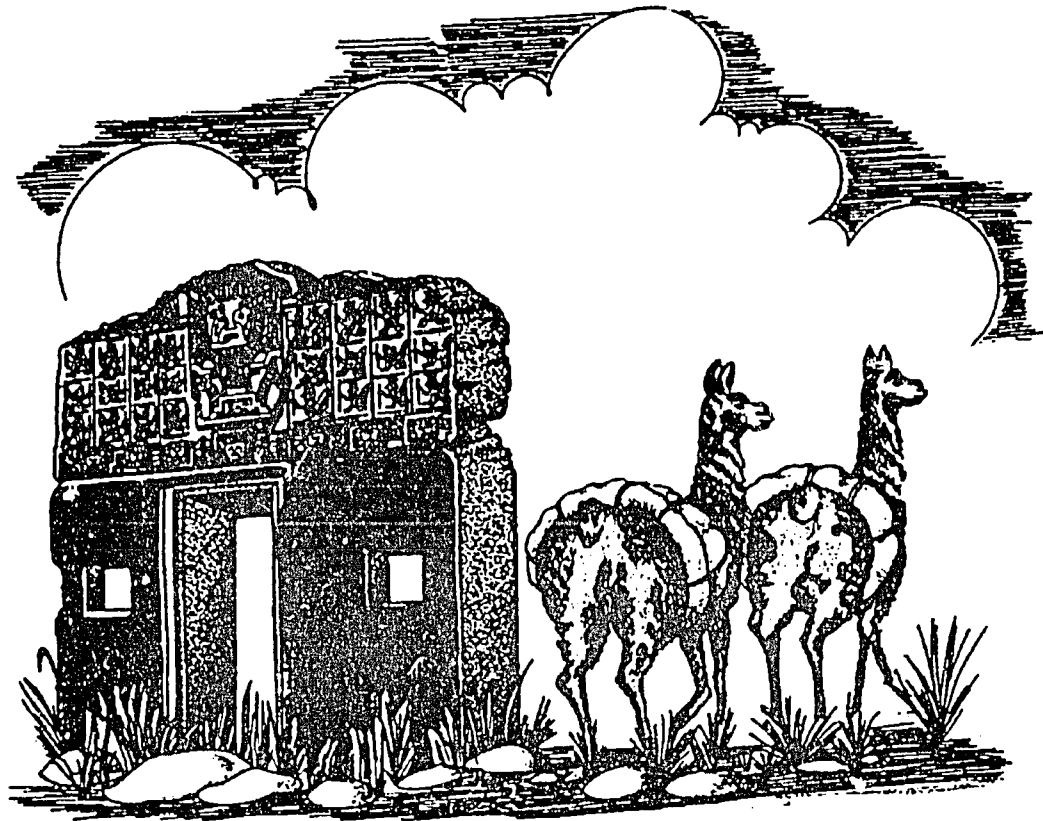


PN ABS-616  
90275

*Small Ruminant Collaborative Research Support Program*

---

PUBLICATIONS 1978-1993



United States Agency for International Development

# PUBLICATIONS

1978-1993

## Table of Contents

List of SR-CRSP Publications: 1978-1993	1
Keyword Index	
<i>Bolivia</i>	189
<i>Brazil</i>	191
<i>Indonesia</i>	193
<i>Kenya</i>	197
<i>Morocco</i>	201
<i>Peru</i>	203
<i>Miscellaneous (U.S./International)</i>	207

*This publication was made possible through support provided by the Office of Agriculture, Bureau for Research and Development, United States Agency for International Development, under Grant No. DAN-1328-G-00-0046-00.*

*This publication was produced by the Management Entity, Small Ruminant CRSP, University of California, Davis, California, 95616-8700. Telephone (916) 752-1721, fax (916) 752-7523.*

*Cover artwork by: Unknown artist  
Compiled and edited by: Susan Sainz*

## LIST OF SR-CRSP PUBLICATIONS: 1978-1993

### Reference #

1. Abegunde, T. O., H. E., Adler, T. B., Farver, and A. J., DaMassa. 1981. A serologic survey of *Mycoplasma putrefaciens* infections in goats. *American Journal of Veterinary Research* 42:1798-1801.
2. Abinanti, F. 1982. Accomplishments of the animal health component in Kenya. Proceedings of the SR-CRSP Kenya Workshop, pp.64-83.
3. Abinanti, F., P., Sayer, J., Bari, S., Mbwiria, J., Njanja, and M., Zegler. 1983. A small ruminant herd health survey in Western Kenya: Research data. SR-CRSP Technical Report No. 25.
4. Aboud, A. 1982. Range management extension services on pastoral societies of Kenya. M.S. Thesis. Departments of Agricultural Economics and Rural Sociology, Ohio State University, Columbus.
5. Aboud, A. 1982. Range management extension in Kenya. Proc. SR-CRSP Kenya Workshop, p.117.
6. Aboulhouda, Youssouf, and M., Coulibaly. 1985. Croissance compensatrice chez les ovins. Influence sur les performances de croissance et les resultats d'abattage (Compensatory growth in sheep. Influence on growth and slaughter parameters). B.S./M.S. Thesis. ENA Meknes, Morocco.
7. Adams, D. S., P., Klevjer-Anderson, J. L., Carlson, T. C., McGuire, and J. R., Gorham. 1983. Transmission and control of caprine arthritis-encephalitis virus. *American Journal of Veterinary Research* 44:1670-1675.
8. Adams, D. S., B. M., Mugenya, E. W., Allonby, J. F., Bell, S., Waghela, and R., Heinonen. 1983. Observations on caprine arthritis-encephalitis in Kenya. *Veterinary Record* 112:227-228.
9. Adams, D. S., R. E., Oliver, E., Ameghino, J. C., DeMartini, D. W., Verwoerd, D. J., Houwers, S., Waghela, J. R., Gorham, B., Hyllseth, M., Dawson, F. J., Trigo, and T. C., McGuire. 1984. Global survey of serological evidence of caprine arthritis-encephalitis virus infection. *Veterinary Record* 115:493-495.

10. Adler, H. E. 1981. Caprine mycoplasmosis. In *Goat Production*, ed. C., Gall. New York: Academic Press.
11. Adler, H. E., and D. L., Brooks. 1982. Mycoplasma infections - The cause of arthritis, mastitis and pneumonia of dairy goats in the United States. *Proceedings of the 3rd International Conference on Goats Production and Disease*, Tucson, AZ, p.212-216.
12. Afzal, M., and C. V., Kimberling. 1986. How to control *Brucella ovis*-induced epididymitis in rams. *Veterinary Medicine/Small Animal Clinician* April:364-370.
13. Afzal, M., R. P., Tengerdy, S. J., Brodie, J. C., DeMartiri, R. P., Ellis, R. L., Jones, and C. V., Kimberling. 1986. Immune response in rams experimentally infected with *Brucella ovis*. *Research in Veterinary Science* 41:85-89.
14. Afzal, M., R. P., Tengerdy, R. P., Ellis, C. V., Kimberling, and C. J., Morris. 1984. Protection of rams against epididymitis by a *Brucella ovis*-vitamin E adjuvant vaccine. *Veterinary Immunological Immunopathology* 7:293-304.
15. Afzal, M., R. P., Tengerdy, P. G., Squire, and R. P., Ellis. 1984. Characterization of *Brucella ovis* lipopolysaccharide and its use for diagnosis of ram epididymitis by ELISA. *Journal of Clinical Microbiology* 20:1159-1164.
16. Aguirre, L. 1985. Soil-plant-water relationships in the Antiplano of Peru. M.S. Thesis. Texas Tech University.
17. Aguirre, L. 1986. Soil-plant-water relationships of the key grass species in Southern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
18. Ahuya, C., T. C., Cartwright, and F., Ruvuna. 1988. Additive and heterotic effects from crossbreeding goats in Kenya. *Proceedings SR-CRSP Workshop, Kenya*:15-22.
19. Ahuya, C. O. 1987. Estimation of direct additive, maternal additive, heterotic and maternal heterotic effects from crossbreeding goats in Kenya. M.S. Thesis. Texas A&M University, College Station.

20. Ahuya, C. O., B. A. J., Mwandotto, F., Ruvuna, and J., Taylor. 1990. Use of Heart Girth Measurements to Estimate Liveweight in Goats. *Proceedings 8th Annual SR-CRSP Scientific Workshop, ILRAD, Nairobi, Kenya. March 7-8, 1990.* :29-31.
21. Ahuya, C. O., B. A. J., Mwandotto, F., Ruvuna, J. F., Taylor, and S. M., Mkuu. 1991. Weight estimation and heart girth measurements in crossbred goats at Ol'Magogo. *Proc. 9th annual SR-CRSP workshop, Nairobi, March, 1991.*
22. Ahuya, C. O., F., Ruvuna, B. A. J., Mwandotto, J. F., Taylor, A. M., Okeyo, and S. M., Mkuu. 1992. Teat Size and Udder Conformation and their Relationship to Milking Potential of East African and Galla Goats. *Proc. 10th Annual SR-CRSP Workshop, Nairobi. Feb. 26-27, 1992* 10:26-28.
23. Alaoui, A., M. Y., K, and M., Bayaddou. 1987. Effet de l'apport calcique sous forme CaCO<sub>3</sub> sur la performance d'agneaux en croissance de race Timahdit. B.S./M.S. Thesis. ENA Meknes, Morocco.
24. Albin, R. C., R., Bryant, and H. K., Henderson. 1982. Developing nations: Challenges involving women. *Proceedings of the Women in Dev. Conference Livestock and Range Management*, pp.105-115.
25. Alderson, A., A., Naranjo, D. D., Kress, P. J., Burfening, R. L., Blackwell, and G. E., Bradford. 1981. A comparison of four imported breeds of sheep and the native criollo in Columbia. *International Goat and Sheep Research* 2:38-48.
26. Alderson, A., A., Naranjo, D. D., Kress, P. J., Burfening, R. L., Blackwell, and G. E., Bradford. 1981. Sheep: Comparison of Rambouillet, Corriedale, American Romney Marsh and British Romney Marsh with native Criollo in Columbia. *International Goat and Sheep Research* 2:38-48.
27. Alexander, A. F., jc, DeMartini, T. C., McGuire, and H. J., Olander. 1989. Animal health in the Small Ruminant Collaborative Research Support Program. *Journal of Animal Science* 67:3103-3110.
28. Ali, O. A. 1986. An ovine mammary adenoma. *Veterinary Pathology* 23:217-218.

29. Ali Musa, O. 1984. Studies on the vertical transmission of ovine progressive pneumonia. Ph.D. Dissertation. Colorado State University, Fort Collins.
30. Alonso, J. I. 1978. Lamb and wool production from Targhee and Crossbred Targhee Range ewes. M.S. Thesis. Utah State University, Logan.
31. Amaral, D. M., W. J., Croom, J., Linnerud, and A. C., Linnerud. 1983. In vitro studies of the effect of cottonseed hulls on determination of Polyethylene Glycol Concentration. *Journal of Dairy Science* 66:190.
32. Ameghino, E. 1989. Infectious problems on sheep of the Central Sierra of Peru. IV Exposicion Nacional de Ganaderia-XVIII Ferial Internacional del Pacifico. Lima, Peru.
33. Ameghino, E. 1989. Problems in Animal Health. Workshop: Results on Research of the SR-CRSP in Peru (1980-1988). Riobamba, Ecuador.
34. Ameghino, E. 1989. Problems in Animal Health. Workshop: Results on Research of the SR-CRSP in Peru (1980-1988). Cajamarca, Peru.
35. Ameghino, E., and J., DeMartini. 1991. Mortalidad en Crias de Alpacas. Published by SR-CRSP for IVITA/INIAA, Peru.
36. Ameghino, E., and J., DeMartini. 1991. El aspecto sanitario en alpacas y ovinos de las comunidades del departamento de Puno. Published by SR-CRSP for IVITA/INIAA, Peru.
37. Ameghino, E., J. S., Reif, L., Inope, A., Laos, and M., Gamarra. 1984. Perinatal lamb mortality in the Central Sierra of Peru. *Preventative Veterinary Medicine* 2:833-843.
38. Ameghino, E., R. H., Rosadio, A. R., Ramirez, and J. C., DeMartini. 1990. Chapter 6. Diagnosis and control of diseases in sheep and alpaca in Peru. In *Improving Andean Sheep and Alpaca Production*, ed. C. M., McCorke. Columbia, University of Missouri: University of Missouri.
39. Amir, P., H., Knipscheer, and J., DeBoer. 1985. Economic analysis of on-farm livestock trials. SR-CRSP Working Paper No. 63, Bogor, Indonesia.

40. Amir, P., and H. C., Knipscheer. 1987. Application of the environment-behavior-performance model in farming systems research - the case of small ruminant technology transfer. *Agricultural Administration and Extension* 25:161-176.
41. Amir, P., and H. C., Knipscheer. 1987. *On-farm animal research/extension and its economic analysis (Proc. Workshop, SEARCA, Philippines)*. Morrilton, Arkansas: Winrock International Institute for Agricultural Development.
42. Amir, P., and H. C., Knipscheer. 1989. *Conducting on-farm animal research: Procedures and economic analysis*, Winrock/IDRC. Morrilton, Arkansas: Winrock International Institute for Agricultural Development.
43. Amir, P., H. C., Knipscheer, S., Karo-Karo, A., Reese, and A. J., DeBoer. 1986. The potential of small ruminant livestock on rubber plantation schemes: A linear programming analysis. SR-CRSP Working Paper No. 86, Balai Penelitian Ternak, Bogor (Indonesia), Winrock International, Morrilton AR (USA), National Rubber Research Institute, Sungai Putih, No. Sumatra (Indonesia) and No. Carolina State University, Raleigh (USA).
44. Amir, P., T. J., Soedjana, and H. C., Knipscheer. 1985. Labor use for small ruminants in three Indonesian villages. SR-CRSP Working Paper No. 62, Bogor, Indonesia.
45. Amir, P. A., and H. C., Knipscheer. 1986. A conceptual framework for the economic analysis of on-farm trials with small ruminants. In *Small Ruminant Production Systems in South and Southeast Asia*, vol. 256E, ed. C., Devendra. : IDRC.
46. Anderson, V. J. 1985. Response of native vegetation to three levels of sheep grazing in the middle atlas region of Morocco. M.S. Thesis. Utah State University, Logan.
47. Anderson, V. J., J. T., O'Rourke, A., Oumekloul, A., El Aich, H., Narjisse, and A., Chergaoui. 1986. Stocking rate research in the Middle Atlas region of Morocco. In *Rangelands: A resource under siege. Proceedings of the Second International Rangeland Congress*, ed. P. J., Joss, P. W., Lynch, and O. B., Williams. : Australian Academy of Science.

48. Angwenyi, G. N., and T. C., Cartwright. 1987. Effects of crossbreeding East African, Galla and Boer goats on body size, growth rate and kid survivability in Kenya. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1315.
49. Arasu, P., M., Hutauruk, and R. M., Gatenby. 1991. Studies of pancreatic fluke infections in sheep. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.50-57.
50. Araujo, aY. 1989. Detection of rotaviral genome in alpaca diarrhea. DVM Thesis. University of San Marcos, Lima, Peru.
51. Arruda, F. 1983. Consumo e digestibilidade de racoes para ovinos com diferentes niveis de resoljo de milho (Intake and digestibility of rations for sheep, with different levels of maize crop residue). M.S. Thesis. Federal University of Ceara, Fortaleza.
52. Arruda, F. A., A. A., de Souza, W. L., Johnson, and K. P., Pant. 1984. Avaliacao de racoes com diferentes niveis de fibra para ovinos (Evaluation of diets with different fiber levels for sheep). *Pesq. Agrope . Bras., Brasilia* 19:777-782.
53. Arruda, F. A. V., R., Bezerra, F. L., Ribeiro, J. W., Santos, J. R., Kawas, and M., Shelton. 1986. The interaction of environmental variables (time of day and shade vs. sun) and level of nutrition on animal response (body gains) with hair sheep. *Proceedings of the First Workshop of the Small Ruminant Collaborative Research Support Program*, p.259.
54. Arruda, F. A. V., J. R., Kawas, K. P., Pant, F. L. R., Silva, J. W., Santos, and J. M., Shelton. 1985. Efeito do sombreamento sobre as consumos de alimentos e agua em caprinos raca marota e caninde. *Proc. Soc. Brasileira Zootecnia*.
55. Artz, N., J., O'Rourke, and J. L., Gilles. 1984. Social inputs in range development planning. *Proc. 2nd Int'l Rangeland Congress, Adelaide, Australia*.
56. Artz, N. E. 1985. Must communal grazing lead to tragedy? *Proceedings of the 1985 International Rangeland Resources Development Symposium, Winrock International*, pp. 146-156.



57. Artz, N. E. 1987. The fusion of Islamic and Berber culture: Cultural implications regarding pastoral development in the Middle Atlas Mountains of Morocco. *Proceedings of the 1987 International Rangeland Development Symposium*, Winrock International, pp. 37-44.
58. Artz, N. E., and M., Jamtgaard. 1988. The use of cluster analysis in distinguishing use patterns in a traditional Moroccan pastoral system. In *Arid lands today and tomorrow*, ed. E. E., Whitehead, C. F., Hutchinson, B. N., Timmermann, and R. G., Varady. Boulder, CO: Westview Press.
59. Artz, N. E., B. E., Norton, and J. T., O'Rourke. 1986. Management of common grazing lands: Timahdite, Morocco. In *Proceedings of the Conference on Common Property Resource Management*. Washington, D. C.: National Academy Press.
60. Artz, N. E., J. T., O'Rourke, J. L., Gilles, R. S., Aro, and H., Narjisse. 1986. Social inputs in range development planning. In *Rangelands: A resource under siege. Proceedings of the Second International Rangeland Congress*, ed. P. J., Joss, P. W., Lynch, and O. B., Williams. : Australian Academy of Science.
61. Ashley, A. 1980. Evaluation of sweet potato vines and leaves as an energy source for small ruminants. M.S. Thesis. Tuskegee Institute.
62. Astorga, J. 1982. Manejo integrado de praderas nativas en la sierra sur (Antiplano) (Integrated management of Native Ranges in the Southern Sierra). *Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales*, Lima, Peru.
63. Astorga, J., V., Choquehuanca, M., Rubio, and F. C., Bryant. 1989. Successional trends related to grazing exclusion on altiplano rangelands. In *Research results in range management and improved forages. Tech. Art. T-9-584*, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.
64. Astorga, L., E., Cari, M., Luque, L., Venegas, A., Schlundt, and G., Atamari. 1989. Forage quality and availability on three range sites of the Peruvian antiplano. In *Research results in range management and improved forages. Tech. Art. T-9-584*, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.

65. Astuti, M., M., Bell, P., Sitorus, and G. E., Bradford. 1984. The impact of altitude on sheep and goat production. SR-CRSP Working Paper No. 30, Indonesia.
66. Atamari, G., and L. C., Fierro. 1986. Grazing sheep behavior and energy budgets in the Antiplano region of Southern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
67. Atamari, G., L. C., Fierro, R., Alencastre, and F., Craddock. 1985. Effects on nutritional supplementation on range ewes during late pregnancy in the Peruvian Antiplano. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
68. Bahri, S., and R. M. A., Adjid. 1993. Small ruminant health and disease research and development in Indonesia. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
69. Baker, G., J., de Souza Neto, and H. C., Knipscheer. 1988. The willingness to pay (WTP) method in evaluating on-farm animal research in Brazil. *Agricultural Systems* 28:91-102.
70. Baker, G., H. C., Knipscheer, and J., de Souza Neto. 1988. The impact of regular research field hearings (RRFH) in the on-farm trails in Northeast Brazil. *Experimental Agriculture* 24:281-288.
71. Baker, G. A., and J., de Souza Neto. 1987. Caracteristicas gerais da caprinocultura leiteira no estado do Rio Grande do Norte. EMBRAPA-National Goat Research Center, Research Bulletin 5.
72. Baker, G. A., and J., de Souza Neto. 1987. On-farm technology trials on small goat farms in Northeast Brazil. Proceedings of the IV International Conference on Goats, EMBRAPA.
73. Ba Mamadou, A. 1980. Etude des preferences alimentaires et de la valeur nutritive des ration des ovins sous l'influence du taux de charge (Station pastorale de Timahdite dans le moyen atlas). M.S. Thesis. IAV, Hassan II, Rabat, Morocco.

74. Banks, K. L., D. S., Adams, T. C., McGuire, and J., Carlson. 1983. Experimental infection of sheep by caprine arthritis-encephalitis virus and goats by progressive pneumonia virus. *American Journal of Veterinary Research* 44:2307-2311.
75. Bari, J. K. 1984. Development of an enzyme-linked immunosorbant assay for detection of contagious caprine pleuropneumonia in goats. M.S. Thesis. Washington State University, Pullman, Washington.
76. Bari, J. K., R., Heinonen, and S., Waghela. 1983. Use of ELISA in serodiagnosis of CCPP. Proceedings of the 2nd SR-CRSP Kenya Workshop, p.175.
77. Bari, J. K., S., Waghela, and R., Heinonen. 1984. Comparison of the enzyme-linked immunosorbent assay (ELISA) with complement fixation and indirect fluorescent antibody as diagnostic tests for contagious caprine pleuropneumonia in Kenya. Proceedings of SR-CRSP Scientific Meeting, Kabete, Kenya, March 1984.
78. Barros, N., W. L., Johnson, E. R., de Oliveira, and T. W., Robb. 1982. Desempenho de caprinos sem raza definida em confinamento, no nordeste to Brasil (Performance of SRD goats in confinement, in Northeast Brazil). Proceedings of the Brazilian Congress of Zootecnia, Piracicaba, SP.
79. Barros, N. N., E. R., de Oliveira, T. W., Robb, F. A. V., Arruda, J. R., Kawas, and W. L., Johnson. 1986. Acabamento de caprinos e ovinos durante a epoca seca (Finishing kids and lambs during the dry season). In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil). (N)
80. Barros, N. N., F. R., Kawas, W. L., Johnson, and J. M., Shelton. 1986. Influence of level of energy supplementation on forage intake and performance of Somali sheep. Proceedings of the First Workshop of the SR-CRSP, p.297.
81. Barros, N. N., J. R., Kawas, H., Carneiro, J. A., Araujo Filho, L. C. L., Freire, J. M., Shelton, and W. L., Johnson. 1986. Digestibility and intake of various native and introduced forages by goats and hair sheep. In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil).

82. Barros, N. N., J. R., Kawas, L. C. L., Freire, J. A., Aroujo Filho, J. M., Shelton, and W. L., Johnson. 1986. Digestibility and intake of various native and introduced forages by goats and hair sheep in Northeast Brazil. *Proceedings of the First Workshop of the SR-CRSP*, p.219.
83. Barros, N. N., J. R., Kawas, L. C. L., Freire, W. L., Johnson, and J. W., dos Santos. 1985. Nutritive value of total mixed rations with various energy sources fed to lambs in Northeast Brazil. *Journal of Animal Science* 61.
84. Barros, N. N., J. R., Kawas, L. C. L., Freire, W. L., Johnson, and J. W., Santos. 1985. Nutritive value of total mixed rations with various energy sources fed to lambs. *Journal of Animal Science* 61:452.
85. Barros, N. N., J. R., Kawas, W. L., Johnson, and J. M., Shelton. 1986. Influence of level of energy supplementation on forage intake and performance of Somali sheep. In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil).
86. Bartels, G. B., B. E., Norton, and G. K., Perrier. 1993. An examination of the carrying capacity concept. In *Range ecology at disequilibrium: New models of natural variability and pastoral development in African savannas*, ed. R. H., Behnke, I., Scoones, and C., Kervin. London: Overseas Development Institute.
87. Batubara, L. P., and Subandriyo. 1993. Research highlights in the integration of small ruminants and rubber in Indonesia. In *Advances in Sustainable Small Ruminant - Tree Cropping Integrated Systems*, ed. S., Sivaraj, P., Agamuthu, and T., Mukherjee. Kuala Lumpur, Malaysia: Institute of Advanced Studies.
88. Bell, M., and I., Inounu. 1982. Sheep reproduction parameters for sixteen farms in Sukawargi Village, District of Garut, West Java. SR-CRSP Working Paper No. 8, Indonesia.
89. Bell, M., I., Inounu, Subandriyo, B., Setiadi, B., Tiesnamurti, G. E., Bradford, and P., Sitorus. 1983. A monitoring program for village sheep and goat farms in Indonesia (I. Breeding/Reproduction). SR-CRSP Working Paper No.23, Indonesia.

90. Bell, M., I., Inounu, B., Tiesnamurti, and Subandriyo. 1983. Variability in reproductive performance of sheep among twenty-two farms in Tenionegara and Sindangratu Villages. District of Garut. SR-CRSP Working Paper No.18, Bogor, Indonesia.
91. Benjelloun, J. 1992. Influence de la complementation des brebis sur chaumes sur leurs perfovrances do production et de reproduction. Memoire de 3eme cycle Agron Thesis. Hassan II. Inst. Agron, Vet. Rabat, Morocco.
92. Benlamlah, S. 1991. Relationship between food intake, growth, blood hormones and body composition in Sardi and D'Man lambs. Proc. Intern. Symp. Nuclear and Related Techniques in Animal Production and Health, International Atomic Energy Agency, Vienna.
93. ben Rahal, B., and L., Koyandoudri. 1985. Place de l'elevage ovin dans les exploitations agricoles de Dir (Region d'El Hajeb) (The place of sheep production on farms of the Dir, El Hajeb Region). B.S./M.S. Thesis. ENA Meknes, Morocco.
94. Berardinelli, J. G., P. J., Burfening, K. C., Curry, and R., Adair. 1987. Effect of testosterone (T) and estriadiol-17B (E) on luteinizing hormone (LH) secretion in orchietomized Rambouillet rams from lines selected for high and low prolificacy. *American Society of Animal Science* 65:361.
95. Berger, Y. M., G. E., Bradford, A., Essaadi, D. W., Johnson, M., Bourfia, and A., Lahlou-Kassi. 1989. Performance of D'Man and Sardi breeds of sheep on accelerated lambing: III. Lamb mortality, growth and production per ewe. *Small Ruminant Research* 2:307-321.
96. Berger, Y. M., and M., Ghezoui. 1985. Estimation de rentabilite d'un troupeau ovin de la ferme d'application de tadla. SR-CRSP Report, IAV, Rabat.
97. Berger, Y. M., A., Kabbali, and G. E., Bradford. 1989. *Sheep Production and Management in a Mediterranean Climate. The Agropastoral System of Morocco.* : Univ. of California Printing.
98. Berger, Y. M., A., Kabbali, and G. E., Bradford. 1990. *Sheep production and management in a Mediterranean climate: The Agropastoral System of Morocco.* Davis, CA: SR-CRSP, Univ. of California, Davis.

99. Berger, Y. M., A., Lahlou-Kassi, G. E., Bradford, L., Derqaoui, I., Boujenane, M., Bourfia, M., Ghezoui, and M., Drissi. 1983. First Annual Report. SR-CRSP Breeding Project, IAV Hassan II.
100. Berger, Y. M., A., Lahlou-Kassi, G. E., Bradford, L., Derqaoui, I., Boujenane, M., Bourfia, M., Ghezoui, and A., Essaadi. 1984. Second Annual Report. SR-CRSP Breeding Project, IAV Hassan II.
101. Berger, Y. M., A., Lahlou-Kassi, G. E., Bradford, L., Derqaoui, I., Boujenane, A., Tibary, M., Ghezoui, and R., Boukhliq. 1985. Third Annual Report. SR-CRSP Breeding Project, IAV Hassan II.
102. Beriajaya. 1993. Pancreatic fluke: Problem and solution. Advances in small ruminant research in Indonesia. Proceedings of a Workshop, RIAP, Ciawi-Bogor, August 3-4, 1993, pp.235-241.
103. Bernsten, R., and A. W., Mukhebi. 1984. Interseasonal household food consumption patterns in Western Kenya. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya, March 5-6, 1984, pp.89-94.
104. Bernsten, R. H., H., Fitzhugh, and H. C., Knipscheer. 1983. Livestock in farming systems research. Proceedings of the 3rd Annual Farming Systems Symposium, Kansas State University, Manhattan.
105. Berrami, A. 1985. Utilisation des pulpes seches d'agrumes et de betteraves et des dechets de dattes dans des rations pour ovin a l'engraissement (Utilization of citrus pulp, beet pulp and waste palm dates in diets for fattening sheep). B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.
106. Bhehbe, E., S. K., Davis, J. F., Taylor, J., Derr, F., Ruvuna, J., Kogi, and F., Rurangirwa. 1993. Goat Microsatellite dinucleotide repeat polymorphisms Detected in the Kenya Dual Purpose Goat. *Proc. 11th Annual SR-CRSP Workshop, Nairobi. March 3-4, 1993* 11.
107. Bilinsky, P. 1985. Barter and Non-Monetary Exchanges in a Peruvian Community. M.S., Rural Sociology Thesis. University of Missouri, Columbia.

108. Bilinsky, P. 1986. Trueque y intercambio no-remunerado de mano de obra en una comunidad altoandina del Peru (Barter and non-monetary exchange of labor in a highland Peruvian community). SR-CRSP/INIPA Technical Report No. 86, Community Studies Series, Lima, SR-CRSP Technical Report No. 74, NTIS #PB8-6-244449/AS.
109. Bilinsky, P., and M., Gaylord. 1992. Outreach pilot project: Small Ruminant Research and Extension in West Java, Indonesia. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.
110. Birnie, E. F. 1983. The prevalence of bacteria and mycoplasma in caprine milk and the relationship of udder infection to age, breed, duration of lactation, length of non-lactating period and month of kidding. MPVM Thesis. University of California, Davis.
111. Blackburn, H. 1984. Simulation of genetic and environmental interaction of sheep performance in Northern Kenya. Ph.D. Dissertation. Texas A&M University, College Station.
112. Blackburn, H. D., F. C., Bryant, T. C., Cartwright, L. C., Fierro, and J., Astorga. 1989. Corriedale sheep production when supplemented with ryegrass pasture in Southern Peru. *Agricultural Systems* 30:101-115.
113. Blackburn, H. D., and T. C., Cartwright. 1985. Validation of the Texas A&M sheep production model. *Journal of Animal Science* 61:440.
114. Blackburn, H. D., and T. C., Cartwright. 1986. Impact of environmental stress on the performance of sheep with different mature sizes and milk potentials. *Proceedings 3rd World Congress on Genetics Applied to Livestock Production, Lincoln, Nebraska* 11:510.
115. Blackburn, H. D., and T. C., Cartwright. 1986. A conceptual overview of the TAMU sheep production model. In *Sheep and Goats, Wool and Mohair*. : Texas Agricultural Experimental Station CPR 4317-4411.
116. Blackburn, H. D., and T. C., Cartwright. 1987. Description and validation of the Texas A&M sheep simulation model. *Journal of Animal Science* 65:373.
117. Blackburn, H. D., and T. C., Cartwright. 1987. Evaluating sheep production enterprises using the Texas A&M sheep computer simulation model. *SID Research Digest* 3:23-28.

118. Blackburn, H. D., and T. C., Cartwright. 1987. Simulated genotype, environment and interaction effects on performance characters of sheep. *Journal of Animal Science* 65:387.
119. Blackburn, H. D., and T. C., Cartwright. 1987. Simulated production and biological efficiency of sheep flocks in a shifting environment. *Journal of Animal Science* 65:399-407.
120. Blackburn, H. D., T. C., Cartwright, and F. C., Bryant. 1987. Productivity of Corriedale sheep using ryegrass pastures as a supplement. *Journal of Animal Science* 65:445.
121. Blackburn, H. D., T. C., Cartwright, A. B., Carles, and F., Ruvuna. 1984. A conceptual overview of the SR-CRSP goat production model. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, p.219-230.
122. Blackburn, H. D., T. C., Cartwright, C. R., Field, and A. B., Carles. 1984. A simulation of genetic environmental interactions of sheep productivity in Northern Kenya. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, p.261-274.
123. Blackburn, H. D., T. C., Cartwright, P. J., Howard, and F., Ruvuna. 1987. Development of dual purpose goat production for smallholders in Western Kenya using computer simulation and system analysis. SR-CRSP Technical Report No. 89.
124. Blackburn, H. D., T. C., Cartwright, and F., Ruvuna. 1987. Simulation of breed, nutrition and management effect on milk production and weaning weight of dual-purpose goats. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1541.
125. Blackburn, H. D., T. C., Cartwright, F., Ruvuna, and A., Mukhebi. 1985. Breed, nutrition and management effects on milk production and weaning weight of dual-purpose goats. Proc. 4th Small Ruminant-CRSP Workshop, Kakamega, p.104-113.
126. Blackburn, H. D., T. C., Cartwright, and G. M., Smith. 1984. The simulated effect of environmental shifts on the flock dynamics of sheep with different genotypes. *Journal of Animal Science* 59:157.



127. Blackburn, H. D., T. C., Cartwright, G. M., Smith, N. McC., Graham, and F., Ruvuna. 1987. The Texas A&M sheep and goat models. *Texas Agricultural Experimental Station Bulletin*:155.
128. Blackburn, H. D., S. K., Davis, J. F., Taylor, T. C., Cartwright, and F., Rurangirwa. 1990. Genetic Resistance of Goats to Internal Parasites. Proc. Eighth SR-CRSP Scientific Workshop. ILRAD, Nairobi, Kenya. March 7-8, 1990 pp. 100-105.
129. Blackburn, H. D., and C. R., Field. 1990. Performance of Somali Blackhead sheep and Galla goats in northern Kenya. *Small Ruminant Research* 3:539-549.
130. Blackburn, H. D., L. C., Fierro, T. C., Cartwright, F. C., Bryant, and E., Figueiredo. 1986. Simulacion computarizada de epocas de empadre y programa de suplementacion nutricional en al produccion de ovinos corriedale en el sur de Peru. X Reunion ALPA:31.
131. Blackburn, H. D., E. A. P., Figueiredo, C. A. F., Costa, M. E. A., Berne, and L. S., Viera. 1988. Simulation of the effects of parasite infestation in the performance of goats in northeastern Brazil. SR-CRSP Technical Report No. 96, p.19.
132. Blackburn, H. D., P. J., Howard, T. C., Cartwright, and F., Ruvuna. 1987. Simulation of the effect of flock size and nutrition on goat productivity in Kenya. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1540.
133. Blackburn, H. D., and J. F., Taylor. 1990. Simulation of Flock Performance when Different Intensities of Selection are Practiced. Third World Congress on Genetics Applied to Livestock Production. Edinburgh. July, 1990.
134. Blackburn, H. D., K., Zessin, J. F., Taylor, and T. C., Cartwright. 1990. Flock Dynamics During Drought and Recovery Years. Proc. Eighth SR-CRSP Scientific Workshop. ILRAD, Nairobi, Kenya. March 7-8, pp. 15-28.
135. Blackwell, R. L. 1985. International agriculture. What's in it for Montana? *Montana Agricultural Research* 2:2.
136. Blackwell, R. L., P. J., Burfening, and D. D., Kress. 1981. International research with small ruminants. Animal and range research highlights. Montana Agricultural Experimental Station Research Report No. 180, pp.53-55.

137. Blackwell, R. L., M., Carpio, D. D., Kress, and P. J., Burfening. 1982. Sources of variation in weights of lambs in the Peruvian Andes. *Journal of Animal Science* 55:139.
138. Boer, M., and M. D., Sanchez. 1989. Improvement in the use of palm kernel cake as a feed supplement for grazing sheep. Proceedings of the 12th Annual Conference of the Malaysian Society of Animal Production, March 29-31, 1989, Genting Highlands, Pahang, Malaysia, pp. 90-94.
139. Bogoi, N. S. 1986. Reproductive performance and preweaning growth of Spanish Goats. M.S. Thesis. Texas A&M University, San Angelo, Texas.
140. Bogue, N. S., T. C., Cartwright, and J. M., Shelton. 1986. Reproductive performance and preweaning growth of meat goats in Texas. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1448.
141. Bogui, M. S. 1986. Reproductive Performance and Preweaning Growth of Spanish Goats. M.S. Thesis. Texas A&M University, College Station.
142. Bogui, N. S. 1986. Reproductive performance and preweaning growth of Spanish Goats. M.S. Thesis. Texas A&M University, College Station.
143. Bogui, N. S., T. C., Cartwright, and J. M., Shelton. 1987. Reproductive performance and preweaning growth of meat goats in Texas. *Proceedings of the IV International Conference on Goats, Brasilia* 2:448.
144. Bojorquez, C. 1986. Root and top-growth of annual legume forages using the slant-tube technique. M.S. Thesis. Texas Tech University.
145. Bojorquez, C. L., A. G., Matches, and H. M., Taylor. 1988. Root and top growth of annual legume forages using the slant-tybe technique. In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
146. Boor, K., E., Ochieng, and H. A., Fitzhugh. 1983. Consumer acceptability of goat milk products in Western Kenya. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.35-39.
147. Boor, K., E., Ochieng, and H. A., Fitzhugh. 1984. Comparison of goat and cow milk for human consumption in Western Kenya. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya.

148. Boor, K. J. 1983. Goat milk products for rural Western Kenya. M.S. Thesis. University of Wisconsin, Madison.
149. Boor, K. J., C. H., Amundson, and D. L., Brown. 1986. Protein conversion efficiencies of four test diets based on milk, two milk and tea treatments, and casein. *Journal of Dairy Science* 69:979-982.
150. Boor, K. J., D. L., Brown, and H. A., Fitzhugh. 1984. Consumer acceptance of goat milk products in Western Kenya. SR-CRSP Technical Report No. 41, NTIS #PB8-4-207471.
151. Boor, K. J., D. L., Brown, and H. A., Fitzhugh. 1987. Western Kenya: The potential for goat milk production. *World Animal Review* 62:31-40.
152. Boor, K. J., H. A., Fitzhugh, D. L., Brown, and S., Chema. 1982. Introduction and consumer acceptance of goat milk products in Western Kenya. Proceedings of Tropical Animal Production for the Benefit of Man, Antwerp, Belgium, p.518.
153. Boor, K. J., H. A., Fitzhugh, D. L., Brown, and E., Ochieng. 1983. Consumer evaluation of goat and cow milk products in Western Kenya. *Journal of Dairy Science* 66:93.
154. Boualil, A. 1983. Valeur nutritive de la luzerne produit dans la vallee du ziz: Campagne 1982 (Nutritive value of alfalfa produced in the Ziz Valley in 1982). B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.
155. Boudiab, A. 1981. Contribution to the study of small ruminants in the Quarzazate pastures. M.S. Thesis. IAV Hassan II, Rabat, Morocco.
156. Bouhafra, L. 1987. Contribution a la caracterisation de l'organisation des productions ovines en relation avec le bovin laitier dans le perimetre irrigue du Tadla. Memoire de 3eme cycle Agron Thesis. Hassan II. Inst. Agron. Vet. Rabat, Morocco.
157. Boujenane, I. 1990. Methods of estimation of genetic effects from two breeds crossing system with an application to litter size in sheep. *J. Anim. Breed. Genet.* 107:431-436.

158. Boujenane, I., and M., Akhazzan. 1990. Reproductive Performance of D'Man, Sardi and their Crossbred Ewes Joined to Rams of Terminal Sire Breeds. Proc., 4th World Cong. on Gen. Appl. to Livest. Prod. Edinburgh, U.K., Vol. XV, pp.77.
159. Boujenane, I., A., Araba, and G. E., Bradford. 1990. Postweaning Growth and Carcass Traits of Lambs of D'Man and Sardi Breeds and their Crosses with Meat Breeds. Proc., 41st Annual Meeting of EAAP. Toulouse, France, Vol.1, pp.86.
160. Boujenane, I., and G. E., Bradford. 1991. Genetic effects on ewe productivity of crossing D'Man and Sardi breeds of sheep. *Journal of Animal Science* 69:525-530.
161. Boujenane, I., G. E., Bradford, Y. M., Berger, and A., Chikhi. 1991. Genetic and environmental effects on growth to one year and viability of lambs from a crossbreeding study of D'Man and Sardi breeds. *Journal of Animal Science* 69:3989-3998.
162. Boujenane, I., G. E., Bradford, Y. M., Berger, and A., Lahlou-Kassi. 1991. Repeatability estimates for litter size and its components in sheep. *Animal Reproduction Science* 26:107-113.
163. Boujenane, I., G. E., Bradford, and T. R., Famula. 1991. Inheritance of litter size and its components in crosses between the D'Man and Sardi breeds of sheep. *Journal of Animal Science* 69:517-524.
164. Boujenane, I., A., Chafik, G. E., Bradford, and Y. M., Berger. 1988. Taille de la portee et ses composantes chez les brebis D'Man, Sardi et D'Man x Sardi. *Proc. 3rd World Congress on Sheep and Beef Cattle Breeding, Paris, France* 2:657-660.
165. Boujenane, I., M., Khallouk, and M., Kerfal. 1988. Parametres genetiques des performances de reproduction des berbis de race D'Man. *Proc. 3rd World Congress on Sheep and Beef Cattle Breeding, Paris, France* 2:653-656.
166. Boujenane, I., and K., Lairini. 1992. Milk production and percentage of fat of D'man, Sardi and crossbred ewes. *Small Ruminant Research* 8:207-215.
167. Boukari, D. G., and G., Ayouba. 1987. Effet de la supplementation de calcium par quatre sources de calcium sur les performances des agneaux Timahdit en croissance. B.S./M.S. Thesis. ENA Meknes.

168. Boukhliq, R. 1986. Variations Saisonnières de l' age a la puberte, de la cyclicite sexuelle et de l'anoestrus post-partum chez les femelles de races D'Man, Sardi et leurs produits de croisement. These Doctorat Veterinaire Thesis. I.A.V. Hassan II, Rabat.
169. Bourfia, M., and M., Echiguer. 1990. Carcass Composition of D'Man Lambs from Various Litter Sizes Slaughtered at Constant Carcass Weight. Proc., 4th World Cong. on Gen. Appl. to Livest. Prod. Edinburgh, U.K., Vol.XV. pp.77.
170. Bourfia, M., and R. W., Touchberry. 1988. Litter live weight at birth with varying levels of D'Man germoplasm. *Journal of Agricultural Science, Cambridge* 60:599-601.
171. Bouzekraoui, A., and N., Mountassir. 1983. Influence de niveau de concentre dans la ration sur la digestibilite de la matiere seche (Influence of concentrate level on digestibility of diet dry matter). B.S./M.S. Thesis. ENA Meknes, Morocco.
172. Bradford, E., and I., Boujenane. 1993. Utilization of Moroccan Sheep Breed Resources to Increase Productivity. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:109-115.
173. Bradford, E., and I., Inounu. 1993. Genetic Variation in Prolificacy in Indonesian Sheep and its use in Increasing Productivity. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:39-43.
174. Bradford, G. E. 1981. The potential of dairy goats as a source of milk for smallholder farms in Kenya. *Proceedings of the Animal Production Society of Kenya and SR-CRSP Technical Report No. 7.*
175. Bradford, G. E. 1983. A note on characteristics of Hair Sheep in Senegal. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
176. Bradford, G. E. 1983. Selection for litter size. In *Genetics of Reproduction in Sheep*, ed. R. B., Land, and D. W., Robinson. London: Butterworths.
177. Bradford, G. E. 1988. Contributions of physiology and genetics to improving reproductive efficiency in sheep. *Proc. 3rd World Congress on Sheep and Beef Cattle Breeding, Paris, France* 2:523-527.

178. Bradford, G. E. 1993. Small ruminant breeding strategies for Indonesia. Advances in small ruminant research in Indonesia. In *Proceedings of a Workshop, Research Institute for Animal Production*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
179. Bradford, G. E., and Y. M., Berger. 1988. Breeding strategies for small ruminants in arid and semi-arid areas. In *Increasing small ruminant productivity in semi-arid areas*, ed. E. F., Thompson, and F. S., Thompson. Aleppo, Syria: ICARDA.
180. Bradford, G. E., Y. M., Berger, V., Chemitei, and D., Kimenye. 1982. Progress and future work on the SR-CRSP breeding project. *Proceedings of the SR-CRSP Kenya Workshop*, pp.8-9.
181. Bradford, G. E., and H. A., Fitzhugh. 1983. Hair sheep: A general description. In *Hair sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
182. Bradford, G. E., H. A., Fitzhugh, and A., Dowding. 1983. Reproduction and birth weight in Barbados Blackbelly Sheep in the Golden Grove Flocks. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
183. Bradford, G. E., R. M., Gatenby, S. E., Sinulingga, and E., Romjali. 1991. Crossbreeding of three breeds of hair sheep with Sumatra Thin-tail sheep. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.20-22.
184. Bradford, G. E., I., Inounu, L. C., Iniguez, B., Tiesnamurti, and D. L., Thomas. 1990. The Prolificacy Gene of Javanese Sheep. *Proc., Workshop on Major Genes for Reproduction in Sheep*. July, 1990. Toulouse, France, pp.67-73.
185. Bradford, G. E., A., Lahlou-Kassi, Y. M., Berger, I., Boujenane, and L., Derqaoui. 1989. Performance of D'Man and Sardi breeds of sheep on accelerated lambing: II. Ovulation rate and embryo survival. *Small Ruminant Research* 2:241-252.
186. Bradford, G. E., and H. H., Meyer. 1986. Economic evaluation of breeding objectives for sheep and goats: Practical considerations and examples. *Proc. 3rd World Congress on Genetics Applied to Livestock Production*, Lincoln, Nebraska 11:479-492.

187. Bradford, G. E., A. J., Muschette, V., Lyttle, and D., Miller. 1983. A note on the performance of Barbados Blackbelly Sheep in Jamaica. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
188. Bradford, G. E., and J. F., Quirke. 1986. Ovulation rate and litter size of Barbados, Targhee and Crossbred Ewes. *Journal of Animal Science* 62:905.
189. Bradford, G. E., J. F., Quirke, and T. R., Famula. 1986. Fertility Embryo Survival and Litter Size in Lines of Targhee Sheep Selected for Weaning Weight or Litter Size. *Journal of Animal Science* 62:895.
190. Bradford, G. E., J. F., Quirke, P., Sitorus, I., Inounu, B., Tiesnamurti, F. L., Bell, and D. T., Torell. 1984. Ovulation rate and litter size in Javanese Sheep. *Journal of Animal Science* 59:154.
191. Bradford, G. E., J. F., Quirke, P., Sitorus, I., Inounu, B., Tiesnamurti, F. L., Bell, and D. T., Torell. 1984. Genetic basis of prolificacy in three Javanese breeds of sheep. Proceedings of the Scientific Meeting on Small Ruminant Research, Bogor, Indonesia, November, pp.131-135.
192. Bradford, G. E., Subandriyo, and L. C., Iniguez. 1987. Breeding strategies for small ruminants in integrated crop-livestock production systems. In *Small Ruminant Production Systems in South and Southeast Asia*, vol. 256E, ed. C., Devendra. : IDRC Publishing.
193. Brasfield, J. C. 1980. A comparison of voluntary intake and digestibility in sheep breeds and crosses fed diets varying in composition and quality. M.S. Thesis. North Carolina State University, Raleigh.
194. Britton, C. 1982. Calculo de la tasa interna de retorna (Calculating the rate of return). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
195. Britton, C. 1982. Mapas y mapeo (Maps and mapping). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.

196. Brodie, S. J., A., de la Concha, K. A., Marcom, L. D., Pearson, B. C., Anderson, S., Magnus-Corral, and J. C., DeMartini. 1991. Detection of ovine lentivirus DNA in seronegative naturally infected sheep by polymerase chain reaction: Relative sensitivity compared with immunodiffusion and immunoblotting tests. 12th Annual Food Animal Disease Research Conference. Laramie, WY. April 3-4, 1991.
197. Brodie, S. J., and J. C., DeMartini. 1992. The pathogenesis of ovine lentivirus infection in lymphoproliferative lung disorders. 10th Scientific Workshop, SR-CRSP, ILRAD, Nairobi, Kenya, February 26-27, 1992.
198. Brodie, S. J., J. C., DeMartini, L. D., Pearson, K. A., Marcom, A., de la Concha-Bermejillo, and B. C., Anderson. 1992. Ovine lentivirus expression in alveolar macrophages correlates with antigenemia and clinicopathological manifestations of disease. Abstract No. 754. 1992 Meeting of the Federation of American Societies for Experimental Biology, Anaheim, CA, April 5-9, 1992.
199. Brodie, S. J., K. A., Marcom, A., de la Concha, L. D., Pearson, and J. C., DeMartini. 1991. Ovine lentivirus expression in alveolar macrophages correlates with antigenemia and clinicopathologic manifestations of disease. 10th Annual Meeting of the American Society for Virology, Fort Collins, CO. July 7-11, 1991.
200. Brodie, S. J., K. A., Marcom, A., de la Concha, L. D., Pearson, B. C., Anderson, S., Magnus-Corral, J. M., Poulson, G. D., Snowden, and J. C., DeMartini. 1990. Comparative efficiency of methods for identifying sheep infected with ovine lentivirus. Proceedings of the 71st Conference of Research Workers in Animal Disease, Chicago, Illinois, November 5-6, 1990.
201. Brodie, S. J., K. A., Marcom, A., de la Concha, L. D., Pearson, and J. C., DeMartini. 1990. Evaluation of a focal immunoassay for the detection and quantitation of infectious ovine lentivirus. Proceedings of the 71st Conference of Research Workers in Animal Disease, Chicago, Illinois, November 5-6, 1990.
202. Brodie, S. J., K. A., Marcom, L. D., Pearson, B. C., Anderson, A., de la Concha-Bermijillo, J. A., Ellis, and J. C., DeMartini. 1992. Effects of virus load in the pathogenesis of lentivirus-induced lymphoid interstitial pneumonia. *Journal of Infectious Diseases* 166:531-541.



203. Brodie, S. J., L. D., Pearson, B., Anderson, and J. C., DeMartini. 1992. Detection of ovine lentivirus and localization of viral proteins in tissues and fluids of infected sheep. 4th AASRP Symposium on the Health and Disease of Small Ruminants, Fort Collins, CO. June 10-12, 1992.
204. Brodie, S. J., L. D., Pearson, G. D., Snowder, and J. C., DeMartini. 1992. Host-virus interaction as defined by amplification of viral DNA and serology in lentivirus-infected sheep. *Archives of Virology* 130:413-428.
205. Brodie, S. J., L. D., Pearson, G. D., Snowder, and J. C., DeMartini. 1993. Host-virus interaction as defined by amplification of viral DNA and serology in lentivirus-infected sheep. *Archives of Virology* 130:413-428.
206. Brodie, S. J., G. D., Snowder, and J. C., DeMartini. 1992. Ovine progressive pneumonia: Advances and prospects for control. *Sheep Research Journal* 8:116-126.
207. Brooks, D. L., A. J., DaMassa, and H. E., Adler. 1981. Caprine Mycoplasmosis immune response in goats to *Mycoplasma putrefaciens* after intramammary inoculation. *American Journal of Veterinary Research* 42:1898-1900.
208. Brooks, D. L., A. J., DaMassa, and H. E., Adler. 1982. Caprine Mycoplasma Mycoides Subsp. Mycoides Infections. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.371.
209. Brooks, D. L., and N. E., East. 1982. Monensin medicated feed as an anticoccidial in young dairy goats. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.565.
210. Brown, C. C. 1986. Caseous lymphadenitis of goats. Ph.D. Dissertation. University of California, Davis.
211. Brown, C. C., and S. F., Alves. 1984. Diagnostico da Linfadenite Caseosa Corynebacterium Pseudotuberculosis Atraves do Teste Sorologico de Inibicao da Hemolise Sinergica. *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:262.
212. Brown, C. C., H. J., Olander, E. L., Biberstein, and D., Moreno. 1985. The serological response and lesions produced in goats experimentally infected with *Corynebacterium Pseudotuberculosis* of caprine and equine origin. *American Journal of Veterinary Research* 46:2322-2326.

213. Brown, C. C., H. J., Olander, E. L., Biberstein, and S. M., Morse. 1986. Use of toxoid vaccine to protect goats against intradermal challenge exposure to *Corynebacterium pseudotuberculosis*. *American Journal of Veterinary Research* 47:1116-1119.
214. Brown, D., E., Chavulimu, H. A., Fitzhugh, and A. E., Sidahmed. 1984. Effects of ensiling or drying on five Kenya feedstuffs: Maize Stover (*Zea Mays*), Pakistan Napier Grass (*Pennisetum Purpureum*), Bana Grass, Sweet Potato Vines (*Impomea Batata*) and Pigeon Pea Leaves (*Cajamus Cajan*). Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya.
215. Brown, D., and M., Nderito. 1982. Nutritional strategies for dual-purpose goats. Proceedings of the SR-CRSP Kenya Workshop, pp.84-90.
216. Brown, D., and M., Nderito. 1983. Performance and milk requirements of Toggenburg x (Toggenburg x East African) kids weaned at two months of age or ten kilograms body weight. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.17-19. (N)
217. Brown, D., S., Russo, E., Chavulimo, H. A., Fitzhugh, and A. E., Sidahmed. 1984. Short rains maize leaf strippings from Maseno, Kenya yields and feed value. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya, pp.37-46.
218. Brown, D. L., and E., Chavalimu. 1985. Effects of ensiling and of drying on five forage species in Western Kenya: *Zea mays* (Maize Stover), *Pennisetum purpureum* (Napier Grass), *Pennisetum Sp.* (Bana Grass), *Impomea batata* (Sweet Potato Vines) and *Cajanus cajan* (Pigeon Pea Leaves). *Animal Feed Science Technology* 13:106.
219. Brown, D. L., E., Chavulimu, and H. A., Fitzhugh. 1983. Responses of lactating goats to free water restriction and diet based on sweet potato vines. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.28-34.
220. Brown, D. L., M. R., Dally, M. R., Schwartz, and G. E., Bradford. 1987. Feed efficiency, growth rates, body composition, milk production and milk composition of Targhee sheep selected for increased weaning weight. *Journal of Animal Science* 65:692-698.
221. Brown, D. L., H. A., Fitzhugh, E., Chavulimu, H., Kiguhi, E., Oltieno, and P., Amuhinda. 1983. Evaluation of lactating Toggenburg x East African Does on small farms in Western Kenya. Proceedings of the 2nd SR-CRSP Scientific Meeting, Naivasha, Kenya.

222. Brown, D. L., and D. E., Hogue. 1982. Effects of monensin sodium on lactating French Alpine does. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.306.
223. Brown, D. L., S. R., Morrison, and G. E., Bradford. 1988. Effects of ambient temperature on milk production of Nubian and Alpine goats. *Journal of Dairy Science* 71:2486-2490.
224. Brown, D. L., M., Salim, E., Chavalimu, and H. A., Fitzhugh. 1987. Intake, selection, apparent digestibility, and chemical composition of Pennisetum purpureum and Cajanus cajan foliage utilized by lactating goats. *Small Ruminant Research* 1:59-66.
225. Brown, L. E. 1982. Goats and sheep: A comparison of intake, digestibility, and other metabolic/digestive parameters when fed wheat straw rations. M.S. Thesis. North Carolina State University, Raleigh.
226. Brown, L. E., and W. L., Johnson. 1982. Products and digestion and metabolism in goats and sheep fed varying levels of wheat straw. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.362.
227. Brown, L. E., and W. L., Johnson. 1983. Comparative intake and digestibility of forages and byproducts by sheep and goats. SR-CRSP Technical Report No. 39.
228. Brown, L. E., and W. L., Johnson. 1984. Comparative intake and digestibility of forages and by-products by sheep and goats: A review. *International Goat and Sheep Research* 2:212-226.
229. Brown, W. C., J. D., Lonsdale-Eccles, J. C., DeMartini, and D. J., Grab. 1990. Recognition of soluble Theileria parva antigen by bovine helper T cell clones: Characterization and partial purification of the antigen. *Journal of Immunology* 144:271-277.
230. Bryant, F. C. 1982. Requerimientos nutricionales y sintomas de deficiencias de animales en pastizales naturales con especial énfasis en ovinos (Nutritional requirements and symptoms of deficiencies of animals on natural pastures with special emphasis on sheep). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.

231. Bryant, F. C. 1985. Nutritional requirements of sheep. Proceedings of the Peruvian Animal Production Meeting, Huancayo, Peru.
232. Bryant, F. C. 1990. Facts about short-duration grazing. In *Beef Cattle Sci. Handbook Vol. 24, International Stockmans School*, vol. 24, ed. D., Herd, and W. M., Warren. : International Stockmans School.
233. Bryant, F. C., and R. D., Farfan. 1984. Dry season forage selection by alpaca (*Lama pacos*) in Southern Peru. *Journal of Range Management* 37:330-333.
234. Bryant, F. C., A., Florez, and J., Pfister. 1989. Sheep and alpaca productivity in high Andean rangelands in Peru. *Journal of Animal Science* 67:3087-3095.
235. Bryant, F. C., A., Florez, and A. F., Schlundt. 1984. Sheep production under rotational grazing at four stocking rates in the Andes of Central Peru. Proceedings of the International Rangeland Congress.
236. Bryant, F. C., A., Florez, and A. F., Schlundt. 1986. Sheep production, stocking rates and rotational grazing in the Andes of Peru. In *Proceedings of the International Rangeland Congress*, ed. D. J., Josse, P. W., Lynch, and O. B., Williams. : International Rangeland Congress.
237. Bryant, F. C., and C. A., Taylor. 1992. Meat Goat/White-Tailed Deer Relationships on Rangelands. In *Proceedings of the International Conference on Meat Goat Production*, vol. July, ed. J. C., Paschal, and C. W., Hanselka. Laredo, TX: Texas Agricultural Extension Service and Texas A&M University.
238. Budisantoso, E., M., Nggobe, A., Saleh, and A., Bamualim. 1993. Growth and reproduction potential of local goats in West Timor from weaning to about 1.5 years old with or without supplementation of *Sesbania* leaf (*Sesbania grandiflora*) and palm pith (*Corypha gebanga*). In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
239. Bueno, L. S., and A., Florez. 1986. Autoecological studies of the key grass species of the Andean grasslands. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.

240. Buntinx, S., K. R., Pond, D. S., Fisher, J. C., Burns, and T. G., Goodwin. 1990. Prediction of total fecal output of free grazing sheep using the Captec chrome controlled release capsule. *Journal of Animal Science* 68:562.
241. Buntinx, S. E., K. R., Pond, D. S., Fisher, and J. C., Burns. 1992. Evaluation of the captec chrome controlled release device for estimation of fecal output in grazing sheep. *Journal of Animal Science* 70:2243-2249.
242. Burfening, J. P., and M., Carpio. 1993. Genetic and environmental factors affecting growth and survival of Junin sheep in the central highlands of Peru. *Small Ruminant Research* 11:275-287.
243. Burfening, P. J. 1982. Selection for reproductive rate. Animal and research highlights. Montana Agricultural Experimental Station Research Report No. 201, pp.1-4.
244. Burfening, P. J. 1992. Direct and maternal genetic effects on lamb survival. MSU Sheep Reports: Miscellaneous Publications, Animal and Range Sciences Department, pp.57.
245. Burfening, P. J. 1993. Direct and maternal effects on lamb survival. *Small Ruminant Research* 11:267-274.
246. Burfening, P. J., and J. G., Berardinelli. 1989. Effect of feed treatment and exogenous estrogen and progesterone on puberty lambing rate in ewe lambs. *Journal of Animal Science* 63:1717-1721.
247. Burfening, P. J., M., Carpio, D. D., Kress, and R. L., Blackwell. 1981. Reproductive performance of improved sheep in the Central Highlands of Peru. *Journal of Animal Science* 53:177.
248. Burfening, P. J., R. L., Friedrich, and J. L., Van Horn. 1984. Production of Dorset Columbia Crosses under Western Range conditions. *International Goat and Sheep Research* 2:323-327.
249. Burfening, P. J., and K., Hanford. 1986. Selection for high and low prolificacy in Rambouillet Sheep. Proceedings of the 3rd World Congress on Genetics Applied to Animal Production, Lincoln, Nebraska.

250. Burfening, P. J., S. D., Kachman, K. J., Hanford, and D., Rossi. 1992. Selection for reproductive rate in Rambouillet sheep: Estimated genetic change in reproductive rate. MSU Sheep Reports: Miscellaneous Publications, Animal and Range Sciences Department, pp.59-60.
251. Burfening, P. J., S. D., Kachman, K. J., Hanford, and D., Rossi. 1993. Selection for reproductive rate in rambouillet sheep: Estimated genetic change in reproductive rate. *Small Ruminant Research* 10:317-330.
252. Burfening, P. J., and R. W., Kott. 1993. Supplemental feeding of range ewes during the perinatal period and lamb mortality and growth rate. *SID Research Digest* 9:24-27.
253. Burfening, P. J., R. W., Kott, and K. L., Coleman. 1987. Selection of ram lambs versus yearling rams in Targhee sheep. *SID Research Digest* spring:6-9.
254. Burfening, P. J., and D. D., Kress. 1992. Early growth traits related to subsequent most probable producing ability. *Small Ruminant Research* 7:67-74.
255. Burfening, P. J., and D. D., Kress. 1992. Direct and maternal effects on birth and weaning weight in sheep. MSU Sheep Reports: Miscellaneous Publications, Animal and Range Sciences Department, pp.58.
256. Burfening, P. J., and D. D., Kress. 1993. Direct and Maternal effects on birth and weaning weights in sheep. *Small Ruminant Research* 10:153-163.
257. Burfening, P. J., and O. O., Thomas. 1980. Get more production from your ewe lambs. Animal and range research highlights. Montana Agricultural Experimental Station Research Report No. 160, pp.33-35.
258. Burfening, P. J., and D., Tulley. 1982. Effect of selection for high and low prolificacy on ram libido and scrotal circumference. *Proceedings of the 2nd World Congress on Genetics Applied to Animal Production, Madrid* 7:536.
259. Burfening, P. J., and J. L., Van Horn. 1980. Production of quarter Finn crossbred ewes on the range: A progress report. Animal and range research highlights. Montana Agricultural Experimental Station Research Report No. 160.

260. Burfening, P. J., and J. L., Van Horn. 1984. Production of Dorset cross ewes on the range. *International Goat and Sheep Research* 2:323.
261. Burns, J. C., K. R., Pond, J. M., Luginbuhl, and D. S., Fisher. 1989. Evaluation of the Captec controlled release device for fecal output estimation. *Proceedings 20th Conference on Rumen Function* Number 18. Nov. 7-9, Chicago, Ill.
262. Burritt, E. A., J. C., Malechek, and F. D., Provenza. 1986. The effect of mastication on tannin concentrations and nutritional constituents of shrubs. *Proceedings of the 39th Meeting of the Society of Range Management*.
263. Burritt, E. A., J. C., Malechek, and F. D., Provenza. 1987. Changes in concentrations of tannins, total phenolics, crude protein and in vitro digestibility of browse due to mastication and insalivation by cattle. *Journal of Range Management* 40:409-411.
264. Burritt, E. A., J. A., Pfister, and J. C., Malechek. 1988. Effect of drying method on the nutritive composition of esophageal fistula forage samples: Influence of maturity. *Journal of Range Management* 41:346-349.
265. Burstein, H. J., W. L., Johnson, and E. A., Lopes. 1986. Dry matter consumption and in vivo dry matter digestibility of Caatinga Leaf litter pen fed to native SRD goats in Northeast Brazil. *Journal of Animal Science* 63:419.
266. Burstein, H. J., W. L., Johnson, and E. A., Lopes. 1986. Consumption and digestibility of Caatinga leaf litter pen fed to native goats. In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil).
267. Burstein, H. J., W. L., Johnson, and E. A., Lopes. 1987. Selectivity and intake of SRD goats grazing dry season Caatinga in Northeast Brazil. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1396.
268. Burstein, H. J., W. L., Johnson, T. W., Robb, and N. N., Barros. 1986. Breeding season effect on milk production and reproductive performance of SRD goats. In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil).

269. Burzlauff, D. F. 1982. Range management research expansion project. Proceedings of the SR-CRSP Kenya Workshop, pp.139-142.
270. Bustinza, V. A., P. J., Burfening, and R. L., Blackwell. 1988. Factors affecting survival in young Alpaca (Lamas pacos). *Journal of Animal Science* 66:1139-1143.
271. Butler, L. G. 1981. Supplementary feeding of Merino wethers grazing weed free stubble pasture. *Australian Journal of Experimental Agricultural Animal Husbandry* 21:272.
272. Cabrera Prospero, C. 1986. Determinacion de la curva de crecimiento para peso vivo y longitud de mecha en ovinos corriedale y junin por corriedale hasta los 16 meses de edad. M.S. Thesis. Universidad Nacional Agraria-La Molina.
273. Calderon, W. 1989. Digestibility of different forage quality in llama, alpaca and sheep. B.S. Thesis. UNSAAC, Cuzco.
274. Camara, F., and A., Koundouno. 1986. Influence de la severite de sousalimentation et de la croissance compensatrice sur les resultats d'abattage et de composition corporelle des agneaux de race local (Influence of severity of underfeeding and compensatory growth on slaughter results and body composition lambs of local breeds). B.S./M.S. Thesis. ENA Meknes, Morocco.
275. Campbell, J. W. 1983. Testicular measurements and endocrine profiles (Luteinizing hormone and testosterone) in young growing males as a measure of breeding value in sheep. M.S. Thesis. Texas A&M University, San Angelo, TX.
276. Campbell, R. R., H., Lionberger, and C., Suda. 1984. A social systems description of small farmers in two Western Kenya Districts. SR-CRSP Technical Report No. 43, NTIS #PB8-5-113850.
277. Campbell, R. R., M. F., Nolan, and J. F., Galliher. 1981. Reflections of Title XII Collaborative Research: The case of sociology in the SR-CRSP. *The Rural Sociologist* 1:2-10.
278. Cardenas, H., J. G., Berardinelli, P. J., Burfening, and R., Adair. 1990. In vitro stimulation of testosterone (T) secretion and testicular characteristics in rams from line selected for high and low reproductive rate. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 41:359-361.



279. Carey, J. 1984. Effects of range management practices on wool production. M.S. Thesis. Texas Tech University.
280. Carey, J. A., B. F., Craddock, A., Florez, and F. C., Bryant. 1988. Effects of grazing strategy and stocking rates on wool quality and quantity in the Andes of Peru. *Journal of Small Ruminant Research* 1:127-134.
281. Carey, J. A., F., Craddock, F. C., Bryant, and A., Florez. 1985. Effects of continuous, rotational and common use rotational grazing on wool quality and quantity in the Andes of Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
282. Carey, J. A., F., Craddock, A., Florez, and F. C., Bryant. 1985. Effects of stocking rate on wool quality and quantity in the Andes of Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
283. Carles, A. B. 1984. Introduction of systems analysis concepts in agricultural education. Proceedings of the 3rd SR-CRSP Workshop, Kabete, p.275-277.
284. Carlson, C., and S., Scholz. 1991. The effect of increased supply of sheep on producer revenues. SR-CRSP Working Paper No. 126, December.
285. Carlson, C., S., Scholz, E., Sembiring, and S., Karo Karo. 1991. Goat and sheep trade data from North Sumatra's Deli Garang district: A preliminary analysis of price data. SR-CRSP Annual Report, Sungei Putih.
286. Carneiro, H., J. R., Kawas, N. N., Barros, J. A., de Araujo Filho, J. W., dos Santos, J. M., Shelton, W. L., Johnson, and L. C. L., Freire. 1985. Efeito da ensilagem na composicao quimica do sorgo forrageiro (*Sorghum vulgare*) e da cunha (*Clitoria ternatea*) (Effect of ensiling on the chemical composition of forage sorghum and cunha). Annals, 22nd Annual Meeting, Brazilian Society of Zootecnia.
287. Carneiro, H., O., Sanchez, and W. L., Johnson. 1986. Aceitacao de silagem de varias plantas nativas pro caprinos e ovinos (Acceptability of tropical forages fed as silage or hay to sheep and goats). In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil).

288. Carneiro, H., O., Sanchez, and W. L., Johnson. 1986. Efeito da suplementacao de energia para caprinos nas epocas secas e umidas (Supplementation for goats in the wet and dry seasons). In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil).
289. Carpio, M., R. L., Blackwell, P. J., Burfening, P., Cabrera, G., Huapaya, and M., Lopez. 1989. Performance de un Rabano de ovinos Junin de clase A, durante 7 anos de experimentacion en la unidad de produccion Consac de la SAIS Tupac Amaru LTAD. no 1. Technical report No. 104 SR-CRSP, Lima, Peru.
290. Carpio, M., R. L., Blackwell, P. J., Burfening, P., Cabrera, and M., Lopez. 1989. Comportamento Productivo y Reproductivo de Borregas Criollas puras y Criollas mejoradas en cruzamientos con carneros de las razas Corriedale, Junin, Targhee x Finnish Landrace y Criollos puros en dos localidades de la Sierra central del Peru. Technical report No. 105 SR-CRSP, Lima, Peru.
291. Carpio, M., and P., Burfening. 1989. Estudios sobre crecimiento y comportamiento geneticos de carateristicas productivas en ovinos Corriedale y Junin en la sierra central del Peru. Technical report No. 106 SR-CRSP, Lima, Peru.
292. Carpio, M., M., Gamarra, P., Cabrera, G., Huapaya, P. J., Burfening, D. D., Kress, and R. L., Blackwell. 1983. Reproduction, growth and wool production of Junin Sheep in the Peruvian Andes. *Journal of Animal Science* 57:386.
293. Cartwright, T. C. 1982. Net herd productivity as a selection objective. *Proceedings of the Australian Association of Animal Breeding and Genetics*.
294. Cartwright, T. C. 1982. Herd level modeling as a tool in breeding systems in the tropics. *Proceedings of the 2nd World Congress on Genetics Applied to Livestock Production VI*, pp.269-278.
295. Cartwright, T. C. 1984. A strategy for breeding dual-purpose goats in Kenya. *Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete*, p.199-202.
296. Cartwright, T. C. 1984. The concept of systems analysis and its application to examining practical problems in Kenya. *Proceedings of the 3rd SR-CRSP Workshop, Kabete*, p.217-218.

297. Cartwright, T. C. 1986. Trends and potentials in developing countries for improved dairy goats. Proceedings of the Third Dairy Goat Field Day, Prairie View International Dairy Goat Research Center, p.21-23.
298. Cartwright, T. C., and H. D., Blackburn. 1987. Portability of animal breeding research to developing countries. *Journal of Animal Science* 67:342-347.
299. Cartwright, T. C., and H. D., Blackburn. 1987. Systems analysis for developing goat production. *Proceedings of the IV International Conference on Goats, Brasilia* 2:905.
300. Cartwright, T. C., H. D., Blackburn, and F., Ruvuna. 1986. Development of dual purpose goat production in Western Kenya - System analysis perspective. Proc. 5th SR-CRSP Workshop, Kabete, pp. 167-173.
301. Cartwright, T. C., R., Hart, H., Blackburn, F., Ruvuna, S., Tallam, and P., Howard. 1984. Results of systems analysis application to dual-purpose goat production in Western and Nyanza Provinces. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya, p.231-260.
302. Cartwright, T. C., P., Howard, F., Ruvuna, and H., Blackburn. 1985. Feasibility of Dual-Purpose Goats for small farms of Western Kenya: A systems analysis of meat and milk off-take potentials and limiting factors. Proc. 4th Small Ruminant-CRSP Kenya Workshop, Kakamega, p.89-103.
303. Cartwright, T. C., P. J., Howard, H. D., Blackburn, and E. L., Lentz. 1986. Viability of dual purpose goat production in Western Kenya - System analysis perspective. Proc. 5th SR-CRSP Workshop, Kabete, pp. 162-166.
304. Cartwright, T. C., E. L., Lentz, H. D., Blackburn, S. K., Tallam, and F., Ruvuna. 1988. The potential productivity of intensive smallholder goat dairies in Western Kenya. Proc. 5th Small Ruminant CRSP Workshop, Kabete.
305. Cartwright, T. C., F., Ruvuna, and S., Chema. 1986. Current status and perspective for breeding the Kenya dual purpose goat. Proc. 5th SR-CRSP Workshop, Kabete, pp. 146-150.
306. Cartwright, T. C., F., Ruvuna, B., Hart, H., Blackburn, G., Smith, and A., Carles. 1983. Simulated dual purpose performance of goats utilizing forage production potential of a smallholder. Proceedings of the 2nd SR-CRSP Kenya Workshop, p.119-135.

307. Cartwright, T. C., F., Ruvuna, P. J., Howard, and H. D., Blackburn. 1987. Designing breeding strategy for a synthetic dual purpose goat. *Journal of Animal Science* 65:202.
308. Cartwright, T. C., and G. M., Smith. 1982. Systems analysis of goat production. Proc. 3rd Int'l. Conf. on Goat Prod. and Dis., Tucson, AZ, p.503.
309. Cartwright, T. C., J. F., Taylor, B., Mwandotto, F., Ruvuna, H. D., Blackburn, and C. O., Ahuya. 1990. The Kenya Dual Purpose Goat breed. Proc. Eighth SR-CRSP Scientific Workshop. ILRAD, Nairobi, Kenya. March 7-8, pp. 5-9.
310. Chafik, A. 1986. Analyse genetique de la taille de portee et de ses composantes chez les brebis D'Man, Sardi et leurs croisees. M.S. Thesis. Memoire 3eme Cycle Agronomie, I.A.V. Hassan II, Rabat.
311. Chami, M. 1982. Productions animales et systemes alimentaires des troupeaux du haut atlas occidental (Vallee de Rheraya) (Feedings systems and animal products in the high atlas. M.S. Thesis. IAV Hassan II, Rabat, Morocco.
312. Chavez, J., P. J., Burfening, M., Carpio, and R. L., Blackwell. 1985. Mating activity of Junin rams under range conditions in the Andes of Peru. *Proceedings of the Western Section, ASAS* 36:46.
313. Chavez, J. C., E. R., Vyse, D. G., Cameron, R. L., Blackwell, and P. J., Burfening. 1992. Interrelationship between plasma transferrins and some reproductive traits in Rambouillet, Targhee and Columbia sheep under montana range conditions. MSU Sheep Reports: Miscellaneous Publications, Animal and Range Sciences Department, pp.61-62.
314. Chavez, J. F. 1986. Genetic analysis of growth and its relationship with lifetime production in Rambouillet, Targhee and Columbia Ewes under range conditions of Montana. Ph.D. Dissertation. Montana State University, Bozeman.
315. Chavulimu, E. 1983. Forage chemical analytical laboratory at NHRS. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.142-143.

316. Chergaoui, A. 1981. Etude bibliographique de l'effet de charge sur la dynamique de la vegetation: (1) preferences alimentaires des animaux sur parcours; (2) valeur nutritive de la ration alimentaire sur parcours; (3) performance des animaux sur parcours (Literature review of the effect of stocking rates on the vegetation dynamics: (1) dietary preferences of animals on pasture; (2) nutritive value of the diet on pasture; (3) animal performance on pasture). M.S. Thesis. IAV Hassan II, Rabat, Morocco.
317. Chergaoui, A. 1982. Etude des preferences alimentaires des ovins et de la vegetation sous differents niveaux de charge a la station pastorale de timahdite (Study of the dietary preferences of sheep and of the vegetation under various stocking rates of the timahdite range research station). M.S. Thesis. IAV Hassan II, Rabat, Morocco.
318. Chikhi, A. 1986. Interpretation des performances de croissance et de mortalite des ovins de races D'Man, Sardi et leurs croises. M.S. Thesis. Memoire de 3eme Cycle Agronomie, I.A.V. Hassan II, Rabat.
319. Chryaa, A. 1982. Etude des effets de la charge et de la saison sur les preferences alimentaires des ovins a la station pastorale de timahdite (Effects of season and stocking rates on the sheep at the timahdite feeding behavior experimental station). M.S. Thesis. IAV Hassan II, Rabat, Morocco.
320. Clark, D. D. 1982. Endocrine and physiological responses on the female goat during three reproductive phases. M.S. Thesis. Utah State University, Logan.
321. Collins, J. A., J. M., Rakes, N., Kasireddy, C. H., Mannasmith, and J. A., Yazman. 1980. Bacterial and somatic cell evaluation of a grade-A goat milk herd in Arkansas. *Journal of Dairy Science* 63:40.
322. de la Concha-Bermejillo, A., A. S., Magnus-Corraí, and J. C., DeMartini. 1991. Lentivirus infections of small ruminants. Symposium on the Health and Disease of Small Ruminant. Kerrville, TX. June 14, 1991.
323. Conelly, W. T. 1992. Population pressure and changing agropastoral management strategies in Western Kenya. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, Colorado: Westview Press.

324. Conelly, W. T., A. W., Mukhebi, L., Oyugi, and H. C., Knipscheer. 1987. Household Labor Allocation in an Intensive Crop/Livestock Farming System in Western Kenya. Proceedings of the Sixth Kenya Veterinary Association/Small Ruminant CRSP Workshop. SR-CRSP, Nairobi. pp.135-152.
325. Conrad, P. A., C. L., Baldwin, B. M., Goddeeris, W. C., Brown, T. T., Dolan, J. C., DeMartini, and O. K., oleMoiYoi. 1989. Infection of bovine T cell clones with genotypically distinct *Theileria parva* parasites and analysis of cell surface phenotype. *Parasitology* 99:205-214.
326. Constance, D. H., J. L., Gilles, and W. A., Heffernan. 1990. Agrarian policies and agricultural systems in the United States. In *Agrarian Policies and Agricultural Systems*, ed. A., Bonanno. Boulder, CO: Westview Press.
327. Contreras, W. 1988. Efectos del cruce de carneros Junin, Targhee x Junin, Targhee-Finish x Junin y Criollos con borregas criollas, sobre la performance productiva de corderos hasta el destete. B.S. Thesis. Universidad Nacional del Centro, Huancayco.
328. Coppock, D. L., J. E., Ellis, J., Wienpahl, J. T., McCabe, D. M., Swift, and K. A., Galvin. 1983. A review of livestock studies of the South Turkana Ecosystem Project. Proceedings of the SR-CRSP Kenya Workshop, pp.168-172.
329. Cordero, T., H., Vidal, R., Cochran, and L., Baquedano. 1983. Utilizacion de hojas de faique en caprinos en crecimiento. SR-CRSP Technical Report No. 20.
330. Coronado, L. 1989. Fattening sheep on cultivated pastures. In *Research results in range management and improved forages. Tech. Art. T-9-584*, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.
331. Coronado, L. E. 1988. Productive and reproductive performance of criollos sheep and crosses in improved pastures. In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
332. Coronado, L. F. 1983. Performance of purebred and crossbred sheep on accelerated lambing and cultivated pastures in Peru. M.S. Thesis. Texas A&M University, College Station.

333. Costa, C. A. F., and L. S., Vieira. 1984. Influencia da instalacao de pernoite, do tipo de pastagem e da suplementacao volumosa sobre a incidencia de nematodeos em caprinos. *Proc. Cong. Brasileiro de Med. Vet., Belem, Para 19:182.*
334. Costa, C. A. F., and L. S., Vieira. 1984. Parasitismo estacional por helmintos em caprinos da MRH do sertao dos unhamuns, CE. Primeiro ano de estudos. *Proc. Cong. Brasileiro de Med. Vet., Belem, Para 19:183.*
335. Crawford, T. B., P. M., Dilbeck, K. M., Kocan, D., Stiller, J. F., Everman, J. W., Kramer, and T. C., McGuire. 1989. Preliminary studies on a new rickettsiaceae from an aborted bovine fetus. *Proceedings of the Eighth National Veterinary Hemoparasite Disease Conference, St. Louis, Missouri, pp. 121-127.*
336. Crocker-Bedford, K. 1982. Courtship and maternal-neonate behavior and physiology of certain wild and domestic caprids. M.S. Thesis. Utah State University, Logan.
337. Curley, J. 1990. Kenya a country works together to feed its people. *Focus 21 Missouri's College of Agriculture Magazine Fall 1990:25-30.*
338. Curry, K. C., J. G., Berardinelli, R. L., Adair, and P. J., Burfening. 1985. Effect of nutrition and selection on reproductive parameters in rams. *Proceedings of the Western Section, ASAS 36:49.*
339. Curry, K. C., J. G., Berardinelli, P. J., Burfening, and R., Adair. 1993. Effect of selection for reproductive rate in females and feeding regimen on testicular characteristics and epididymal sperm reserve in rambouillet rams. *Small Ruminant Research 11:257-287.*
340. Cushwa, W. T., G. E., Bradford, G. H., Stabenfeldt, Y. M., Berger, and M. R., Dally. 1992. Ram influence on ovarian and sexual activity in anestrous ewes: Effects of isolation of ewes and rams before joining and date of ram introduction. *Journal of Animal Science 70:1195-1200.*
341. Cushwa, W. T., and J. F., Medrano. 1993. Effects of blood storage time and temperature on DNA yield and quality. *BioTechniques 14:204-207.*
342. da Costa, O. M. E., N., Gutierrez-A, and M., Amin. 1984. Export supply relationships for Brazilian Goat Skins. SR-CRSP Technical Report No. 44.

343. Dahl, B. 1982. Pasos en la toma de decisiones para el mejoramiento de la pradera (Considerations in deciding to improve the range). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
344. Damanik, K. I., and M. K., Salangka. 1983. The role of the village collector (Blantik) in the production and marketing systems of small ruminants of Central Java. SR-CRSP Working Paper No. 28, Small Ruminants Conf., Ciawi, Bogor, Indonesia.
345. DaMassa, A. J., D. L., Brooks, N. E., East, and A. I., Moe. 1984. Brief account of caprine mycoplasmosis in the United States with special reference to *Mycoplasma Mycoides* Subsp. *Mycoides*. *Proceedings of the Annual Meeting of the U.S. Animal Health Association, Fort Worth, Texas* 88:291.
346. Darfaoui, E. M. 1982. Etude des ressources de l'activite pastorales et du comportement alimentaire des caprins dans la Vallee Rheraya (Haut Atlas Occidental) (Study of range resources and goats feeding behavior in the Rheraya Valley, High Atlas). M.S. Thesis. IAV Hassan II, Rabat, Morocco.
347. daSilva, J. H. 1981. The effects of age of regrowth, day length and ambient air temperature on the growth and quality of three forage species. Ph.D. Dissertation. North Carolina State University, Raleigh.
348. da Silva, J. H. S., W. L., Johnson, J. C., Burns, and C. E., Anderson. 1987. Growth and environment effects on anatomy and quality of temperate and subtropical forage grasses. *Crop Science* 27:1266.
349. Davis, S. K., J. F., Taylor, and F., Ruvuna. 1991. Restriction fragment length polymorphisms and strategies for genetic improvement. In *Biotechnology in Kenya: Proc. National Conference on Plant and Animal Biotechnology (Nairobi, Kenya)*, ed. A. M., Mailu, J. O., Mugah, and P. O., Fungoh. Nairobi, Kenya: Initiatives Publishers, Initiatives Ltd.
350. DeBoer, A. J. 1982. Livestock Development: The Asian Experience. In *Livestock in Asia*, ed. J. C., Fine, and R. G., Lattimore. Ottawa, Canada: Int'l. Dev. Res. Ctr.
351. De Boer, A. J. 1982. Goat and goat product markets and market prospects: An international perspective. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, pp.37-44.



352. DeBoer, A. J. 1983. Design of alternative crop-livestock systems for Asian farmers. SR-CRSP Working Paper No.21, Indonesia.
353. DeBoer, A. J. 1985. *Some Basic Features of Asian Livestock-Production Systems Factors Underlying Productivity-Improvement Programs*. Morrilton, Arkansas: Winrock International.
354. De Boer, A. J., and H. A., Fitzhugh. 1983. *Sheep and goats in developing countries*. Washington, D.C.: World Bank.
355. De Boer, A. J., H. A., Fitzhugh, R. D., Hart, M. W., Sands, M. O., Job, and S., Chema. 1984. Production of meat and milk from goats in mixed farming systems in the high potential tropics. In *Livestock development in Sub-Saharan Africa - Constraints, prospects, policy*, ed. J. R., Simpsom, and P., Evangelou. Boulder, CO: Westview Press.
356. De Boer, A. J., M., Job, and R. W., Matthewman. 1982. Economic modeling of small farms in Western Kenya. Proceedings of the SR-CRSP Kenya Workshop, pp.91-96.
357. De Boer, A. J., M., Job, and G., Maundu. 1982. The relative profitability of meat goats, Angora goats, sheep, and cattle in four agro-economic zones of Kenya. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.355.
358. De Boer, A. J., M. O., Job, and B. A., McCarl. 1983. Economic factors influencing the simulated adoption of dual-purpose goats on representative small farms in Western Kenya. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.40-48.
359. De Boer, A. J., H., Knipscheer, and I., Kartamulia. 1993. Constraints to Technology Transfer for Animal Science Research in Indonesia. In *Livestock Service for Smallholders*, ed. P. W., Daniels. Bogor, Indonesia: Indonesia Institute for Animal Research and Development (INI ANSREDEF).
360. De Boer, A. J., and D. L., Mortimer. 1983. Some relationships between farm characteristics and herd/flock health indicators on a sample of farms in Western Kenya. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.49-63.

361. DeBoer, A. J., M., Sabrani, and A., Muljadi. 1982. Small ruminant production on small farms in West Java, Indonesia: An analysis of comparative resource use. Proc. 3rd Int'l. Conf. on Goat Prod. and Dis., Tucson, AZ, p.552.
362. DeBoer, J., M., Sabrani, and A., Muljadi. 1982. Small ruminant production on small farms in West Java, Indonesia: An analysis of comparative resource use. Proc. 3rd International Conference on Goat Production and Disease, p.552.
363. DeMartini, J., E., Ameghino, P., Rwambo, and T., McGuire. 1993. Retroviral Diseases of Small Ruminants. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:99-104.
364. DeMartini, J., F., Rurangirwa, P., Rwambo, and T., McGuire. 1993. Strategy for Development of Multivalent Virus-vectored Vaccines for Small Ruminants. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:133-138.
365. DeMartini, J. C. 1983. Observations of the prevalence, lesions and etiology of pulmonary adenomatosis and progressive pneumonia in Peru. Proceedings of the 1983 Western Conference for Food Animal Veterinary Medicine, Tulare, CA.
366. DeMartini, J. C. 1991. Ovine Lentivirus-induced lymphoid interstitial pneumonia. International Symposium on the Changing Role of Mycoplasmas in Respiratory Disease and AIDS. Scottsdale, AZ, November 30-December 5, 1991.
367. DeMartini, J. C. 1991. Pathogenesis of ovine lentivirus in experimentally and naturally infected sheep: Viral expression, antibody responses, and lesions. Annual Meeting of the American College of Veterinary Pathologists, Orlando, FL, December 10-13, 1991.
368. DeMartini, J. C., K. L., Banks, A., Greenlee, D. S., Adams, and T. C., McGuire. 1983. Augmented T lymphocyte responses and abnormal B lymphocyte numbers in goats chronically infected with the retrovirus causing caprine arthritis-encephalitis. *American Journal of Veterinary Research* 44:2064-2069.
369. DeMartini, J. C., H., Bickle, and S. J., Brodie. 1992. Immunogenicity of a raccoon poxvirus rabies-glycoprotein recombinant vaccine in sheep. 10th Scientific Workshop, SR-CRSP, ILRAD, Nairobi, Kenya, February 26-27, 1992.

370. DeMartini, J. C., H. M., Bickle, S. J., Brodie, B. X., He, and J. J., Esposito. 1993. Raccoon poxvirus rabies virus glycoprotein recombinant vaccine in sheep. *Archives of Virology* 133:211-222.
371. DeMartini, J. C., R. A., Bowen, J. O., Carlson, and A., de la Concha-Bermejillo. 1991. Genetic control of ovine lentivirus-associated disease through biotechnology. 12th Annual Food Animal Disease Reserach Conference. Laramie, WY. April 3-4, 1991.
372. DeMartini, J. C., R. A., Bowen, J. O., Carlson, and A., dela Concha. 1991. Chapter 17. Strategies for the genetic control of ovine lentivirus infections. In *Breeding for Disease Resistance in Farm Animals*, ed. J. B., Owen, and R. F. E., Axford. Oxon, U.K.: A.B. International.
373. DeMartini, J. C., S. J., Brodie, A., de la Concha-Bermijillo, J. A., Ellis, and M. D., Lairmore. 1993. The pathogenesis of lymphoid interstitial pneumonia in natural and experimental ovine lentivirus infection. *Clinical Infectious Diseases* 1:S236-S242.
374. DeMartini, J. C., S. J., Brodie, A., de la Concha-Bermejillo, J. A., Ellis, and M. D., Lairmore. 1993. Pathogenesis of lymphoid interstitial pneumonia in natural and experimental ovine lentivirus infection. *Clinical Infectious Diseases* 17:S236-S242.
375. DeMartini, J. C., S. J., Brodie, and P., Rwambo. 1993. Prevelence and characteristics of retrovirus-associated pulmonary diseases of Kenya Sheep: Preliminary results. 11th SR-CRSP Scientific Workshop, Nairobi, Kenya, March 3-4, 1993.
376. DeMartini, J. C., and A., de la Concha. 1990. Ovine lentivirus infection: Manifestations and diagnosis. Symposium on Diseases of Small Ruminants. Corvallis, OR, June 7-9, 1990.
377. DeMartini, J. C., A., de la Concha, R., Rosenbusch, and J. G., Tully. 1992. Ovine lentivirus and mycoplasma infection as a model for AIDS-associated lymphoid interstitial pneumonis. 11th Congress of the International Organization for Mycoplasmaology, Ames, Iowa, August 2-7, 1992.
378. DeMartini, J. C., Y., He, and S. J., Hecht. 1991. Antigenic and molecular characterization of Type D retrovirus-associated CA expression in ovine pulmonary carcinoma. 10th Annual Meeting of the American Society for Virology, Fort Collins, CO. July 7-11, 1991.

379. DeMartini, J. C., and S. J., Hecht. 1992. Antigenic and molecular characterization of a type D retrovirus associated with obine pulmonary carcinoma. 12th International Symposium of the World Association of Veterinary Microbiologist, Immunologists, and Specialists in Infectious Diseases, Davis, CA, September 8-12, 1992.
380. DeMartini, J. C., S. J., Hecht, and Y., He. 1991. Molecular characterization of type D retrovirus associated ovine pulmonary carcinoma. Third workshop on the pathogenesis of non-acute retroviruses. Philadelphia, PA, December 4-7, 1991.
381. DeMartini, J. C., S. J., Hecht, and Y., He. 1992. Characterization of a type D retrovirus associated with ovine pulmonary carcinoma. 10th Scientific Workshop, SR-CRSP, ILRAD, Nairobi, Kenya, February 26-27, 1992.
382. DeMartini, J. C., S. J., Hecht, and J. M., Sharp. 1992. Genetic and immunological analysis of a type D retrovirus associated with obine pulmonary carcinoma. 1992 Workshop on the Pathogenesis by Non-Acute Retroviruses, Newport Beach, CA, December 2-3, 1992.
383. DeMartini, J. C., M. D., Lairmore, R., Grant, O., Kajikawa, and J., Carlson. 1989. Molecular and antigenic diversity in ovine lentivirus strains is associated with varying pathogenicity. *J. Cellular Biochem. Suppl.* 13B:299.
384. DeMartini, J. C., M. D., Lairmore, R. F., Grant, O., Kajikawa, and J., Carlson. 1989. Viral heterogeneity and ovine lentivirus pathogenicity. Proceedings of the 40th Annual Meeting of the American College of Veterinary Pathologists, Baltimore, MD October 30-November 3, 1989.
385. DeMartini, J. C., R. H., Rosadio, and O., Kajikawa. 1989. Ovine pulmonary carcinoma: A retrovirus-induced neoplasm of sheep. 10th Annual Food Animal Disease Conference, Fort Collins, CO March 9-11, 1989.
386. DeMartini, J. C., R. H., Rosadio, and M. D., Lairmore. 1988. The etiology and pathogenetics of ovine pulmonary carcinoma. *Veterinary Microbiology* 17:219-236.
387. DeMartini, J. C., R. H., Rosadio, J. M., Sharp, H. I., Russell, and M. D., Lairmore. 1987. Experimental coinduction of type D retrovirus - Associated pulmonary adenomatosis and lentivirus - Associated lymphoid interstitial pneumonia. *Journal of the National Cancer Institute* 79:167-177.

388. DeMartini, J. C., S. P., Snyder, and E., Ameghino. 1985. Sheep pulmonary adenomatosis in Peru: Epidemiologic, pathologic and ultrastructural studies. In *Slow viruses in sheep, goats and cattle*, ed. J. M., Sharp, and R. H., Jorgenson. Luxembourg: Commission of the European Communities.
389. De Moraes Eloy da Costa, O. 1981. Oferta de Exportacao de Peles de Caprinos e Ovinos (Export Supply of Sheep and Goat Skins). Ph.D. Dissertation. Dept. of Agricultural Economics, Federal University of Ceara, Fortaleza, Brazil.
390. Dentine, M. R., and B. T., McDaniel. 1982. Potential genetic gain in US dairy goats. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.302.
391. de Queiroz, J. S. 1985. The Acarau Valley in Northeast Brazil: Vegetation, Soils and Land Use. Ph.D. Dissertation. Utah State University, Logan.
392. de Queiroz, J. S., and N., Gutierrez A. 1985. Ecology and management of traditional small ruminant production in Ceara, Northeast Brazil: Status and research needs. In *Proceedings of the International Rangeland Resources Development Symposium, Annual Meeting of the Society of Range Management*, ed. L. D., White, and J. A., Tiedeman. Salt Lake City, UT: Society of Range Management.
393. de Queiroz, J. S., N., Gutierrez-Aleman, and F. A., Ponce de Leon. 1986. The ecology and management of small ruminant production systems in the sertao of the northeast of Brazil. *Agricultural Systems* 22:259-287.
394. de Souza Neto, J., and G. A., Baker. 1986. Sistemas de manejo e producao pecuaria em uso no Nordeste: O caso de caprinos leiteiros. Proceedings of the First Workshop of the SR-CRSP, EMBRAPA/SR-CRSP.
395. de Souza Neto, J., and G. A., Baker. 1987. Production levels, production systems and production potential and strategies. Proceedings of the IV International Conference on Goats, EMBRAPA.
396. de Souza Neto, J., and G. A., Baker. 1987. Dairy goat production in Northeast Brazil: Production characteristics and research needs. Proceedings of the IV International Conference on Goats, EMBRAPA.

397. de Souza Neto, J., N., Gutierrez-A, and A. J., De Boer. 1984. Statistical analysis of small ruminant supply in Ceara State, Northeast Brazil. SR-CRSP Technical Series Paper No. 378.
398. de Souza Neto, J., N., Gutierrez-Aleman, and M. M., Amin. 1984. Un modelo de oferta para pequenos ruminantes no estado do Ceara, Brazil. *Revista de Economia Rural (Brazil)* 22:177-191.
399. Diaz, R., E., Lotterman, A., Carrasco, and A., Florez. 1982. Evaluacion economica del pastoreo rotativo complementario con y sin fertilization en las SAIS pachacutec (Economic evaluation of complementary pasture rotation with and without fertilization on SAIS Pachacutec). Proceedings of the Meeting of the Peruvian Association of Animal Production, Cajamarca, Peru.
400. Dilbeck, P. M., J. F., Evermann, T. B., Crawford, A. C. S., Ward, C. W., Leathers, C. J., Holland, C. A., Mebus, L. L., Logan, F. R., Rurangirwa, and T. C., McGuire. 1990. Isolation of a previously undescribed Rickettsia from an aborted bovine fetus. *Journal of Clinical Microbiology* 28:814-816.
401. Djajanegara, A., and I. W., Mathius. 1983. The utilization of Cassava leaves by sheep and goats. Proc. Seminar Pemanfaatan Limbah Pangan dan Limbah Pertanian untuk Makana Ternak, Yogyakarta.
402. Djajanegara, A., and A., Priyanti. 1993. Networking in small ruminants. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Bogor, Indonesia: SR-CRSP/CRIAS.
403. Djajanegara, A., N., Thomas, and W. L., Johnson. 1982. Patterns in goat and sheep production in West Java. Proc. 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.518.
404. Driggins, K. J., K. R., Pond, J. V., Cooper, T. G., Goodwin, J. A., Moore, and T. S., Wise. 1991. Performance of lambs fed bread and peanut hulls. *Journal of Animal Science* 69:523.
405. Drobnis, E. Z. 1981. Processing frozen goat semen. M.S. Thesis. California State Polytechnic University, Pomona.

406. Drobnis, E. Z., E. A., Nelson, and M. J., Burrill. 1980. Effect of several processing variables on motility and glutamic oxalacetic transaminase levels for frozen goat semen (I. Diluent; II. Washing; III. Glycerol Level). *Proceedings of the Western Section, ASAS* 31:170-175.
407. Drobnis, E. Z., E. A., Nelson, and T. Y., Lin. 1982. The effect of freezing rate on motility and GOT release of frozen goat spermatozoa. *Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ*, p.282.
408. Droke, E. A., and J. W., Spears. 1991. Effect of zinc deficiency on the immune response of growing lambs. *Journal of Animal Science* 69:546.
409. Droke, E. A., J. W., Spears, T. T., Brown, and M. A., Qureshi. 1991. Influence of dietary zinc and dexamethasone on immune response and organ weights in growing lambs. *Journal of Animal Science* 69:546.
410. Drummond, R. O., G., Lambert, H. E., Smalley, and C. E., Terrill. 1981. Estimated losses of livestock to pests. *Handbook of Pest Management in Agriculture* 1:111.
411. Dwiranti, F., and B., Haryanto. 1990. Rumen characteristics of sheep as affected by dietary crude protein concentrations, levels of feeding and timing of energy feed supplementation. Seminar Univ. Jenderal Soedirman. Purwokerto. Central Java.
412. East, N. E. 1981. The prevalence of Bluetongue Virus in some selected (California) counties. MPVM Thesis. University of California, Davis.
413. East, N. E. 1982. Chronic weight loss in adult dairy goats. *Compendium on Continuing Education for the Practicing Veterinarian* 4:braz1.
414. East, N. E. 1982. Population dynamics of a large commercial goat dairy. *Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ*, p.504.
415. East, N. E., and D. L., Brooks. 1982. Causes of abortion in a large goat dairy over a three-year period. *Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ*, p.539.

416. East, N. E., and D. L., Brooks. 1982. Pathologic diagnosis of diseases leading to culling from a large goat dairy. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.286.
417. Edwards, R. L., D. D., Creawelge, J. W., Savell, M., Shelton, and G. C., Smith. 1982. Cutability and palatability of Rambouillet, Blackface-crossbred and Karakul Lambs. *International Goat and Sheep Research* 2:77-80.
418. Ekpe, E. 1981. Some effects of crossbreeding on reproductive and productive programs in Nigeria. M.S. Thesis. Utah State University, Logan.
419. El Aich, A. 1979. Etude des preference alimentaire et de la valeur nutritive de la ration des ovins sur la station pastorale de Timahdite. M.S. Thesis. IAV Hassan II, Rabat, Morocco.
420. El Aich, A., D., Himeur, and M., Atiqui. 1981. Three years of research at the Timahdite Range Research Station. *Hommes, Terre et Eaux* 11:71-78.
421. El Aich, A., J., O'Rourke, and A., Bourbouze. 1980. Etude des preferences alimentaires et de la valeur nutritive de la ration des ovins sur la station pastorale de Timahdite. *Hommes, Terre et Eaux* 10:59-67.
422. El Aich, A., J. T., O'Rourke, and A., Bourbouze. 1980. Effects of grazing season on sheep diet preferences in the Moyen Atlas Mountains of Morocco. Proceedings of the 33rd Annual Meeting of the Society for Range Management, San Diego, CA.
423. El Aich, A., L. H., Rittenhouse, S., El Khamkhami, and T., Ait Mhand. 1990. Timahdit sheep production and behavior at three stocking rates in the Moyen Atlas of Morocco. *Journal of Range Management* 43:390-396.
424. El Aich, A., and L. R., Rittenhouse. 1989. Relationship between habitats selection and diet selection by Timahdit sheep. *Actes Inst. Agron. Vet.* 9:5-10.
425. El Fadili, M. 1984. Les sous-produits dans l'alimentation des ruminants (By-products in ruminant feeding). B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.



426. El Hilali, A. 1987. Influence du taux d'incorporation de la pulpe de caroube sur la digestibilité et l'utilisation de la ration par des ovins à l'engraissement (Influence of carob pulp level on the digestibility and utilization of diets for fattening sheep). B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.
427. Elliot, A. W. 1980. The effects of supplementing grass hay with a concentrate containing dried cattle manure. M.S. Thesis. Tuskegee Institute.
428. Ellis, J. A. 1982. The hematology of South American Camelidae and its role in adaptation to altitude. *Veterinary Medicine/Small Animal Clinician* 77:1795-1802.
429. Ellis, J. A. 1983. Ovine caseous lymphadenitis. *Compendium on Continuing Education for the Practicing Veterinarian* 9:S504-S511.
430. Ellis, J. A. 1984. Studies on the pathogenesis of lymphoid proliferation in sheep with ovine progressive pneumonia. Ph.D. Dissertation. Colorado State University, Fort Collins.
431. Ellis, J. A., A. E. V., Chavera, and J. C., DeMartini. 1993. Disease conditions in slaughtered sheep from small holder flocks in Peru. *Small Ruminant Research* 10:243-250.
432. Ellis, J. A., and J. C., DeMartini. 1983. Retroviral diseases in small ruminants: Ovine progressive pneumonia and caprine arthritis-encephalitis. *Compendium on Continuing Education for the Practicing Veterinarian* 5:S173-S180.
433. Ellis, J. A., and J. C., DeMartini. 1985. Ovine concanavalin A induced suppressor cells: Generation, assay, age related effects and re-evaluation of mechanism of suppression. *Immunology* 54:353-362.
434. Ellis, J. A., and J. C., DeMartini. 1985. Evidence of decreased concanavalin A induced suppressor cell activity in the peripheral blood and pulmonary lymph nodes of sheep with ovine progressive pneumonia. *Veterinary Immunological Immunopathology* 8:93-106.
435. Ellis, J. A., and J. C., DeMartini. 1985. Ovine interleukin-2: Partial purification and assay in normal sheep and sheep with ovine progressive pneumonia. *Veterinary Immunological Immunopathology* 8:15-25.

436. Ellis, J. A., and J. C., DeMartini. 1985. Immunomorphologic and morphometric changes in the pulmonary lymph nodes of sheep with ovine progressive pneumonia. *Veterinary Pathology* 22:32-41.
437. Ellis, J. A., and R., Rosadio. 1984. Intranasal tumor in a ewe. *Compendium on Continuing Education for the Practicing Veterinarian* 6:S61-S63.
438. Ellis, R. P., R. A., Wilson, and I. A., Ramirez. 1984. Characteristics of enteropathogenic E. coli isolated from neonatal alpacas. Proceedings of the 4th International Symposium of Neonatal Diarrhea, pp.270-276.
439. Ellis, R. P., R. A., Wilson, and I. A., Ramirez. 1985. Enteropathogenic E. Coli from neonatal alpacas: O:K:H serotypes and presence of pilus antigens and enterotoxins. Proceedings of the 5th International Convention on South American Cameloids, June 1985, Cuzco, p.33.
440. El Maadoudi, E. 1990. Supplementation azotee de regimes contenant la pulpe de caroube ou la puope d'agrumes pour ovins en croissance-engraissement. Memoire de 3eme cycle Agron Thesis. Hassan II. Inst. Agron. Vet. Rabat, Morocco.
441. El Maghraoui, A. 1979. Les effects de la mise en defens sur les preferences alimentaires de ovins dans le moyen atlas. M.S. Thesis. IAV Hassan II, Rabat, Morocco.
442. El Magraoui, A., J. T., O'Rourke, and A., Bourbouze. 1980. Sheep diet preferences in the Moyen Atlas Mountains of Morocco as affected by rest, deferment and moderate use. Proceedings of the 33rd Annual Meeting of the Society for Range Management, San Diego, CA.
443. Elzo, M. A., and G. E., Bradford. 1985. Multibreed sire evaluation procedures Across Countries. *Journal of Animal Science* 60:953-963.
444. Ennaciri, K., and N., Zrirak. 1986. Influence de la supplementation minerale sur les performances d'agneaux en croissance (Influence of mineral supplementation of performance of growing lambs). B.S./M.S. Thesis. ENA Meknes, Morocco.
445. Espinosa, C. 1985. Aspectos socioeconomicos de la ganaderia en las comunidades de la sierra de Peru (Socioeconomic aspects of livestock production in peasant communities in the highlands of Peru). SR-CRSP Paper No. 52.

446. Espinosa, C., and H., Rojas. 1985. La ganaderia de caprinos y la economia comunera en Salas, Peru (Goat herding and peasant economy in Salas, Peru). SR-CRSP Paper No. 36.
447. Espinoza, E. 1993. Current Work and Future Plans IBTA/CRSP, Bolivia. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:85-92.
448. Espinoza, J., F., San Martin, D., Holgado, and F., Suarez. 1989. Incidence of poisonous plant toxicity affecting the peruvian livestock industry. In *Research results in range management and improved forages. Tech. Art. T-9-584*, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.
449. Essaadi, A. 1984. Etude preliminaire des performances de croissance et de reproduction de deux races ovines marocaines: Sardi et D'Man conduites en race pure et en croisement a la Ferme d'Application de Tadla. M.S. Thesis. Memoire de 3eme Cycle Agronomie, I.A.V. Hassan II, Rabat.
450. Essadi, M., and M., Hafidi. 1983. Influence du niveau energetique sur la composition corporelle des agneaux en croissance (Influence of energy level on body composition of growing lambs). B.S./M.S. Thesis. ENA Meknes, Morocco.
451. Esslinger, D. L., and C. M., McCorkle. 1985. Communications in FSR Team-building: The interdisciplinary research team. In *Proc. Kansas State U. 1985 Farming Systems Res. and Ext. Symp.: Management and Methodology*, ed. C. B., Flora, and M., Tomecek. : Kansas State University.
452. Esslinger, D. L., and C. M., McCorkle. 1986. Communications on Agricultural Research, Development, and Extension Teams. *Agricultural Communications in Education Quarterly* 69:7-17.
453. Estofanero, M. 1990. Small Farmer Agricultural Production and Rural Development in the Andes of Peru. MSc, Community Development Thesis. University of Missouri-Columbia.
454. Ethuro, D. E. 1992. A socio-economic analysis of household expenditures in rural Western Kenya. M.S. Thesis. Clemson Univ., Clemson, South Carolina.

455. Farfan, R. 1982. Dry season forage preferences of alpaca (Lama pacos) in Southern Peru. M.S. Thesis. Texas Tech University, Lubbock.
456. Farfan, R., L. C., Fierro, T., Huisa, A., Rosales, and F. C., Bryant. 1986. Voluntary intake of llamas in the Andes of Southern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfa. Lubbock, TX: Texas Tech University.
457. Farfan, R., T., Huisa, D., Holgado, and F. C., Bryant. 1988. Vegetative communities in the high Andean region. In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
458. Farfan, R. D., and F. C., Bryant. 1984. Alpaca selectivity during the dry season in Southern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 1, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
459. Felix Romero, R. H. 1984. Clostridium perfringens type A in neonatal enteritis in lambs and its histopathological evaluation. D.V.M. Thesis. San Marcos University, Lima.
460. Fernandes, A., A., Oria, C. A., Zometa, and F., Helio Machado. 1985. As rasas caprinas leiteiras especializadas precisam de manejo racional adequado. *Extension Bulletin, EPACE Information* 4:1-2.
461. Fernandes, A. A. O., E. A. P., Fieureido, F. H. F., Machado, and M., Shelton. 1986. Growth and mortality of meat type kids under extensive management in Northeast Brazil. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1328.
462. Fernandes, A. A. O., E. A. P., Fieureido, F. H. F., Machado, and M., Shelton. 1986. Reproductive performance of meat goats under extensive management in Northeast Brazil. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1510.
463. Fernandes, A. A. O., E. A. P., Fieureido, J. O., Sanders, M., Shelton, and F. H. F., Machado. 1986. Reproductive performance of Morada Nova sheep in Northeastern Brazil. *Proceedings of the First Workshop of the SR-CRSP*, p.327.

464. Fernandes, A. A. P., E. A. P., Figueredo, J. O., Sanders, M., Shelton, and F. H. F., Machado. 1986. Genetic and environmental parameter estimates for growth traits in Morada Nova sheep in Northeast Brazil. Proceedings of the First Workshop of the SR-CRSP, p.313.
465. Fernandez, A. A. O., F. H. F., Machado, J. MdeS., Andrade, E. A. P., de Figueredo, M., Shelton, and K., Pant. 1985. Efeito cruzamento sobre crescimento caprinos no Ceara. *Pesq. Agropec. Bras.*, Brasilia 20:109-114.
466. Fernandez, M. 1988. Researching with high-altitude community farmers of the Mantaro Valley. INIAA/SR-CRSP Symposium on Results of Eight Years of Small Ruminant Collaborative Research in Peru, Lima and Arequipa.
467. Fernandez, M. 1988. Towards a participatory system approach. *ILEIA Newsletter for Low External Input and Sustainable Agriculture* 4:15-17.
468. Fernandez, M. 1989. La organizacion de la produccion en comunidades campesinas alto-andinas (The organization of production in high-Andean peasant communities). In *Consideraciones para la investigacion participativa en comunidades campesinas alto-andinas (Considerations for participatory research in high-Andean peasant communities)*, ed. L., Lluvian editores for the SR-CRSP. Lima, Peru: SR-CRSP (Serie comunidades, report (sic) tecnico no. 98).
469. Fernandez, M., C., Gregory, and N., Canales. 1989. Compartiendo la perdida con productores alto-andinos (Sharing the risk with high-Andean producers). In *Consideraciones para la investigacion participativa en comunidades campesinas alto-Andinas (Considerations for participative research in high-Andean peasant communities)*, ed. L., Lluvian editores for the SR-CRSP. Lima, Peru: SR-CRSP (Serie comunidades, reporte (sic) tecnico no. 98).
470. Fernandez, M. E. 1985. Participatory-action-research and the farming systems approach with highland peasants. M.S., Rural Social Development Thesis. Reading University, England.
471. Fernandez, M. E. 1986. La investigacion accion participativa y el enfoque de sistemas de produccion con los campesinos altoandinos (Participatory action research and the farming systems approach with Highland Andean Peasants). SR-CRSP/INIPA Technical Report No. 61, Community Studies Series, Lima.

472. Fernandez, M. E. 1986. Participatory-action-research and the farming systems approach with Highland peasants. SR-CRSP Technical Report No. 75 Lima UMC.
473. Fernandez, M. E. 1987. Division del Trabajo por Sexo (Division of Labor by Sex). *Mujer y Sociedad (Women and Society)* 7:43-44.
474. Fernandez, M. E. 1988. Technological domains of women in mixed farming systems of Andean peasant communities. In *Gender Issues in Farming Systems Research and Extension*, ed. S. V., Poats, M., Schmink, and A., Spring. Boulder, CO: Westview Press.
475. Fernandez, M. E. 1990. Sociological Considerations for Agricultural Research and Development in Andean Communities. In *Improving Andean Sheep and Alpaca Production: Recommendations from a Decade of Research in Peru*, ed. C. M., McCorkle. Columbia, MO: University of Missouri Printing Services.
476. Fernandez, M. E. 1992. The Social organization of production in community-based agropastoralism in the andes. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.
477. Fernandez, M. E., N., Gutierrez, and A. J., Swindale. 1986. Como son las comunidades de la zona intermedia del Valle del Mantaro (What are the intermediate zone communities of the Mantaro Valley like?). SR-CRSP Technical Report No. 62.
478. Fernandez, M. E., and A. A., Huaylinos. 1986. Sistemas de produccion agropecuarios y zonas agroecologicas del Valle del Mantaro (Agropastoral production systems and agroecological zones of the Mantary Valley). SR-CRSP/INIPA Technical Report No. 60, Community Studies Series, Lima.
479. Fernandez, M. E., and H., Salvatierra. 1986. The effect of gender-related production management on the design and implementation of participatory technology validation. Selected Proceedings of Kansas State University's 1986 Farming Systems Research Symposium - Farming Systems Research and Extension: Food and Feed, Kansas State University, pp.739-750.
480. Fernandez, M. E., and H., Salvatierra. 1989. Participatory Technology Validation in Highland Communities of Peru. In *Farmer First: Farmer Innovation and Agricultural Research*, ed. R., Chambers, A., Pacey, and L. A., Thrupp. New York: Bookstrap Press.

481. Ferris, C. F. 1983. Autoradiographic analysis of luteinizing hormone receptor sites in ovine ovarian follicles. M.S. Thesis. Utah State University, Logan.
482. Fetcher, A. 1982. Clinical outbreak of in domestic goats in Montana. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.499.
483. Field, C. R. 1982. The smallstock program of the UNESCO-Integrated Project in arid lands. Proceedings of the SR-CRSP Kenya Workshop, pp.151-167.
484. Fierro, L. C. 1985. Forage intake, diet composition and bioenergetics of grazing sheep in Southern Peru. Ph.D. Dissertation. Texas Tech University.
485. Fierro, L. C., and F. C., Bryant. 1989. Nutrition of herded sheep in the Andes of southern Peru. *Journal of Small Ruminant Research* 3:117-134.
486. Fierro, L. C., and F. C., Bryant. 1989. Grazing activities and bioenergetics of sheep grazing native range in southern Peru. *Journal of Small Ruminant Research* 3:135-146.
487. Fierro, L. C., T. C., Cartwright, H. D., Blackburn, and F. C., Bryant. 1986. Systems analysis and computer simulations of Corriedale Range Ewes in Peruvian Antiplano. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
488. Fierro, L. C., and R., Farfan. 1984. *Investigacion sobre pastos y forrajes de Texas Tech University, Peru*, vol. 1. Lubbock, TX: Texas Tech University.
489. Fierro, L. C., and R., Farfan. 1985. *Investigacion sobre pastos y forrajes de Texas Tech University, Peru*, vol. 2. Lubbock, TX: Texas Tech University.
490. Fierro, L. C., R. D., Farfan, and J., Astorga. 1983. *Proceedings of Symposium on Range Management in the Andes*. Puno, Peru: .
491. Fierro, L. C., T., Huisa, A., Rosales, and C., Schreiber. 1986. Nutritive value of llama diets during the drought and rainy season in Southern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.

492. Figueiredo, E. A. P. 1986. Potential breeding plans developed from observed genetic parameters and simulated genotypes for Morada Nova sheep in Northeast Brazil. Ph.D. Dissertation. Texas A&M University, College Station.
493. Figueiredo, E. A. P., H. D., Blackburn, J. O., Sanders, T. C., Cartwright, and J. M., Shelton. 1986. Potential genotypes for Morada Nova sheep in Northeast Brazil. Proceedings of the First Workshop of the SR-CRSP, p.355.
494. Figueiredo, E. A. P., E. R., Oliveira, and C., Bellaver. 1980. Performance dos ovinos deslançados no Brasil. EMBRAPA, Centro Nacional de Pesquisa de Caprinos, Circular Técnica No. 1.
495. Figueiredo, E. A. P., E. R., Oliveira, C., Bellever, and A. A., Simplicio. 1983. Hair sheep performance in Brazil. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
496. Figueiredo, E. A. P., and K. P., Pant. 1982. Evaluation of goat breeds in the tropical northeast Brazil (II. Analysis of age of death of kids). *Pesq. Agropec. Bras.*, Brasília 17:803-808.
497. Figueiredo, E. A. P., M., Shelton, and K. P., Pant. 1982. Goat skins. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, pp.488-490.
498. Figueiredo, E. A. P., A. A., Simplicio, C., Bellaver, and K. P., Pant. 1982. Evaluation of goat breeds in the tropical northeast Brazil (I. A study of birth related traits of native and exotic goat breeds). *Pesq. Agropec. Bras.*, Brasília 17:643-650.
499. Figueiredo, E. A. P., A. A., Simplicio, and K. P., Pant. 1982. Evaluation of sheep breeds for early growth in tropical northeast Brazil. *Tropical Animal Health and Production* 14:219-223.
500. Finley, C. M., G. E., Bradford, B. W., Kennedy, and F. D., Murrill. 1982. Use of DHA production records for dairy goat sire evaluation. Proc. 3rd Int'l. Conf. on Goat Prod. and Dis., Tucson, AZ, p.303.
501. Finley, C. M., E. J., Pollak, B. W., Kennedy, and G. E., Bradford. 1980. Influences of parity and seasonal breeding pattern on age adjustment factors for dairy goats. *Journal of Dairy Science* 63:112.



502. Finley, C. M., J. R., Thompson, and G. E., Bradford. 1984. Age-parity-season adjustment factors for milk and fat yield of dairy goats. *Journal of Dairy Science* 67:1867-1872.
503. Fiscus, S. A., J. C., DeMartini, and L. D., Pearson. 1982. Mitogen-induced blastogenesis of peripheral blood and efferent lymph lymphocytes from normal sheep. *American Journal of Veterinary Research* 43:629-632.
504. Fitzhugh, A. H., and G. E., Bradford. 1983. *Hair sheep of Western Africa and the Americas*. Boulder, Colorado: Westview Press.
505. Fitzhugh, H. A. 1981. Small ruminants as food producers. In *New protein foods*, vol. 4, ed. A. M., Altschul, and H. L., Wilke. : Academic Press.
506. Fitzhugh, H. A. 1982. Dual purpose goat production systems for smallholder agriculturalists. Proceedings of the SR-CRSP Kenya Workshop, pp.10-11.
507. Fitzhugh, H. A. 1983. Systems for efficient livestock production: Commercial systems producing marketable products. Proceedings of the 5th World Conference on Animal Production, Tokyo, Japan.
508. Fitzhugh, H. A. 1984. Hair sheep: Meat production without wool. In *Sheep and goat handbook*, vol. 4, ed. F. H., Baker, and M. E., Miller. Boulder, CO: Westview Press.
509. Fitzhugh, H. A. 1984. Systems approach to small ruminant research and development. Proceedings of the FAO Workshop, Small Ruminant Research and Development in the Near East, Tunis, Tunisia.
510. Fitzhugh, H. A. 1984. Small ruminant CRSP in Kenya. Proceedings of the SR-CRSP Kenya Workshop, Kabete, Kenya, pp.11-14.
511. Fitzhugh, H. A. 1984. Genetic aspects of germplasm storage and genetic engineering. In *Animal genetic resources: Cryogenic storage of germplasm and molecular engineering*, vol. 44. : FAO/APH Paper.
512. Fitzhugh, H. A. 1985. Designing production systems to optimize net merit and profit. In *Emerging technology and management of ruminants*, ed. F. H., Baker, and M. E., Miller. Boulder, CO: Westview Press.

513. Fitzhugh, H. A. 1985. SR-CRSP in Kenya. Prospects for the testing of the dual-purpose goat technology in Western Kenya. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
514. Fitzhugh, H. A. 1987. Systems approach to small ruminant research and development. In *Small ruminants in the near East*, vol. 54, ed. A. W., Qureshi, and H. A., Fitzhugh. : FAO Animal Production and Health Paper.
515. Fitzhugh, H. A. 1988. Relevance of animal research: An international perspective. *Journal of Animal Science* 66:2110-2116.
516. Fitzhugh, H. A., and G. E., Bradford. 1983. Productivity of Hair Sheep and Opportunities for Improvement. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
517. Fitzhugh, H. A., and G. E., Bradford. 1983. *Hair sheep of Western Africa and the Americas*. Boulder, CO: Westview Press.
518. Fitzhugh, H. A., D., Brown, M., Salim, M., Sands, A. E., Sidahmed, H., Kiguhi, P., Amuhinda, and E., Toieno. 1984. Monitoring on-farm performance of dual-purpose goats in Western Kenya. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya.
519. Fitzhugh, H. A., and A. J., De Boer. 1981. Physical and economic constraints to intensive animal production in developing countries. In *Intensive animal production in developing countries*, vol. 4, ed. A. J., Smith, and R. G., Gunn. : British Society of Animal Production Occ. Publishing.
520. Fitzhugh, H. A., R. D., Hart, R. A., Moreno, P. O., Osuji, M. E., Ruiz, and L., Singh. 1982. *Research on crop-animal systems*. : Centro Agronomico Tropical de Investigacion y Ensenauza, Caribbean Agricultural Research and Development Institute and Winrock International.
521. Fitzhugh, H. A., H. J., Hodgson, O. J., Scoville, T. D., Nguyen, and T. C., Byerly. 1987. *The role of ruminants in support of man*. Morrilton, AR: Winrock Monograph, Winrock International.
522. Fitzhugh, H. A., and R. E., Hudgens. 1988. Optimal use of genetic variability for different socioeconomic and production environments. Proceedings of the 3rd World Congress on Sheep and Beef Cattle Breedings, Paris.

523. Fitzhugh, H. A., J. F. M., Onim, P. P., Semenye, and A. E., Sidahmed. 1987. Integration of goats with crop production and other livestock production systems: Mixed farming systems in tropics. Proceedings of the 4th International Conference on Goats, Brasilia.
524. Fitzhugh, H. A., and M., Sands. 1983. Description of mixed small farm systems in Western Kenya. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.3-10.
525. Fletcher, I. C., P., Sitorus, B., Tiesnamurti, I., Inounu, and G. E., Bradford. 1985. Reproductive performance of Indonesian Sheep on different planes of nutrition. *Proceedings of the 3rd AAAP Animal Science Congress* 1:414-416.
526. Flores, E. R., F. D., Provenza, and D. F., Balph. 1989. Role of experience in the development of foraging skills of lambs browsing the shrub serviceberry. *Applied Animal Behavior Science* 23:271-278.
527. Flores, E. R., F. D., Provenza, and D. F., Balph. 1989. The effect of experience on the foraging skills of lambs: Importance of plant form. *Applied Animal Behavior Science* 23:285-291.
528. Flores, E. R., F. D., Provenza, and D. F., Balph. 1989. Relationship between plant maturity and foraging experience of lambs grazing hycrest crested wheatgrass. *Applied Animal Behavior Science* 23:279-284.
529. Flores, M. 1982. Pastoreo complementario, quema y fertilizacion de pastos naturales y estudios autoecologicos (Complementary pasturing, burning and fertilization of natural pastures and autoecological studies). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
530. Florez, A. 1992. Directorio de Profesionales. In *Red De Rumiantes Menores*, ed. A., Florez. Lima, Peru: .
531. Florez, A., F., Bryant, L., Bueno, and N., Rodriguez. 1986. Efecto de diferentes grados de utilizacion sobre el rendimiento del valor nutritivo de cinco gramineas de las praderas altoandinas. SR-CRSP Technical Report No. 80, INIPA, UNA-La Molina, Peru and Texas Tech University, Lubbock.

532. Florez, A., F., Bryant, J., Gamarra, J., Pfister, and J., Arias. 1986. Estudio de la influencia de diferentes niveles nutricionales al pastoreo sobre el crecimiento de la fibra de alpaca. SR-CRSP Technical Report No. 78, INIPA, UNA-La Molina, Peru and Texas Tech University, Lubbock.
533. Florez, A., F., Bryant, J., Gamarra, J., Pfister, and J., Arias. 1986. Empadre de alpacas al año de edad usando pasturas en la region altoandina del Peru. SR-CRSP Technical Report No.83, INIPA, UNA-La Molina, Peru and Texas Tech University, Lubbock.
534. Florez, A., F., Bryant, E., Malpartida, J., Gamarra, and J., Arias. 1986. Comparacion de los sistemas de pastoreo continuo y rotativo con ovinos en praderas nativas altoandinas. INIPA/SR-CRSP Ser. de reportes tecnicos no. 81, Lima, Peru.
535. Florez, A., F., Bryant, E., Malpartida, and J., Gamarro. 1986. Determinacion de la carga ovina optima en praderas nativas altoandinas bajo el sistema de pastoreo rotativo. SR-CRSP Technical Report No. 84, INIPA, UNA-La Molina, Peru and Texas Tech University, Lubbock.
536. Florez, A., F., Bryant, E., Malpartida, and J., Pfister. 1986. Pastoreo complementario una alternativa de utilization de las praderas nativas altoandinas. SR-CRSP Technical Report No. 79, INIPA, UNA-La Molina, Peru and Texas Tech University, Lubbock.
537. Florez, A., and F. C., Bryant. 1985. Plant phenology and nutrient content of species in the Andes of Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
538. Florez, A., F. C., Bryant, J., Gamarra, and J., Arias. 1986. Estudio de la influencia de diferentes niveles nutricionales al pastoreo sobre el crecimiento de la fibra de alpaca. INIPA/SR-CRSP Ser. de reportes tecnicos no. 78, Lima, Peru.
539. Florez, A., F. C., Bryant, and A. F., Schlundt. 1986. Grazing strategies and sheep production in the Andes of Peru. In *Proceedings of the International Rangeland Congress*, ed. D. J., Josse, P. W., Lynch, and O. B., Williams. : International Rangeland Congress.

540. Florez, A., F. C., Bryant, A. F., Schlundt, and E., Malpartida. 1982. Estudios autoecologicos de las principales especies forrajeras nativas de la puna peruana. In *Informe de investigacion 1981*, ed. A., Florez. La Molina, Peru: Programa de forrajes, Univ. Nac. Agraria.
541. Florez, A., F. C., Bryant, A. F. B., Schlundt, and E., Malpartida. 1982. Mejorar la produccion de ovinos con el uso de un sistema de pastoreo complementario con y sin fertilizacion. In *Informe de investigacion 1981*, ed. A., Florez. La Molina, Peru: Programa de forrajes, Univ. Nac. Agraria.
542. Florez, A., F. C., Bryant, A. F. B., Schlundt, and E., Malpartida. 1982. Efecto de los sistemas de pastoreo y carga animal sobre los indices pecuarios en el periodo paricion-destete, con borequillas. In *Informe de investigacion 1981*, ed. A., Florez. La Molina, Peru: Programa de forrajes, Univ. Nac. Agraria.
543. Florez, A., A., Carrasco, N., Gutierrez A, and O., Carhuamaca. 1986. Desempeno biologico-economico de la asociacion rye grass-trebol para engorde de ovinos en la sierra del Peru. SR-CRSP Technical Report No. 82, INIPA, UNA-La Molina, Peru and Texas Tech University, Lubbock.
544. Florez, A., A., Carrasco, A., N Gutierrez, and O., Carhuamaca. 1986. Desempeno biologico-economico de la asociacion rye grass-trebol para engorde de ovinos en la sierra del Peru. SR-CRSP Technical Report No. 82, INIPA, UNA-La Molina, Peru and Texas Tech University, Lubbock.
545. Florez, A., E., Malpartida, F. C., Bryant, and E. P., Wiggers. 1986. Nutrient content and phenology of cool-season grasses in Peru. *Grass and Forage Science* 40:365-369.
546. Florez, A., C., Novoa, F., San Martin, E., Ameghino, and M., Carpio. 1993. Overview of Achievements of the SR-CRSP in Peru and National and Regional Impacts. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:73-84.
547. Foote, W. C. 1981. International movement of sheep and goats. In *Sheep and Goat Handbook*, vol. 2. San Antonio, TX: International Stockmen's School.
548. Foote, W. C. 1981. Some aspects of goat meat production. In *Sheep and Goat Handbook*, vol. 2. San Antonio, TX: International Stockmen's School.

549. Foote, W. C. 1981. Animal production in developing countries. *Utah Science* 42:48-53.
550. Foote, W. C. 1981. Hormonal regulation in small ruminants to increase production. In *Sheep and goat handbook*, vol. 2. San Antonio, TX: International Stockmen's School.
551. Foote, W. C. 1983. The St. Croix Sheep in the United States. In *Hair Sheep in Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
552. Foote, W. C., R. C., Evans, and S., Gebrelul. 1981. The St. Croix: A different kind of sheep. Proceedings of "Production for Profit", Utah Sheep Day, Cedar City, UT.
553. Foote, W. C., S., Gebrelul, and D. H., Matthews. 1981. Factors affecting lamb production. Proceedings of "Production for Profit", Utah Sheep Day, Cedar City, UT, pp.130-135.
554. Foote, W. C., S., Gebrelul, and D. H., Matthews. 1981. Factors affecting reproduction and growth in sheep. In *Sheep and goat handbook*, vol. 2. San Antonio, TX: International Stockmen's School.
555. Foote, W. C., and H., Goot. 1981. Some bio-economic aspects of lamb-meat production. In *Sheep and goat handbook*, vol. 2. San Antonio, TX: International Stockmen's School.
556. Foote, W. C., and E. A., Nelson. 1981. Techniques and procedures for small ruminant breed improvement. In *Sheep and Goat Handbook*, vol. 2. San Antonio, TX: International Stockmen's School.
557. Foote, W. C., J., Pitcher, and W. W., Clark. 1981. Scrapie and the U.S. Sheep Industry. Proceedings of "Production for Profit", Utah Sheep Day, Cedar City, UT, pp.122-125.
558. Foote, W. D., W. C., Foote, and E. A., Nelson. 1982. Induced out of season activity in dairy goats. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.340.
559. Friedrich, R. L., and P. J., Burfening. 1981. Survival rates and weaning weights of lambs. Animal and range research highlights. Montana Agricultural Experimental Station Research Report No. 180, pp.47-49.

560. Froetschel, M. A., W. J., Croom, H. R., Gaskins, E. S., Leonard, and M. D., Whitacre. 1983. The effects of avoparcin on ruminal propionate production and amino acid degradation in sheep fed high and low fiber diets. *Journal of Nutrition* 113:1355-1362.
561. Fuchs, T. W., and M., Shelton. 1985. Effectiveness of new methods of biting lice control on goats. *The Southwestern Entomologist*:15-19.
562. Gamarra, J., A., Florez, F. C., Bryant, A., Schlundt, and E., Malpartida. 1985. Sheep production under continuous, rotational and common use rotational grazing at equal stocking rates in the Andes of Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
563. Garay, G. L. 1985. Efecto de la edad y numero de esquilas sobre el peso vivo, peso vellon, longitud de mecha y finura en el ovino junin. B.S. Thesis. Universidad Nacional Agraria, La Molina.
564. Garcia, H., F., Villena, T., Cordero, A., Schlundt, and R., Higaonna. 1984. Grazing behaviors of goats in Northern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 1, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
565. Garcia, O., J., Bravo, B., Kennedy, and E., Garcia. 1982. Crossbreeding of imported and native goats in a dry tropical environment (II. Production and Reproduction). Proc. 3rd Int'l Conf. on Goat Prod. and Dis., Tucson, AZ, p.509.
566. Garcia, O., E., Garcia, B., Kennedy, and J., Bravo. 1982. Crossbreeding of imported and native goats in a dry tropical environment (I. Survival and growth of kids). Proc. 3rd Int'l Conf. on Goat Prod. and Dis., Tucson, AZ, p.510.
567. Garcia-Betancourt, O. J. 1981. Genetic Analysis of a Crossbreeding Experiment Using Improved Dairy Goat Breeds and Native Goats in a Dry Tropical Environment. Ph.D. Dissertation. University of California, Davis.
568. Garmendia, A. 1986. The mechanism, isotypes involved, and effect of passive immunoglobulin transfer to the newborn Alpaca. Ph.D. Dissertation. Washington State University, Pullman.

569. Garmendia, A. E., and T. C., McGuire. 1987. The mechanism and isotypes involved in passive immunoglobulin transfer to the newborn Alpaca. *American Journal of Veterinary Research* 48:1465-1471.
570. Garmendia, A. E., G. H., Palmer, J. C., DeMartini, and T. C., McGuire. 1987. Failure of passive immunoglobulin transfer: A major determinant of mortality in newborn Alpacas. *American Journal of Veterinary Research* 48:1472-1476.
571. Garmendia, A. E., G. H., Palmer, J. C., DeMartini, and T. C., McGuire. 1987. A major determinant of mortality of newborn alpacas. *American Journal of Veterinary Research* 48:1472-1476.
572. Gaskins, H. R. 1986. Effects of parasympathetic stimulation and protein supplementation in immature small ruminants fed low quality roughage diets. M.S. Thesis. North Carolina State University, Raleigh.
573. Gaskins, H. R., J. E., van Eys, J. M., Fernandez, W. J., Croom, and W. M., Hagler. 1986. Effect of parasympathetic stimulation and protein source on performance of immature sheep and goats fed low quality roughage diets. *Journal of Animal Science* 63:435.
574. Gatenby, R., E., Bradford, M., Doloksaribu, E., Romajli, D., Pitono, and H., Sakul. 1993. Growth Mortality, and Wool Cover of Sumatra Sheep and Crosses with Three Breeds of Hair Sheep. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:19-27.
575. Gatenby, R. M. 1985. The design of houses for domestic animals in hot countries. *Proceedings of the 3rd AAAP Animal Science Congress* 11:1171-1173.
576. Gatenby, R. M. 1985. A survey of goat husbandry in West Timor and recommendations for research at Lili. SR-CRSP Working Paper No. 68, Bogor, Indonesia.
577. Gatenby, R. M., and S. P., Ginting. 1991. Sheep production in rubber plantations. *Indonesian Small Ruminant Newsletter* 2:10-11.
578. Gatenby, R. M., M., Hutauruk, A. J., Wilson, and E., Romjali. 1991. Identification of worm resistance in sheep. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.58-59.



579. Gatenby, R. M., R. A. C., Jensen, Subandriyo, and G. E., Bradford. 1988. Actual and potential levels of performance of Indonesian sheep and goats under traditional management systems. SR-CRSP Technical Report No. 97.
580. Gatenby, R. M., M., Martawidjaja, and S. W., Handayani. 1985. Housing of sheep and goats in West Java. *Proceedings of the 3rd AAAP Animal Science Congress* 2:1168-1170.
581. Gatenby, R. M., M., Martawidjaja, and G., Spinhoven. 1986. Comparison of the thermal budgets of five different roofs of animal houses. SR-CRSP Working Paper No. 75.
582. Gaylord, M. S., and P. R., Bilinsky. 1986. Outreach Pilot Project: A case study of a small ruminant farming systems research and extension project in West Java. In *Selected Proceedings of Kansas State University's 1986 Farming Systems Research Symposium - Farming Systems Research & Extension: Food and Feed*. Manhattan, KS: Kansas State University.
583. Gebrelul, S. 1979. Factors affecting ewe reproduction and lamb production traits in Targhee and Crossbred Targhee Range Ewes and relationships among important traits. M.S. Thesis. Utah State University, Logan.
584. Gebrelul, S. 1983. The relationship of ewe body mass to lamb production. Ph.D. Dissertation. Utah State University, Logan.
585. Gefu, J., and J., Gilles. 1987. Problems of livestock research and development in Nigeria. *Samaru J. of Agricultural Education* 1:72-79.
586. Gefu, J., and J. L., Gilles. 1991. Pastoralist, ranchers and the state in Nigeria and North America. *Nomadic People* 27:34-50.
587. Gefu, J. O. 1982. Socio-economic characteristics of goat producers and their husbandry practices in Norther Nigeria. *Proceedings of the Third International Conference on Goat Production and Disease*, Tucson, AZ, p.422-427.
588. Gefu, J. O., and I. F., Adu. 1982. Observations on the herd size of sheep and goats under traditonal production systems in Kano State, Nigeria. *World Review of Animal Production* 18:25-28.

589. Gefu, J. O., and I. F., Adu. 1984. Understanding small ruminant production in Northern Nigeria. *World Review of Animal Production* 20:35-38.
590. Getz, W., and M., Onim. 1993. Systems Approach in Developing Feed Resource and Feeding Strategies. In *Proceedings Small Ruminant Workshop*, ed. E., Bradford, and M., Keene. San Juan, Puerto Rico: .
591. Getz, W., and N., Raun. 1993. Opportunities for Animal Agriculture in Sub-Saharan Africa for the Benefit of People. Invited paper: 20th Anniversary Symposium, Tanzania Society of Animal Production, Arusha, Tanzania, October 12-15, 1993.
592. Getz, W. R., and G. H., Mannasmith. 1991. Reproductive performance in a small flock of sheep grading up to Katahdin hair sheep in Arkansas. Proc. Symp. Hair Sheep Research, June 28-29, 1991, Hotel on the Cay, St. Croix Agric. Exp. Sta., Univ. Virgin Islands, Kingshill, St. Croix, U.S.V.I, (Stephan Wildeus, editor).
593. Gifford, G. F., F. D., Provenza, and J. C., Malechek. 1983. Impacts of range goats on infiltration rates in Southwestern Utah. *Journal of Range Management* 36:152-153.
594. Gilles, J. L. 1979. Prolific sheep found in North Africa. *Farm and Ranch Forum* 1:8.
595. Gilles, J. L. 1982. Organizing for pastoral development: Themes from traditional systems. *Agricultural Administration and Extension* 11:215-225.
596. Gilles, J. L. 1982. Prestige and goats - Social obstacles to the expansion of goat production. Proc. 3rd International Conference on Goat Production and Disease, Tucson, AZ, pp.417-419.
597. Gilles, J. L. 1988. Slippery Grazing Rights: Using Indigenous Knowledge for Pastoral Development. In *Arid Lands Today and Tomorrow: Proceedings of an International Research and Developmental Conference*, ed. E. E., Whitehead, C. F., Hutchinson, and B. N., Timmerman. Westview, Belhaven: .
598. Gilles, J. L., and J., Gefu. 1990. Nomads, Ranchers and the State: The socio-cultural aspects of pastoralism. In *The World of Pastoralism*, ed. J., Galaty, and D., Johnson. New York: Guilford Press.

599. Gilles, J. L., and K., Jamtgaard. 1981. Overgrazing in pastoral areas - The commons reconsidered. *Sociologia Ruralis* 21:129-141.
600. Gilles, J. L., and K., Jamtgaard. 1982. Reconsidering the commons. *Rangelands* 4:51-54.
601. Gilles, J. L., M., Mahdi, and A., Hammoudi. 1986. Ouakaimedene, Morocco: A high mountain Agdal. In *Proceedings of the Conference on Common Property Resource Management*, ed. National Research Council. Washington, DC: National Academy Press.
602. Ginting, S., and A., Djajanegara. 1993. Recent methodology on the evaluation of forages as feeds for small ruminant integrated with tree cropping production systems. In *Advances in Sustainable Small Ruminant - Tree Cropping Integrated Systems*, ed. S., Sivaraj, P., Agamuthu, and T., Mukherjee. Kuala Lumpur, Malaysia: Institute of Advanced Studies.
603. Ginting, S. P., R. M., Gatenby, A. D., Pitono, M. D., Sanchez, and K. R., Pond. 1992. Supplementation of ewes during late pregnancy and early lactation. Proc. of the 6th AAAP Anim. Sci. Congress vol. 3 p. 44.
604. Ginting, S. P., M. D., Sanchez, E., Romjali, R. M., Gatenby, and K. R., Pond. 1991. Supplementation of ewes in late pregnancy and early lactation. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.5-7.
605. Gobena, A. 1988. Effect of fertilization on woody plant chemistry: The role in diet selection by goats. Ph.D. Dissertation. Utah State University, Logan.
606. Gonzales, E., A., Florez, and E., Malpartida. 1985. Lamb fattening with elephant grass (*Pennisetum purpureum*) and alfalfa on the coast of Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
607. Gonzalez, G. E. 1982. Factors affecting estimates of genetic parameters for economic traits in sheep. Ph.D. Dissertation. University of California, Davis.
608. Gonzalez-Reyna, A., J., De Alba, and W. C., Foote. 1983. Reproduction in the Peliguey Sheep. In *Hair Sheep in Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.

609. Goode, L., and R. W., Harvey. 1980. The use of corn stover ensiled with either soybean meal or broiler litter for wintering stocker steers. NCSU Animal Science Annual Report, pp.24-25.
610. Goode, L., A. C., Linnerud, and D. F., Tugman. 1980. Sheep: Reproductive performance of straightbred and crossbred Barbados Blackbelly ewes. *International Goat and Sheep Research* 1:216-225.
611. Goode, L., T. A., Yazwinski, D. J., Moncol, A. C., Linnerud, G. W., Morgan, and D. F., Tugman. 1983. Research with Barbados Blackbelly sheep in North Carolina. In *Hair Sheep in Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : .
612. Goot, H., E., Eyal, Y., Folman, and W. C., Foote. 1979. Contemporary comparisons between progeny by Finnish Landrace and Romonov Rams out of mutton Merino and Awassi ewes. *Livestock Production Science* 6:283-293.
613. Grados, A. B. 1984. Estudio del peso vivo y peso vellon en la progenie de tres grupos de carneros en la raza junin. B.S. Thesis. Universidad Nacional Agraria, La Molina.
614. Grant, R. F., J. O., Carlson, O., Kajikawa, and J. C., DeMaritni. 1990. Molecular analysis of several ovine lentiviruses with distinctly different pathogenic potentials. *J. Cellular Biochem. Suppl.* 14D:134.
615. Grant, R. F., J. O., Carlson, O., Kajikawa, and J. C., DeMartini. 1990. Molecular analysis of several ovine lentiviruses with distinctly different pathogenic potentials. *Journal of Cellular Biochemistry Suppl.* 14D:134.
616. Grenet, E., J. M., Luginbuhl, P., Barry, K. R., Pond, and R., Beaumont. 1990. Image analysis of the size and morphological characteristics of ruminal digesta particles from sheep fed mixed grass hay. *Reproduction Nutrition Development*:176S.
617. Guardioloa, C. M., G. C. J., Fahey, J. W., Spears, U. S., Garrigus, O. A., Izquierdo, and C., Pedroza. 1983. The effects of sulfur supplementation on cellulose digestion in vitro and on nutrient digestion, nitrogen metabolism and rumen characteristics of lambs fed on good quality fescue and tropical star grass hays. *Animal Feed Science Technology* 8:129-138.

618. Guessous, F. 1984. Nitrogen residue in cell-wall fractions and prediction of organic matter digestibility in berseem (*Trifolium alexandrinum*). *Journal of Animal Science* 59:304.
619. Guessous, F. 1991. Utilisation des chaumes de cereales par les ruminants. In *Livestock in the Mediterranean Cereal Production Systems: Proceedings International Symposium ANPA-EAAP-ICAMAS*. Wageningen: Pudoc Scientific Publishers.
620. Guessous, F. 1993. The SR-CRSP in Morocco 1981-1992: Achievements and Impacts. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:105-108.
621. Guessous, F., E., Dahbi, W. L., Johnson, and K. R., Pond. 1989. Effect of period of grazing and supplementation on diet collected by sheep grazing wheat stubble. In *40th European Association of Animal Production*. Dublin, Ireland: .
622. Guessous, F., A., El Hilali, and W. L., Johnson. 1987. Influence de taux d'incorporation de la pulpe de caroube sur la digestibilite et l'utilisation des rations par des ovins a l'engraissement (Influence of carob pulp level on the digestibility and utilization of diets for fattening sheep). *Memoires, Troisiemes Journees des Recherches sur l'Alimentation et la Nutrition des Herbivores, Inst. Nat. de la Recherche Agron., Paris*.
623. Guessous, F., A., El Hilali, and W. L., Johnson. 1988. Influence de taux d'incorporation de la pulpe de caroube sur la digestibilite et l'utilisation des rations par les ovins a l'engraissement. *Reproduction Nutrition Developement* 28:93.
624. Guessous, F., A. E., Hilali, and W. L., Johnson. 1988. Influence du taux d'incorporation de la pulpe de caroube sur la digestibilite et l'utilisation des rations par des ovins a l'engraissement. *Reproduction Nutrition Developement* 28:93-94.
625. Guessous, F., A., Igmoullan, and W. L., Johnson. 1986. Nutritive value of alfalfa produced in a Mediterranean climate. *Journal of Animal Science* 63:308.
626. Guessous, F., J.-M., Luginbuhl, N., Rihani, and K. R., Pond. 1991. Influence of supplementation on the performance of gestating ewes grazing wheat stubble pastures. *Animal Feed Science Technology* 35:95-103.

627. Guessous, F., A., Outmani, E., Dahbi, J. E., Garrett, and W. L., Johnson. 1987. Utilization of wheat stubble by sheep: Effect of protein supplementation on intake, diet composition and animal weight. Proceedings of the 38th Annual Meeting of the European Association of Animal Production, Lisbon.
628. Guessous, F., N., Rihani, E., Dahbi, and K. R., Pond. 1990. Affect of protein and energy supplementation during the wheat stubble grazing period on ewe weight and reproductive performance. 41 Annual Meeting EAAP, Toulouse. Vol. 1:236.
629. Guessous, F., N., Rihani, A., Igmoullan, and W. L., Johnson. 1985. Valeur nutritive des principaux aliments utilises par les ovins dans les vallees du Ziz et du Draa (Nutritive value of the principal feeds used for sheep in the Ziz and Draa Valleys). In *Projet Petits Ruminants*. Institut Agron. et Vet. Hassan II and SR-CRSP, Rabat (Morocco): Premier Bilan.
630. Guessous, F., N., Rihani, A., Kabbali, and W. L., Johnson. 1985. Rapport general du sous groupe nutrition du projet petits ruminants (General report of the nutrition group of the small ruminant project). In *Projet Petits Ruminants*. Rabat, Morocco: Premier Bilan. Inst. Agron. et Vet. Hassan II and SR-CRSP, Rabat (Morocco).
631. Guessous, F., N., Rihani, A., Kabbali, and W. L., Johnson. 1989. Improving feeding systems for sheep in a Mediterranean rain-fed cereals/livestock area of Morocco. *Journal of Animal Science* 67:3080.
632. Guillet, D. W. 1985. Microcomputers in fieldwork and the image of the anthropologist. *Human Organization* 44:369-371.
633. Guillet, D. W. 1987. Agricultural intensification and deintensification in Lari, Colca Valley, Peru. In *Res. Econ. Anthropology Vol. 8*, ed. B., Isaac. : JAI Press.
634. Guillet, D. W. 1987. Contemporary agricultural terracing in Lari, Colca Valley, Peru: Implications for theories of terrace abandonment and programs of terrace restoration. In *Pre-Hispanic Agricultural Fields in the Andean Region*, ed. W. M., Denevan, K., Mathewson, and G., Knapp. : British Archaeological Reports, Int'l Series, Oxford U. Press.

635. Guillet, D. W. 1987. On the potential for intensification of agropastoralism in arid zones of the Central Andes. In *Arid Land Use Strategies and Risk Management in the Andes: A Regional Anthropological Perspective*, ed. D. L., Browman. Boulder, CO: Westview Press.
636. Guillet, D. W. 1987. Terracing and irrigation in the Peruvian Highlands. *Current Anthropology* 28:409-430.
637. Guillet, D. W. 1989. Irrigation and power in Southern Peru. In *Human Systems Ecology: Studies in the Integration of Political Economy, Adaptation, and Socionatural Regions*, ed. S., Smith, and E., Reeves. Boulder, CO: Westview Press.
638. Guillet, D. W. 1992. The Impact of alfalfa introduction on common field agropastoral regimes: Quechua Villagers in Southwestern Peru. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.
639. Gutierrez, A. N., A. J., De Boer, and E., Kehrberg. 1983. Modelo matematico para ovaliar tecnologias pecuarias a nivel de toda fazenda do Nordeste do Brasil. Paper presented to IX Reunion of ALPA, Santiago, Chile, abstract SE-22.
640. Gutierrez, L. C., A., Schlundt, and L. C., Fierro. 1984. Low cost-easy to build esophageal cannula for sheep. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
641. Gutierrez, N., A. J., De Boer, and V., Vieira. 1982. Capital structure and farm incomes for a sample of sheep and goat producers in Northeast Brazil. Proceedings of the 3rd International Conference on Goat Production and Disease, University of Arizona, Tucson, AS, January 10-15, 1982.
642. Gutierrez, N. F., and A. J., De Boer. 1982. Marketing and price formation for meat goats, hair sheep, and their products in Ceara State, Northeast Brazil. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, pp.50-54.
643. Gutierrez, N. F., A. J., De Boer, and E., Ospina. 1981. Un modelo econometrico para la ganaderia de carne en Columbia: 1950-1970 (An econometric model of the Columbian beef sector: 1950-1970). *Revista de Planeacion y Desarrollo* 13:91-102.

644. Gutierrez, N. F., A. J., De Boer, and J., Ubiraci. 1981. Interacoes de recursos e caracteristicas economicos dos criadores de ovinos e caprinos no sertao do Ceara, Nordeste do Brasil. Resultados Preliminares. Research Bulletin No. 3, National Goat Research Center, Sobral, Brazil.
645. Gutierrez, N. F., A. J., De Boer, and V., Vieira. 1982. An economic analysis of potential technology packages for increasing meat goat production in Ceara State Northeast Brazil. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.512.
646. Gutierrez-Aleman, N. 1983. Characterization and linear programming analysis of sheep and goat production in the Sertao Zone of Northeast Brazil. Ph.D. Dissertation. Purdue University, Lafayette.
647. Gutierrez-Aleman, N., A. J., De Boer, and R. D., Harb. 1986. A bio-economic model of small ruminant production in the semiarid tropics of Northeast Brazil: Part I. Model description and components. *Agricultural Systems* 9:55-66.
648. Gutierrez-Aleman, N., A. J., De Boer, and E. W., Kehrberg. 1986. A bio-economic model of small ruminant production in the semiarid tropics of Northeast Brazil: Part II. Linear programming applications and results. *Agricultural Systems* 19:159-187.
649. Haj Hamou, Y. 1990. Etude de l'effet belier chez la brebis Sardi. These de Doctorat Veterinaire Thesis. I.A.V. Hassan II, Rabat.
650. Handayani, S. E., M., Martawidjaja, and R. M., Gatenby. 1986. Effect of physical environment on physiology of sheep and goats in West Java. *Tlmu dan Peternakan* 2:75-78.
651. Handayani, S. W. 1991. Peasant Household Systems in North Sumatra Plantation Areas. Masters, Rural Sociology Thesis. University of Missouri-Columbia.
652. Handayani, S. W., R. B., Brown, and J. L., Gilles. 1993. Differential access to land and its consequences in three peasant household production systems in North Sumatra's plantation periphery. SR-CRSP Technical Report Series, No. 110, October 1993.



653. Handayani, S. W., R. B., Brown, and M. F., Nolan. 1993. Preliminary sociological examinations of Outreach Project Membang Muda (OPMM). SR-CRSP Technical Report Series, No. 108, October 1993.
654. Handayani, S. W., R. B., Brown, and C., Valdivia. 1993. Bio-social roles in peasant small ruminant production: The importance of children and women in secondary economic activities. SR-CRSP Technical Report Series, no. 109.
655. Handayani, S. W., S. P., Ginting, and P. P., Ketaren. 1986. Effect of supplementation of palm kernel sludge for sheep fed a basal diet of native grasses. SR-CRSP Working Paper No. 90, Balai Penelitian Ternak, Bogor (Indonesia), N.C. State University, Raleigh (USA) and Research Institute for Rubber Plantations, Sungai Putih, No. Sumatra (Indonesia).
656. Hansen, H. H. 1981. Goat diets in an upland hardwood ecosystem. M.S. Thesis. University of Florida, Gainesville.
657. Hardesty, L. H. 1984. Overseas, women are at home on the range. *Rangelands* 6:17-18.
658. Hardesty, L. H. 1984. The challenge of integrated brush management in semiarid tropics. *Rangelands* 6:249-253.
659. Hardesty, L. H. 1986. Factors affecting the sprouting of woody Caatinga species and implications for improved forage production. In *Goats and Sheep in Northeast Brazil*, ed. W. L., Johnson, and E. C., Valois. Sobral, Brazil: EMBRAPA-CNPC.
660. Hardesty, L. H. 1986. Coppicing to improve dry season forage production in the semi-arid tropics. In *Rangelands: A resource under siege. Proceedings of the Second International Rangeland Congress*, ed. P. J., Joss, P. W., Lynch, and O. B., Williams. Adelaide: Australian Academy of Science.
661. Hardesty, L. H. 1987. Factors affecting the sprouting response of woody Caatinga species and their implications for improved Caatinga management. Ph.D. Dissertation. Utah State University, Logan.
662. Hardesty, L. H. 1987. Coppicing: using a forester's tool on rangelands. *Rangelands* 9:129-132.
663. Hardesty, L. H. 1988. Multiple-use management in the Brazilian Caatinga. *Journal of Forestry* 86:35-37.

664. Hardesty, L. H., and J. H., Bassman. 1987. Institutionalizing range management's role in agroforestry systems. In *Proceedings of the 3rd International Rangeland Resources Development Symposium*, ed. J. T., O'Rourke. Boise, Idaho: .
665. Hardesty, L. H., and T. W., Box. 1982. Preparing women for international service: A case study experience. *Proceedings Women in Natural Resources: An International Perspective*, pp. 11-27.
666. Hardesty, L. H., and T. W., Box. 1988. Defoliation impacts on coppicing browse species in Northeast Brazil. *Journal of Range Management* 41:66-70.
667. Hardesty, L. H., T. W., Box, and J. C., Malechek. 1988. Season of cutting affects biomass production by coppicing browse species of the Brazilian Caatinga. *Journal of Range Management* 41:479-482.
668. Harkousse, M. 1982. Effet de la charge et le temps sur la valeur nutritive de la ration et les quantites ingerees par les ovins, a la station pastorale de Timahdite (Effect of the stocking rate and time on the nutritive value and intake of rations on the sheep at Timahdite). M.S. Thesis. IAV Hassan II, Rabat, Morocco.
669. Hart, R., M., Onim, S., Russo, M., Mathuva, K., Otieno, and H., Fitzhugh. 1984. Analytical framework for feed resources research on mixed farms in Western Kenya. SR-CRSP Technical Report No. 46.
670. Hart, R. D. 1982. Synthesis and evaluation of dual-purpose goat production for small mixed farm in Western Kenya. *Proceedings of the SR-CRSP Kenya Workshop*, pp.35-40.
671. Hart, R. D., H. A., Fitzhugh, and N., Gutierrez. 1982. Crop-animal production system research at Winrock International. *Proceedings of the Workshop on Research on Crop-animal Systems (CATIE, CARDI, and Winrock International)*, pp.42-45.
672. Hart, R. D., H. A., Fitzhugh, and M. W., Sands. 1982. Mixed farming systems in Western Kenya with interaction among maize, sorghum, beans, cassava with goats, hair sheep and cattle. In *Proceedings of Workshop - Research on Crop-Animal Systems*. : CATIE, CARDI and Winrock International.

673. Hart, R. D., and H. C., Knipscheer. 1986. Characteristics and socioeconomic aspects of small ruminant production systems: An analytical framework. In *Small Ruminant Production Systems in South and Southeast Asia*, vol. 256E, ed. C., Devendra. : IDRC.
674. Hart, R. D., S. L., Russo, and M., Mathuva. 1982. A farming systems research strategy to increase forage production in Western Kenya. Proceedings of the American Society of Agronomy, p.45.
675. Haryanto, B. 1983. Digestibility and retention time of forage fiber as affected by level of intake in sheep and goats. M.S. Thesis. North Carolina State University, Raleigh.
676. Haryanto, B. 1988. Fiber utilization by Indonesian Kacang goats fed mixed native grass forage supplemented with zinc and nitrogen. Ph.D. Dissertation. North Carolina State University, Raleigh.
677. Haryanto, B., and I., Inounu. 1993. Effect of creep feeding on growth of pre-weaning lambs. In *Sheep Prolificacy, SR-CRSP Progress Report 1992-1993*, pp.7-12.
678. Haryanto, B., and W. L., Johnson. 1983. Digestibility and retention time of alfalfa and coastal bermuda grass hays by sheep and goats as influenced by level of intake. *Journal of Animal Science* 57:435.
679. Haryanto, B., W. L., Johnson, and N., Thomas. 1982. Intake preferences for Cassava, Sweet Potato, Banana and Napier grass forages by Indonesian sheep and goats. Proc. 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.279.
680. Haryanto, B., D., Yulistiani, and M., Rangkuti. 1989. Pemanfaatan Biji Kapas Sebagai Pakan Domba (Utilization of cottonseeds for feeding sheep). Simposium I Hasil Penelitian dan Pengembangan Tanaman Industri. Bogor.
681. Haryanto, B., D., Yulistiani, M., Rangkuti, and K. R., Pond. 1990. Nutrient utilization by sheep fed cottonseed hulls and lint containing diet. Fifth AAAP Animal Science Congress. Taipei, Taiwan. p.134.
682. Hatch, P. A. 1985. Effects of dietary zinc on growth and reproduction in ruminants. M.S. Thesis. North Carolina State University, Raleigh.

683. Hatch, P. A., J. W., Spears, L., Goode, and B. H., Johnson. 1987. Influence of dietary zinc on growth and testicular development in ram lambs fed a high fiber diet. *Nutrition Reports International* 35:1175-1183.
684. Hazzam, R., and L., Sali. 1986. Effet de trois niveaux de supplementation de calcium sur les performances de croissance des agneaux (Effect of calcium supplementation on growth performance of lambs). B.S./M.S. Thesis. ENA Meknes, Morocco.
685. He, Y., S. J., Hecht, and J. C., DeMartini. 1992. Evidence for retroviral capsid and nucleocapsid antigens in ovine pulmonary carcinoma. *Virus Research* 25:159-167.
686. Hecht, S., S., Magnus, Y., He, and J. C., DeMartini. 1991. Antigenic and molecular characterization of a type D retrovirus in obine pulmonary carcinoma. RNA Tumor Virus Meeting. Cold Spring Harbor Laboratory, New York. May 21-26, 1991.
687. Hetcht, S. J., and J. C., DeMartini. 1993. Integration of a type D retrovirus in obine pulmonary carcinoma-affected and unaffected tissues. Abstract W22-6 IX International Congress of Virology, Glasgow, Scotland. August 8-13, 1993.
688. Hinshelwood, M. M., E. A., Nelson, M. J., Burrill, and E. Z., Drobnis. 1980. Effects of diluent, washing and equilibration time on progressive motility and glutamic oxalacetic transaminase levels for frozen ram semen. *Proceedings of the Western Section, ASAS* 31:181-184.
689. Hoffman, L. M. 1988. In situ hybridization of OPPV and in vitro transcription of *Acanthamoeba castellanii* rRNA genes. Ph.D. Dissertation. Colorado State University, Fort Collins.
690. Holgado, D. 1988. Climatic aspects in the highlands of southern Peru. In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
691. Howard, P. J. 1984. The economic feasibility of dairy goat milk marketing in the United States with an overview of the Dairy Goat Industry. M.S. Thesis. University of Florida, Gainseville, FL.

692. Howard, P. J., T. C., Cartwright, H. D., Blackburn, and E. L., Lentz. 1987. Interaction among genotype and nutrition for dual purpose goat productivity. *Journal of Animal Science* 65:431.
693. Howard, P. J., A. J., De Boer, and R., Ward. 1982. Demand and market characteristics of selected dairy goat products in the United States: Results of producer and consumer surveys. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.358.
694. Howell, L. A. 1981. A review of tropical and subtropical brush management techniques with special reference to Northeast Brazil. M.S. Thesis. Utah State University, Logan.
695. Huaman, D., I. A., Ramirez, V., Leyva, and R. P., Ellis. 1985. Enteropathogenicity and clinical manifestation induced in alpaca by crude enterotoxin preparation from *C. perfringens* Type A. Proceedings of the 5th International Convention of South American Cameloids, June 1985, Cuzco, p.40.
696. Huapaya, G. F., and M. P., Carpio. 1981. Tasa de incremento de peso vivo del nacimiento al destete y esquila en ovinos junin. Proceedings of the Assoc. Peruana de Prod. Animal, Ayacucho, Peru.
697. Huapaya, G. M. 1985. Estimacion de parametros geneticos y fenotipicos para peso vivo, peso vellon y longitud mecha en ovinos junin, corriedale y progenie junin x corriedale. M.S. Thesis. Universidad Nacional Agraria-La Molina.
698. Huisa, T., R., Farfan, F., San Martin, F. C., Bryant, and L. C., Fierro. 1985. Botanical composition and nutritive value of alpaca diets during the drought season. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
699. Hunter, S., E. Z., Drobnis, E. A., Nelson, and M. J., Burrill. 1980. Effects of diluent, washing and equilibration time of progressive motility and glutamic oxalacetic transaminase levels for goat semen. *Proceedings of the Western Section, ASAS* 31:178-181.

700. Hunter, S., L. L., Garcia, E. A., Nelson, E. Z., Drobnis, and T. Y., Lin. 1982. Training and collection of male goats using the artificial vagina. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.5353.
701. Huston, J. E., B. S., Rector, W. C., Ellis, and M. L., Allen. 1985. Dynamics of digestion in cattle, sheep, goats and deer. *Journal of Animal Science* 62:208-215.
702. Igmoullan, A. 1982. Valeur nutritive et conditions d'utilisation de foin de luzerne dans la Vallee de Ziz (Nutritive value and alfalfa hay utilization conditions in the Ziz Valley). B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.
703. Ihalauw, J. 1983. A summary of exploratory research on various socio-economic aspects of the goat/sheep production system in Central Java (1981-1982). *Indonesian Agricultural Research and Development Journal* 5:3-4.
704. Ihalauw, J. 1984. Sheep/goat controllership system and the role of the village collector in the sheep/goat production and marketing systems. Satya Wacana Christian University, SR-CRSP Working Paper No.39.
705. Ihalauw, J. 1984. A summary of exploratory research on various socio-economic aspects of the goat/sheep production system in Central Java (1981-1982). SR-CRSP Working Paper No. 32, Indonesia.
706. Iniguez, L., G. E., Bradford, and I., Inounu. 1991. Sheep breeding plans for integrated tree cropping and sheep production systems. Proc. Workshop on Integrated Tree Cropping and Small Ruminant Production Systems (IPS), Medan, North Sumatra, September, 1990.
707. Iniguez, L., G. E., Bradford, Komarudin, and K., Utama. 1991. The Javanese Fat Tail, an Indonesian sheep population with potential to produce hair sheep. *Proceedings of the Hair Sheep Research Symposium:54-62.* (University of Virgin Islands, St. Croix, June 28-29, 1991)
708. Iniguez, L., G. E., Bradford, M. D., Sanchez, D. L., Thomas, Endang, S., Sinulingga, and R., Gatenby. 1991. Productivity of Sumatran Thin Tail X St. Croix ewes in a system integrated with rubber plantations in North Sumatra. *Proceedings of the Hair Sheep Research Symposium:109-114.* (University of Virgin Islands, St. Croix, June 28-29, 1991)

709. Iniguez, L., G. E., Bradford, M. D., Sanchez, D. L., Thomas, E., Romjali, S. E., Sinulingga, and R. M., Gatenby. 1991. Productivity of Sumatra Thin-tail, Virgin Island and crossbred ewes. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.17-19.
710. Iniguez, L., M., Sanchez, and S., Ginting. 1991. Productivity of Sumatran sheep in a system integrated with rubber plantations. *Small Ruminant Research* 5:303-317.
711. Iniguez, L. C., G. E., Bradford, and A. M., Okeyo. 1986. Lambing date and lamb production of spring-mated Rambouillet, Dorset and Finnish Landrace Ewes and their F1 crosses. *Journal of Animal Science* 63:715-728.
712. Inounu, I., L., Iniguez, G. E., Bradford, Subandriyo, and B., Tiesnamurti. 1993. Production performance of prolific Javanese ewes. *Small Ruminant Research* 12:243-257.
713. Inounu, I., P., Sitorus, B., Tiesnamurti, I. A., Fletcher, and G. E., Bradford. 1985. Reproductive performance of Indonesian sheep on different planes of nutrition. SR-CRSP Working Paper No.49, Bogor, Indonesia.
714. Inounu, I., P., Sitorus, B., Tiesnamurti, and I. C., Fletcher. 1984. Reproductive performance of Javanese sheep on different planes of nutrition. SR-CRSP Working Paper No.36.
715. Inounu, I., and Subandriyo. 1993. Javanese prolific sheep performance 1993. In *Sheep Prolificacy, SR-CRSP Progress Report 1992-1993*, pp.1-6.
716. Inounu, I., Subandriyo, N., Thomas, P., Sitorus, and M., Bell. 1986. Lambing characteristics of Javanese Thin-tail ewes at Cicadas Experiment Station and under village conditions. *Ilmu dan Peternakan* 2:79-82.
717. Inounu, I., N., Thomas, P., Sitorus, and M., Bell. 1984. Lambing characteristics of Javanese Thin-tail ewes at Cicadas Experiment Station and under village conditions. SR-CRSP Working Paper No. 41.
718. Ismaili, D. 1983. Caracterisation de l'elevage ovin dans une zone bour de tadla (Commune des Beni Oukil) (Characterization of sheep husbandry in a dryland region of Tadla). B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.

719. Ismaili, D., F., Guessous, and N., Rihani. 1985. Systemes alimentaires pour ovins dans une zone bour de Tadla (Commune des Beni Oukil). *Hommes, Terre et Eaux* 15:5.
720. Ismaili, D., F., Guessous, N., Rihani, and W. L., Johnson. 1985. Sheep production in a rainfed region of Tadla (Morocco). SR-CRSP Technical Report No. 58.
721. Jaillita, J. R., X., Paredes, R., Lizarraga, and S., Scholz. 1993. Comercializacion y autoconsumo de productos ganaderos: Vacunos y ovinos en la comunidad de San Jose de Llanga. IBTA Technical Bulletin No. 128;SR-CRSP Technical Bulletin No. 6, February 1993.
722. Jamtgaard, K. 1982. El potencial para mejoras de pasturas y produccion en comunidades campesinas Peruanas dedicadas a la crianza de alpaca (The potential for pasture and production improvements in peasant communities dedicated to alpaca-raising). Proc. 2nd Int'l. Conf. on S. American Cameloids.
723. Jamtgaard, K. 1983. Limits on common pasture use in an agro-pastoral community: The case of Toqra, Peru. M.S., Rural Sociology Thesis. University of Missouri, Columbia.
724. Jamtgaard, K. 1984. Limits on common pasture use in an agro-pastoral community: The case of Toqra, Peru. SR-CRSP Technical Report No. 42, NTIS #PB8-4-207448.
725. Jamtgaard, K. 1986. Agro-pastoral production systems in Peruvian peasant communities. Selected Proceedings of Kansas State University's 1986 Farming Systems Research Symposium - Farming Systems Research and Extension: Food and Feed, Kansas State University, Manhattan, KS, pp.751-765.
726. Jamtgaard, K. 1989. Targeting Production Systems in the Small Ruminant CRSP: A Typology Using Cluster Analysis. In *The Social Sciences in International Agricultural Research: Lessons from the CRSPs*, ed. C. M., McCorkle. Boulder, CO: Lynne Rienner Publishers.
727. Jamtgaard, K. 1989. Growing inequality: The case of dryland farming and pasture production on the Great Plains. Ph.D., Rural Sociology Dissertation. University of Missouri, Columbia.



728. Jaramillo, M., A. J., De Boer, A., Flores, F., Bryant, and L. C., Fierro. 1985. Economic analysis of range management strategies for increasing small ruminant productivity in the Peruvian Andes. Winrock International and Technical Article T-9-443, Department of Range and Wildlife Management, Texas Tech University.
729. Jasmer, D., F., Rurangirwa, F., Karanu, L., Perryman, and T., McGuire. 1993. Identification of Genes Useful for Control of Parasitic Diseases of Small Ruminants. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:143-150.
730. Jasmer, D. P., and T. C., McGuire. 1991. Protective immunity to a blood feeding nematode (*Haemonchus contortus*) induced by parasite gut antigens. *Infection and Immunity* 59:4412-4417.
731. Jasmer, D. P., L. E., Perryman, G. A., Conder, S., Crow, and T. C., McGuire. 1993. Protective immunity to *Haemonchus contortus* induced by immunoaffinity isolated antigens that share a phylogenetically conserved carbohydrate gut surface epitope. *Journal of Immunology* 151:5450-5460.
732. Jasmer, D. P., L. E., Perryman, S., Crow, G. A., Conder, and T. C., McGuire. 1992. Gut surface antigens as targets to immunise against *Haemonchus contortus*. *Proceedings of the SR-CRSP Kenya Workshop, Nairobi, Kenya*.
733. Jasmer, D. P., R. B., Wescott, and J. W., Crane. 1986. Influence of cold temperatures upon development and survival of eggs of Washington isolates of *Haemonchus contortus* and *Ostertagia circumcincta*. *Proceedings of the Helminthological Society of Washington* 53:244-247.
734. Jette, C. 1992. Relacion de la historia con la investigacion agropecuaria. IBTA Boletin Informativo No. 4, page 6, November, 1992.
735. Jette, C., and L., Markowitz. 1993. Enfoque de sistemas en el altiplano Boliviano: El papel de sociologos, antropologos y otros rumiantes menores. Instituto Boliviano de Tecnologia Agropecuaria Sistemas de Produccion 128 Boletin Tecnico, February 1993.
736. Jimenez, L. 1985. Social organization of alpaca production in Peru: A case study. M.S. Thesis. University of Missouri, Columbia.

737. Jimenez, L., and D., Hobbs. 1986. Social organization of alpaca production in Peru: A case study. SR-CRSP Technical Report No. 72.
738. Job, M. O. 1982. A study of technology adoption by subsistence farmers with a case study involving dairy goats in Kenya. Ph.D. Dissertation. Purdue University, Lafayette.
739. Johnson, W. L. 1980. Los residuos de cosecha como estrategia para la alimentacion de rumiantes menores (Crop residues as a strategy for small ruminant feeding). SR-CRSP Technical Report No.2, NTIS #PB8-4-88903 and Workshop on Strategies for Crop Residue Use in Animal Feedings, CATIE, Turrialba, Costa Rica.
740. Johnson, W. L. 1984. Strategies for improving the nutritional status of small ruminants in tropical ecosystems. In *Impact of Diseases on Livestock Production in the Tropics*, ed. H. P., Riemann, and M. J., BurrIDGE. : Elsevier Science Publishers.
741. Johnson, W. L., N., Barros, E. R., de Oliveira, and B., Haryanto. 1982. Relative acceptability of Napier grass and maize crop residues by Brazilian SRD goats. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.512.
742. Johnson, W. L., N., Barros, E. R., Oliveira, A., Simplicio, and S., Riera. 1985. Feeding to influence age of puberty in tropical hair sheep. SR-CRSP Technical Report No. 59.
743. Johnson, W. L., N. N., Barros, E. R., de Oliveira, A. A., Simplicio, and G. S., Riera. 1988. Dietary energy levels and age and weight at puberty in Morada Nova ewe-lambs in Northeast Brazil. *Small Ruminant Research* 1:67.
744. Johnson, W. L., N. N., Barros, E. R., de Oliveira, A. A., Simplicio, and S., Riera. 1986. Feeding to influence age of puberty in Morada Nova sheep. In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil).
745. Johnson, W. L., and J., DaSilva. 1980. Cell-wall structure and digestibility in forage plants. Proceedings of the 29th Annual Dairymen's Conference, NCSU, p.58.

746. Johnson, W. L., E., Oliveira, T. W., Robb, J. E. J., van Eys, and M., Rangkuti. 1983. Comparisons between sheep and goats in utilization of high fiber diets. Proc. XVII Conference on Rumen Function, Chicago.
747. Johnson, W. L., T. W., Robb, C. A., Zometa, W. H., Sousa, E. R., de Oliveira, and P. R. M., Leite. 1986. Confinement diets for dairy goats in Paraiba. In *Goats and Sheep in Northeast Brazil: Proceedings of the SR-CRSP Workshop*. Sobral, Brazil: SR-CRSP, EMBRAPA-CNPC, Sobral CE (Brazil).
748. Johnson, W. L., T. W., Robb, C. A., Zometa, W. H., Sousa, E. R., Oliveira, and P. R. M., Leite. 1986. Confinement diets for dairy goats in Paraiba. Proc. State of the Art Workshop.
749. Johnson, W. L., and J. E., van Eys. 1987. Recent concepts in tropical forage utilization by goats. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1063-1076.
750. Johnson, W. L., J. E., Van Eys, and H. A., Fitzhugh. 1986. Sheep and goats in tropical and subtropical agricultural systems. *Journal of Animal Science* 63:1587-1599.
751. Jones, M. 1993. Estimation of heterosis and heterosis retention in the development of synthetic breed of goat. M.S. Thesis. Texas A&M University, College Station, TX.
752. Jordan, P., P. J., Burfening, and W., Kezar. 1985. Effect of supplemental feeding of range ewes during the prenatal period on perinatal lamb mortality. *Proceedings of the Western Section, ASAS* 36:483.
753. Kabbali, A. 1987. Compensatory growth studies in native Moroccan breeds of sheep. Ph.D. Dissertation. University of Minnesota, St. Paul, USA.
754. Kabbali, A. 1987. Effect of liveweight on body components and their proximate composition. Proceedings of the 38th Annual Meeting of the European Association of Animal Production, Lisbon.
755. Kabbali, A. 1990. Protein and energy supplementation of wheat straw diets for pregnant ewes. *Journal of Animal Science* 68:598.
756. Kabbali, A., C. E., Allen, W. L., Johnson, and D. W., Johnson. 1985. Energy requirements for maintenance and gain in Timahdit lambs. *Journal of Animal Science* 61:457.

757. Kabbali, A., and Y. M., Berger. 1990. *L'Elevage du Mouton dans un Pays a Climat Mediteraneen. Le Systeme Agro-Pastoral du Maroc.* : Editions Actes.
758. Kabbali, A., W. L., Johnson, D. W., Johnson, R. D., Goodrich, and C. E., Allen. 1993. Effects of compensatory growth on some body component weights and on carcass and noncarcass composition of growing lambs. *Journal of Animal Science* 70:2852.
759. Kabbali, A., W. L., Johnson, D. W., Johnson, R. D., Goodrich, and C. E., Allen. 1993. Effects of undernutrition and refeeding on weights of body parts and chemical components of growing Moroccan lambs. *Journal of Animal Science* 70:2859.
760. Kabbali, A., W. L., Johnson, D. W., Johnson, R. D., Goodrich, and E. C., Allen. 1991. Effects of undernutrition and refeeding on weights of body parts and chemical composition of growing Moroccan lambs. *Journal of Animal Science* 70:2859.
761. Kabbali, A., W. L., Johnson, D. W., Johnson, R. D., Goodrich, and E. C., Allen. 1991. Effects of compensatory growth on some body component weights and on carcass and non-carcass composition of growing lambs. *Journal of Animal Science* 70:2852.
762. Kajikawa, O., J. E., Dahlberg, R. H., Rosadio, and J. C., DeMartini. 1990. Detection and Quantitation of a type D retrovirus gag protein in ovine pulmonary carcinoma (sheep pulmonary adenomatosis) by means of a competition radioimmunosassay). *Veterinary Microbiology* 25:17-28.
763. Kajikawa, O., M. D., Lairmore, and J. C., DeMartini. 1990. Analysis of antiviral antibody responses to phenotypically distinct lentiviruses. *Journal of Clinical Microbiology* 28:764-770.
764. Karanu, F. N. 1992. Identification of proteases with diverse characteristics in adult *Haemonchus contortus* excretory-secretory products. M.S. Thesis. Washington State University, Pullman.
765. Karanu, F. N., F. R., Rurangirwa, T. C., McGuire, and D. P., Jasmer. 1993. *Haemonchus contortus*: Identification of proteases with diverse characteristics in adult worm excretory-secretory products. *Experimental Parasitology* 77:362-371.

766. Karimi, S. K., P. P., Semenyé, A. E., Sidahmed, H. A., Fitzhugh, and J. F. M., Onim. 1985. Feed consumption and selection by dual-purpose goats and local goats from Masumbi Cluster in Siaya District, Western Kenya. Proceedings of the 4th SR-CRSP Kenya Workshop.
767. Karokaro, S. 1993. Research on economics and marketing of sheep and goats in tree cropping systems. In *Advances in Sustainable Small Ruminant - Tree Cropping Integrated Systems*, ed. S., Sivaraj, P., Agamuthu, and T., Mukherjee. Kuala Lumpur, Malaysia: Institute of Advanced Studies.
768. Karo-Karo, S., U., Haris, and R. M., Gatenby. 1993. Introduction of sheep husbandry to smallholder rubber farmers in a nuclear estate scheme. In *Livestock service for smallholders*, ed. P. W., Daniels. Bogor, Indonesia: Indonesia Institute for Animal Research and Development (INI ANSREDEF).
769. Karo Karo, S., and S., Scholz. 1991. Partial budget analysis of feeding supplements to sheep. SR-CRSP Annual Report, Sungei Putih.
770. Karo Karo, S., and S., Scholz. 1991. Partial budget analysis of feeding supplements. SR-CRSP Working Paper No. 125, December.
771. Karo-Karo, S., E., Sembiring, M. D., Sanchez, and H. C., Knipscheer. 1990. Cost-benefit analysis of sheep production at village level. In *Resource Utilization for Livestock Production in Malaysia: Proceedings of the 13th MSAP Annual Conference*, ed. W. Z., Mohamed, W. H., Hum, E. A., Ahmed, and D., Ismail. Kuala Lumpur, Malaysia: MARDF/MSAP.
772. Karo-Karo, S., J., Sirait, and I., Kartamulia. 1993. Farmers share, marketing margin and demand for small ruminants in North Sumatra. SR-CRSP/SBPT Working Paper No. 146, October 1993.
773. Kartamulia, I., S., Karo-Karo, and A. J., De Boer. 1993. Economic analysis of sheep grazing in rubber plantations: A case study of OPMM Membang Mudah. Proceedings Small Ruminant Workshop, September 7-9, 1993, San Juan, Puerto Rico.
774. Kartamulia, I., S., Karokaro, and J., DeBoer. 1993. Economic Analysis of Sheep Grazing in Rubber Plantations: A Case Study of OPMM Membang Muda. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:33-38.

775. Kartamulia, I., S., Karo-Karo, A., Misniwaty, A. J., De Boer, and H. C., Knipscheer. 1993. Characteristics of the international market for live sheep and potential for export from North Sumatra. SR-CRSP/SBPT Working Paper No. 149, November 1993.
776. Kartamulia, I., M., Misniwaty, and H., Knipscheer. 1993. Development of a private animal health delivery network in North Sumatra. SR-CRSP/SBPT Working Paper No. 144, October 1993.
777. Kawas, J. R., H., Carneiro, N. N., Barros, L. C. L., Freire, F. N., Kawas, J. M., Shelton, and W. L., Johnson. 1985. Valor nutritivo para caprinos das silagens de sorgo forrageiro (*Sorghum vulgare*) e da cunha (*Clitoria ternatea*) em dois estagios de maturidade (Nutritive value for goats of forage sorghum and cunha silages in two stages of maturity). *Annals*, 22nd Annual Meeting, Brazilian Society of Zootecnia.
778. Kawas, J. R., H., Carneiro, M., Bezerra, F. A. V., Arruda, L. C., Freire, W. L., Johnson, and J. M., Shelton. 1985. Influence of fiber component levels of *Clitoria Ternatea* and Sorghum Silages on intake and digestion by goats in Northeast Brazil. *Journal of Animal Science* 61:475.
779. Kawas, J. R., H., Carneiro, M., Bezerra, F. A. V., Arruda, L. C., Freire, W. L., Johnson, and M., Shelton. 1985. Influence of fiber component levels of and sorghum silages on intake and digestion by goats in Northeast Brazil. *Journal of Animal Science* 61:47.
780. Kawas, J. R., W., Guimaraes, N. N., Barros, L. C. L., Freire, and W. C., Foote. 1987. Survival and growth of goat kids grazing native range from dams supplemented with incremental energy levels. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1399.
781. Kawas, J. R., W., Guimaraes, N. N., Barros, L. C. L., Freire, and M., Shelton. 1986. Survival and growth of goat kids foraging native range from dams supplemented with incremental energy levels. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1463.
782. Kawas, J. R., O., Sanches, and W., Goimaraes. 1986. Influence of energy supplementatation of the reproductive performance of female goats grazing native range. *Proc. State of the Art Workshop*.

783. Kwas, J. R., O., Sanchez, and W., Guimaraes. 1987. Influence of energy supplementation on the reproductive performance of female goats grazing native range. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1398.
784. Kayongo-Male, H., and A. N., Abate. 1982. Role of systematic maize (corn) defoliation in small ruminant production. *Proceedings of the SR-CRSP Kenya Workshop*, pp.145-150.
785. Kedi, S., and H. C., Knipscheer. 1984. Regular research field hearings (RRFH): A discussion of the contribution of farmers' opinions to farming systems research. SR-CRSP Working Paper No. 38, Bogor, Indonesia.
786. Kennedy, B. W., C. M., Finley, and G. E., Bradford. 1982. Phenotypic and genetic relationships between reproduction and milk production in dairy goats. *Journal of Dairy Science* 65:2373-2383.
787. Kennedy, B. W., C. M., Finley, and G. E., Bradford. 1982. Genetic relationships between reproduction and milk production in U.S. dairy goats. *Proc. 3rd Int'l. Conf. on Goat Prod. and Dis., Tucson, AZ*, p.302.
788. Kennedy, B. W., C. M., Finley, E. J., Pollak, and G. E., Bradford. 1981. Joint effects of parity, age and season of kidding on milk and fat yields in dairy goats. *Journal of Dairy Science* 64:1707-1712.
789. Khal, M. 1982. Les dattes en alimentation animale: valeur nutritive et conditions d'utilisation dans la vallee du Draa. *Memoire de 3eme cycle Agron Thesis. Hassan II. Inst. Agron. Vet. Rabat, Morocco.*
790. Kibor, A. 1983. Cultural, biochemical and antigenic characteristics of caprine mycoplasmas isolated in Kenya. *M.S. Thesis. University of Nairobi.*
791. Kibor, A. C., and P. G., Waiyaki. 1984. Serological characteristics of mycoplasma F-38 strains and other mycoplasma species isolated from caprine pleuropneumonia. *Proceedings of the SR-CRSP Kenya Workshop, Kabete, Kenya.*
792. Kibuchi, J. 1982. A study of the feasibility of substituting sweet potato meal for corn in a diet of growing goats. *M.S. Thesis. Tuskegee Institute, Tuskegee, Alabama.*

793. Kihara, S. M. 1992. Identification of Mycoplasma F38 surface antigens with goat serum antibodies. M.S. Thesis. Washington State University, Pullman.
794. Kimberling, C. 1984. The economics and techniques of breeding soundness evaluation of rams. Proceedings of the Annual Meeting of the Society for Theriogenology, Denver.
795. Kimberling, C. 1986. The effects of a new vaccine against brucellosis in sheep: A study in Peru. Proceedings of the Annual Veterinary Conference, Colorado State University.
796. Kimberling, C. V. 1985. Economics and techniques of breeding soundness examinations of rams. Proceedings of the Reg. Symposium of the American Association of Sheep and Goat Practitioners, Bloomington, MN, pp.139-150.
797. Kimberling, C. V., K. S., Arnold, D. J., Schweitzer, R. L., Jones, H., VonByern, and M., Lucas. 1986. Correlation of the presence of seminal white blood cells and the prevalence of separated spermatozoal heads with sub clinical Brucella ovis infection. *Journal of American Veterinary Medical Association* 189:73-76.
798. Kimberling, C. V., D., Schweitzer, J., Butler, M., Bulgin, C., Bagley, and R. P., Ellis. 1987. A new way to eradicate ram epididymitis. *Veterinary Medicine/Small Animal Clinician* 84:424-429.
799. Kimenye, D., C., Ngugi, Y., Berger, C., Ahuya, and F., Ruvuna. 1983. Artificial insemination and its potential use on goats in Kenya. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.102-104.
800. Kirmse, R. D. 1984. Effects of clearcutting on forage production, quality and decomposition in the Caatinga woodland of Northeast Brazil: Implications to goat and sheep nutrition. Ph.D. Dissertation. Utah State University, Logan.
801. Kirmse, R. D., A., Dickie, N. E., Artz, and V. J., Anderson. 1986. Exporting extension. *Rangelands* 8:233-235.
802. Kirmse, R. D., and B. E., Norton. 1984. The potential of Acacia albida for desertification control and increased productivity in. *Chad. Biol. Conservation* 29:121-141.
803. Kirmse, R. D., and B. E., Norton. 1985. Comparison of the reference unit method and dimensional analysis methods for two large shrubby species in the caatinga woodlands. *Journal of Range Management* 38:425-428.



804. Kirmse, R. D., J. A., Pfister, L. V., Vale, and J. S., de Queiroz. 1983. Woody plants of the Northern Ceara Caatinga. SR-CRSP Technical Report No. 14, NTIS #PB8-4-189265.
805. Kirmse, R. D., F. D., Provenza, and J. C., Malechek. 1987. Clearcutting Brazilian semiarid tropics: Observations on its effects on small ruminant nutrition during the dry season. *Journal of Range Management* 40:428-432.
806. Kirmse, R. D., F. D., Provenza, and J. C., Malechek. 1986. Clearcutting effects on dry season forage reserves in Brazil's semi-arid northeast. In *Rangelands: A Resource Under Siege. Proceedings of the 2nd International Rangeland Congress, Adelaide, Australia*, ed. P. J., Joss, P. W., Lynch, and O. B., Williams. Adelaide, Australia: Australian Academy of Science.
807. Kirmse, R. D., F. D., Provenza, and J. C., Malechek. 1987. Effects of clearcutting on litter production and decomposition in semiarid tropics of Brazil. *Forest Ecology and Management* 22:205-217.
808. Kirmse, R. D., F. D., Provenza, and J. C., Malechek. 1987. Cutting Brazilian Caatinga: Assessment of a traditional forest grazing management practice. *Agroforestry Systems* 5:429-441.
809. Knight, H. D., B., McGowan, and S., Hietala. 1982. Assessment of *Corynebacterium Pseudotuberculosis* infection in goats by use of the synergistic hemolysin inhibition assay. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.523.
810. Knipscheer, H. C. 1984. Review of "Management of pastoral development" (by Sandford, S). *Public Administration and Development* 4:289.
811. Knipscheer, H. C. 1985. Definition of research problems. In *Research methodology for livestock on-farm trials*, vol. 242E, ed. T. L., Nordblom, A. E. K., Hamid Achmed, and G. R., Potts. : ISRC.
812. Knipscheer, H. C. 1989. The role of CRSP social scientists in technology generation and evaluation. In *The social sciences in international agricultural research: Lessons from the CRSP's*, ed. C. M., McCorkle. Boulder, Colorado: Lynne Rienner Publishers.

813. Knipscheer, H. C. 1993. Policy and priorities for forming systems research in Indonesia: Lessons learned. Lokakarya Nasional Pembangunan Daerah dalam Rangka Pengelolaan Usahatani Lahan Kering dan Perbukitan Kritis, Jakarta, February 2-4.
814. Knipscheer, H. C., C. A., Baker, and J., de Souza Neto. 1989. Measuring the economic feasibility of new small ruminant technologies in Brazil. In *Improving Meat Goat Production in the Semiarid Tropics*, ed. W. L., Johnson, and E. R., de Oliveira. Davis, California: SR-CRSP, University of California, Davis.
815. Knipscheer, H. C., A. J., DeBoer, M., Sabrani, and T., Soedjana. 1983. The economic role of sheep and goats in Indonesia: A case study of West Java. *Bulletin of Indonesian Economic Studies* 19:74-93.
816. Knipscheer, H. C., R. D., Hart, and G., Baker. 1987. Socioeconomic aspects of small ruminant productivity. IV International Conference on Goats, Brazilia, March 8-13.
817. Knipscheer, H. C., and R. R., Harwood. 1989. On-station versus on-farm research: Allocation of resources. In *Development in procedures for farming systems research. Proceedings of an international workshop*, ed. S., Sukmana, P., Amir, and D., Mulyadi. Jakarta, Indonesia: Agency for Agricultural Research and Development.
818. Knipscheer, H. C., and U., Kusnadi. 1983. The present and potential productivity of Indonesian goats. SR-CRSP Working Paper No. 29, Bogor, Indonesia.
819. Knipscheer, H. C., U., Kusnadi, and A. J., DeBoer. 1984. Some efficiency measures for analysis of the productive potential of Indonesian goats. *Agricultural Systems* 15:125-135.
820. Knipscheer, H. C., and J., Levine. 1984. *The status of ruminants in Indonesia with special reference to research needs*. Bogor/Jakarta, Indonesia: Research Institute for Animal Production USAID.
821. Knipscheer, H. C., and M., Sabrani. 1982. The contribution of the goat and sheep enterprise to West Javanese farming systems at different income levels. International Conference of Agricultural Economists, Jakarta, Aug. 24-September 2.
822. Knipscheer, H. C., M., Sabrani, T. D., Soedjana, and A. J., De Boer. 1987. The small ruminant market system in Indonesia: A review. *Agricultural Systems* 25:87-103.

823. Knipscheer, H. C., T., Soedjana, and A., Prabowo. 1983. Small ruminant farm management at semi-commercial level in the districts of Cicadas and Garut, West Java. *Ilmu dan Peternakan* 1.
824. Knipscheer, H. C., and T. D., Soedjana. 1982. The productivity of small ruminants in West Javanese Farming Systems. SR-CRSP Working Paper No. 4, Indonesia; SR-CRSP Technical Report No. 13; NTIS #PB8-4-187178.
825. Knipscheer, H. C., T. D., Soedjana, and A., Prabowo. 1983. Tatalaksana Usaha Ternak Ruminansia Kecil Semi Komersil de Daerah Cirebon dan Garut, Jawa Barat (Small ruminant farm management at semi-commercial level in the districts of Cirebon and Garut, West Java). *Ilmu dan Peternakan* 1:135-139.
826. Knipscheer, H. C., and K., Suradisastra. 1986. Farmer participation in Indonesian livestock farming systems by regular reseach field hearings (RRFH). *Agricultural Administration and Extension* 22:205-216.
827. Knipscheer, H. C., and D. S., Tjeppey. 1982. The productivity of small ruminants in West Javanese Farming Systems. SR-CRSP Working Paper No. 4, Bogor, Indonesia.
828. Knipscheer, H. C., D. S., Tjeppey, and A., Prabowo. 1983. A survey of six specialised ruminant farms in West Java. SR-CRSP Working Paper No. 9, Bogor, Indonesia.
829. Kocan, K. M., T. B., Crawford, P. M., Dilbeck, J. F., Evermann, and T. C., McGuire. 1990. Development of a rickettsia isolated from an aborted bovine fetus. *Journal of Bacteriology* 172:5949-5955.
830. Kogi, J., F., Ruvuna, J. F., Taylor, B. A. J., Mwandotto, C. O., Ahuya, and S., Mkuu. 1993. Lactation Curves of Crosses among Galla and East African with Toggenburg and Anglo-Nubian. *Proc. 11th Annual SR-CRSP Workshop, Nairobi. March 3-4, 1993* 11:118-120.
831. Kooyman, D. L., E. S., Fonda, E. A., Cogger, and T. Y., Lin. 1985. Effect of frequent ejaculation on libido and semen characteristics in the dairy goat buck. *Journal of Animal Science* 61:170.
832. Kooyman, D. L., E. S., Fonda, E. A., Cogger, and T. Y., Lin. 1985. Effect of frequent ejaculation on libido and semen characteristics. *Proceedings of the Western Section, ASAS* 35:340-342.

833. Lahlou-Kassi, A., S., Benlamlih, R., Bouklik, A., Tibary, and I., Boujenane. 1988. Reproduction and adaptation characteristics in D'Man sheep. *Journal of Agricultural Science, Cambridge* 60:566-575.
834. Lahlou-Kassi, A., Y. M., Berger, G. E., Bradford, R., Boukhliq, M., Tibary, L., Derqaoui, and I., Boujenane. 1989. Performance of D'Man and Sardi breeds of sheep on accelerated lambing: I. Fertility, litter size, post partum anoestrus and puberty. *Small Ruminant Research* 2:225-239.
835. Lahlou-Kassi, A., and R., Boukhliq. 1989. Oestrus Behavior and Ovarian Activity in D'Man and Sardi Breeds of Moroccan Sheep Under Normal and Experimental Photoperiods. In: *Isotope-aided Studies of Livestock Productivity in Mediterranean and North African Countries*. I.A.E.A., Vienna, pp.131-139.
836. Lairini, K. 1988. Estimation des effets genetiques de la production laitiere et du taux butyreux des brebis D'Man, Sardi et leurs croisees. M.S. Thesis. Memoire de 3eme Cycle Agronomie, I.A.V. Hassan II, Rabat.
837. Lairmore, M. D. 1987. Studies on the immunopathogenesis of ovine lentivirus induced lymphoid interstitial pneumonia. Ph.D. Dissertation. Colorado State University, Fort Collins.
838. Lairmore, M. D., G. Y., Akita, H. I., Russell, and J. C., DeMartini. 1987. Replication and cytopathogenic effects of ovine lentivirus strains in alveolar macrophages correlate with in vivo pathogenicity. *Journal of Virology* 61:4038-4042.
839. Lairmore, M. D., S. T., Butera, G. N., Callahan, and J. C., DeMartini. 1987. Spontaneous interferon production by pulmonary leukocytes is associated with lentivirus-induced lymphoid interstitial pneumonia. *Journal of Immunology* 140:779-785.
840. Lairmore, M. D., A. P., Knight, and J. C., DeMartini. 1987. Three primary neoplasms in a goat: Hepatocellular carcinoma, pheochromocytoma, and leiomyoma. *Journal of Comp. Path.* 97:267-272.
841. Lairmore, M. D., J. M., Poulson, T. A., Adducci, and J. C., DeMartini. 1987. Lentivirus-induced lymphoproliferative disease: Comparative pathogenicity of phenotypically distinct ovine lentivirus strains. *American Journal of Pathology* 130:80-90.

842. Lairmore, M. D., R. H., Rosadio, and J. C., DeMartini. 1986. Ovine lentivirus lymphoid interstitial pneumonia: Rapid induction in neonatal lambs. *American Journal of Pathology* 125:173-181.
843. Lairmore, M. D., R. H., Rosadio, H. I., Russell, and J. C., DeMartini. 1986. Pathogenesis of ovine lentivirus in neonatal lambs. *Federal Proceedings* 45:690.
844. Lairmore, M. D., R. H., Rosadio, J. M., Sharp, H. I., Russell, and J. C., DeMartini. 1985. Infection of neonatal lambs with ovine progressive pneumonia virus. Proceedings of the 36th Annual Meeting of American College Veterinary Pathologists, December 1985, p.249.
845. Lares, J., A., Florez, F. C., Bryant, and E., Malpartida. 1985. Sheep production under rotational grazing at four stocking rates in the Andes of Central Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
846. Lasslo, L. L. 1982. Direct and correlated responses to selection for weaning weight in sheep in two environments. Ph.D. Dissertation. University of California, Davis.
847. Lasslo, L. L., G. E., Bradford, D. T., Torell, and B. W., Kennedy. 1985. Selection for weaning weight in Targhee sheep in two environments (I. Direct Response). *Journal of Animal Science* 61:376-386.
848. Lasslo, L. L., G. E., Bradford, D. T., Torell, and B. W., Kennedy. 1985. Selection for weaning weight in Targhee sheep in two environments (II. Correlated effects). *Journal of Animal Science* 61:387-397.
849. Lawson, J., and M., Shelton. 1982. Observations on breeding season variations and early weaning of Spanish Does. *International Goat and Sheep Research* 2:30-37.
850. Lawson, J., and M., Shelton. 1982. Spanish does: Breeding season variations and early weaning. *International Goat and Sheep Research* 2:30-37.
851. Lawson, J. L. 1983. Seasonal reproduction in Spanish does and reproductive response to suckling manipulations. M.S. Thesis. Texas A&M University, San Angelo, TX.
852. Lawson, J. L., D. W., Forrest, and M., Shelton. 1984. Reproductive response to suckling manipulation in Spanish goats. *Theriogenology* 21:747-755.

853. Leathers, C. W., W. J., Foreyt, A., Fetcher, and K. M., Foreyt. 1982. Clinical fascioliasis in domestic goats in Montana. *Journal of American Veterinary Medical Association* 180:1451-1454.
854. Legdali, N., and F., Oumzai. 1984. Influence de niveau alimentaire sur la digestibilite de la matiere seche estimee par la methode des cendres insolubles dans l'acide (Influence of feeding level on dry matter digestibility as estimated by the acid-insoluble ash method). B.S./M.S. Thesis. National School of Agriculture, Meknes, Morocco.
855. Lemharzi, L., and D., Semega. 1984. Estimation de la composition corporelle des agneaux (Estimation of body composition in lambs). B.S./M.S. Thesis. ENA Meknes, Morocco.
856. Lentz, E. L., and H. D., Blackburn. 1987. User guide for specifying input parameters for the TAMU sheep and goat simulation models, SAV version. SR-CRSP Technical Report No. 90.
857. Levine, J., and S., Karo-Karo. 1985. Secondary village level data for fifteen villages of Kecamatans Sibolangit, Galang and Perbaugnan. Kabupaten Deli Serdang, North Sumatra. SR-CRSP Working Paper No. 48, Bogor, Indonesia.
858. Levine, J., S., Karo-Karo, and M., Gaylord. 1985. Livestock marketing survey for Kecamatans, Sibolangit, Galang and Perbaungan of Kabupaten Deli Serdang, North Sumatra. SR-CRSP Working Paper No. 61, Bogor, Indonesia.
859. Levine, J., A., Muljadi N., Amiruddin, Subiharta, and R. L., Watung. 1986. Baseline survey results of the upland agriculture and conservation project research locations in Central Java: How do the farmers of Kandangan and Klari live before the project? SR-CRSP Working Paper No. 76.
860. Levine, J., and M., Sabrini. 1986. *Proceedings of the Workshop on Farming Systems Research and Development*. Bogor, Indonesia: Central Research Institute for Animal Sciences (CRIAS/ CIAWI).
861. Levine, J. M., and G. M., Spurlock. 1983. Barbados Blackbelly Sheep in California. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.

862. Lewis, R. D. 1984. Comparison of Finnish Landrace Crossbred ewes with Columbia, Rambouillet and Targhee on Western Range. M.S. Thesis. Montana State University, Bozeman.
863. Lewis, R. D., and P. J., Burfening. 1987. Comparison of Finnish Landrace crossbred ewes with Columbia, Rambouillet and Targhee ewes on western range. *Journal of Animal Science* 66:1059-1066.
864. Lewis, R. D., and P. J., Burfening. 1988. Finish Landrace crossbred ewes compared to Columbia, Rambouillet and Targhee ewes. *Montana Agricultural Research* 5:6-10.
865. Lewis, R. M. 1986. The use of production records as a method for improving the reproductive performance of Rambouillet sheep. M.S. Thesis. Texas A&M University, College Station, TX.
866. Li, M., H., Sakul, M. R., Dally, and G. E., Bradford. 1992. Puberal performance of Targhee ewe lambs selected for weaning weight or litter size. *Sheep Research Journal* 8:54-58.
867. Lipner, M., and R., Brown. 1993. Constraints to the Integration of the CCPV Vaccine into Kenya's Animal Health Delivery System. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:151-160.
868. Lipner, M. E., and M. F., Nolan. 1989. Dilemmas of Opportunity: Social Sciences in CRSPs. In *The Social Sciences in International Agricultural Research: Lessons from the CRSPs*, ed. C. M., McCorkle. Boulder, Colorado: Lynne Rienner Publishers.
869. Llerena, G. 1981. Analisis economico de la produccion y comercializacion de la fibra de alpaca (Economic analysis of the commercial production of alpaca fiber). M.S. Thesis. Department of Economics and Planning, National Agrarian University (UNA), La Molina, Lima, Peru.
870. Llerena, G. H. 1984. Analisis economico de la produccion de la fibra de alpaca (Economic analysis of alpaca fiber production). *Proceedings of the 7th Annual Science Meeting of the Peruvian Association of Animal Production*, UNA, Lima, Abstract 125.
871. Loker, W., and H., Knipscheer. 1993. Problemas y contribuciones potenciales de la investigaciones on fincas con ganado. *Investigaciones con Pasturas en Fincas*, Working Paper No. 124, CIAT, Cali, Columbia.

872. Loker, W., and H. C., Knipscheer. 1990. Problems and potential contributions of on-farm research with livestock. Meeting of the International Network for Tropical Pastures Evaluation, CIAT, Cali, Columbia, August 27-September 1.
873. Lopez, M. 1986. Evaluacion productiva del peso vivo y villon de ovinos targhee x junin y targhee finnish x junin nacidos en 1981-1982. B.S. Thesis. Universidad Nacional Agraria, La Molina.
874. Lotterman, E. D. 1981. Agricultural policy, peasant economics, and livestock production in Peru. Proceedings of the Meeting of the Peruvian Association of Animal Production, Ayacucho, Peru.
875. Lotterman, E. D. 1981. Economic-biological relationships in genetic improvement of livestock. SR-CRSP Shortcourse on Animal Breeding, Lima, Peru.
876. Lotterman, E. D. 1981. Economic factors affecting livestock breeding programs in Peru. SR-CRSP Shortcourse on Animal Breeding, Lima, Peru.
877. Ludgate, P. J. 1987. The recruitment and retention of agricultural extension agents in developing countries. Ph.D. Dissertation. Colorado State University, Fort Collins, Colorado.
878. Ludgate, P. J. 1989. Summary report of 1987-1988 Outreach Pilot Project research activities. Working Paper Series No. 96, SR-CRSP/Balitnik, Bogor.
879. Ludgate, P. J., and A., Priyanti. 1990. Outreach pilot project on-farm research activities annual report for 1988-1989. Working Paper Series No. 109, SR-CRSP/Balitnak, Bogor.
880. Ludgate, P. J., A., Priyanti, and H. C., Knipscheer. 1989. Participatory research with small ruminant farmers in West Java. Proceedings of Pertemuan Ilmiah Ruminasia, November 1988, Cisarua, West Java, Indonesia.
881. Ludgate, P. J., and S., Scholz. 1992. *New Technologies for Small Ruminant Production in Indonesia*. : Winrock International.



882. Ludgate, P. J., T. D., Soedjana, and H. C., Knipscheer. 1990. Rate of technology adoption for small-holder sheep and goat farmers: The utility of learning curves to explain technology adoption rates. Paper prepared for the AFSRE Symposium, October, 1990, Michigan State University, East Lansing, Michigan.
883. Ludgate, P. J., T. D., Soedjana, and U., Kusnadi. 1989. Farming systems research and extension relationships: Methodological issues affecting implementation and extension of research results. Proceedings of an International Workshop on Developments for Farming Systems Research, March 1989, Bogor.
884. Ludgate, P. J., T. D., Soedjana, A., Priyanti, and H. C., Knipscheer. 1990. Farmer oriented research yields innovative communication technologies in on-farm research in West-Java. Seminar paper for Regional Symposium on Training and Extension on Livestock Production, September, 1990, MARDI/FAO, Kuala Lumpur, Malaysia.
885. Ludgate, P. J., T. D., Soedjana, A., Priyanti, and H. C., Knipscheer. 1990. Integrated on-farm animal research: Technology development and farmer groups in West Java, Indonesia. Paper presented at Asia Farming System Research and Extension Symposium, November, 1990, Bangkok, Thailand.
886. Luginbuhl, J. M. 1983. Forage fiber utilization in sheep, goats, and steers. M.S. Thesis. North Carolina State University, Raleigh.
887. Luginbuhl, J. M. 1983. Comparative anatomy of the digestive tract in cattle, sheep and goats - A review. SR-CRSP Technical Report No. 40.
888. Luginbuhl, J. M., and W. L., Johnson. 1982. Coastal Bermuda grass and tall Fescue intake and digestibility by goats, sheep and steers. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.280.
889. Luginbuhl, J. M., K. R., Pond, J. C., Russ, and J. C., Burns. 1987. A simple electronic device and computer interface system for monitoring chewing behavior of stall-fed ruminant animals. *Journal of Dairy Science* 70:1307-1312.
890. Luginbuhl, J.-M., K. R., Pond, J. C., Burns, and D. S., Fisher. 1993. Evaluation of the Captec controlled-release chromic oxide capsule for fecal output determination in sheep. *Journal of Animal Science* 72:357.

891. Luginbuhl, J.-M., K. R., Pond, J. C., Burns, D. S., Fisher, and J. C., Russ. 1991. A computer interface system to monitor the ingestive and ruminating behavior of grazing ruminants. Proc. 2nd Grazing Livestock Nutrition Conference, Steamboat Springs, Colorado, August 1-3, 1991, Mp-133, Agric. Expt. Station, Oklahoma State University.
892. Luginbuhl, J. M., F., Guessous, N., Rihani, and A., Kabbali. 1993. Feeding Systems for Sheep Integrated into Cereal Cropping Regions. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:123-132.
893. Luna, M. 1989. Ovine lentivirus-associated mastitis in the Central Sierra of Peru. DVM Thesis. University of San Marcos, Lima, Peru.
894. Machado, F., F., Helio, C. A., Zometa, and A. A., Oria Fernandes. 1985. Alternative para melhorar a producao caprina no nordeste. *Station Bulletin, EPACE Information* 3:1-2.
895. Madewell, B. R., E., Ameghino, H., Rivera, L., Inope, and J., DeMartini. 1987. Seroreactivity of sheep and goats to small ruminant lentivirus-ovine progressive pneumonia virus. *American Journal of Veterinary Research* 48:372-374.
896. Madison, V. 1980. Embryo transfer in sheep: The influence of selected factors. M.S. Thesis. Utah State University, Logan.
897. Mahan, S. M., S. D., Waghela, T. C., McGuire, F. R., Rurangirwa, L., Wassink, and A. F., Barbet. 1992. A Cloned DNA Probe for *Cowdria ruminantium* hybridizes with eight heartwater strains and detects infected sheep. *Journal of Clinical Microbiology* 30:981-986.
898. Malechek, J. C. 1982. Grazing management of goats in extensive rangelands production systems. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, pp.404-408.
899. Malechek, J. C., and D. F., Balph. 1987. Diet Selection by grazing and browsing livestock. In *The Nutrition of Herbivores*, ed. J. B., Hacker, and J. H., Ternouth. Brisbane, Australia: Academic Press.

900. Malechek, J. C., D. F., Balph, and F. D., Provenza. 1985. Plant defense and herbivore learning: Their consequences for livestock grazing systems. In *Proceedings of the NATO Advanced Research Workshop on Grazing Research at Northern Latitudes*, ed. O., Gudmundsson. New York, NY: Plenum Publishing.
901. Malechek, J. C., and J. S., de Queiroz. 1989. The ecological character of the semi-arid tropics of Northeast Brazil. In *Improving meat goat production in the semi-arid tropics*, ed. W. L., Johnson, and E. R., Oliveira. Davis, CA: SR-CRSP.
902. Malechek, J. C., and H., Narjisse. 1990. Behavioral ecology of sheep and goats: Implications to sustained production on pastures and rangelands. Invited paper presented to the European Association of Animal Production, Toulouse, France.
903. Malechek, J. C., and F. D., Provenza. 1981. Feeding behavior and nutrition of goats on rangelands. In *Nutrition and systems of goat feeding. Proceedings International Congress, Tours, France*, ed. P., Morand-Fehr, A., Bourbouze, and M., de Simane. Paris, France: INFA-ITOVIC Publ.
904. Malechek, J. C., and F. D., Provenza. 1983. Feeding behaviour and nutrition of goats on rangelands. *World Animal Review* 47:38-48.
905. Malechek, J. C., and F. D., Provenza. 1986. Analysis of feeding behavior on grazing trials and production studies on small ruminants. Proceedings of the 2nd International Rangeland Congress, Adelaide, Australia, pp.387-389.
906. Malechek, J. C., W., Schacht, J. A., Pfister, R., Kirmse, L., Hardesty, and F. D., Provenza. 1989. Improving productivity of grazing lands in the semi-arid tropics. In *Improving meat goat production in the semi-arid tropics*, ed. W. L., Johnson, and E., de Oliveira. Berkeley, CA: Univ. Calif. Press.
907. Malpartida, I. E. 1982. Mapas agrostodafologicos de las pasturas naturales de la sierra central y ensayos de pastoreo (Soil-vegetation maps of the natural pastures of the Central Sierra and pasture trials). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
908. Manchego, A. 1989. Serological analysis of viral infection in mixed herds from Arequipa Communities. DVM Thesis. University of San Marcos, Lima, Peru.

909. Mann, D. L., L., Goode, and K. R., Pond. 1987. Voluntary intake gain, digestibility, rate of passage and gastrointestinal tract fill in tropical and temperate breeds of sheep. *Journal of Animal Science* 64:880-886.
910. Mannasmith, C. H. 1981. A herd health program for a goat dairy. In *International Stockmen's School Sheep and goat handbook*, vol. 2. Clovis, CA: Agriservices Foundation.
911. Mannasmith, C. H. 1981. Mastitis in dairy goats. In *International Stockmen's School Sheep and Goat Handbook*, vol. 2. Clovis, CA: Agriservices Foundation.
912. Mannasmith, C. H., M. J., Keens-Dumas, W. R., Getz, H. A., Fitzhugh, and A. E., Wilhelm. 1991. Comparative ewe productivity among selected hair sheep genotypes in the Caribbean: Preliminary assessments. Proc. Symp. Hair Sheep Research, June 28-29, 1991, Hotel on the Cay, St. Croix Agric. Exp. Sta., Univ. Virgin Islands, Kingshill, St. Croix, U.S.V.I. (Stephan Wildeus, editor).
913. Manrique, J. C. 1984. Analisis de diametro, longitud, peso de vellon en borreguillas y carnerillos procedentes de diferentes cruzas. B.S. Thesis. Universidad Nacional del Centro del Peru, Huancayo.
914. Marcom, K. A., S. J., Brodie, L. D., Pearson, and J. C., DeMartini. 1992. Analysis of ovine lentivirus infectivity and replication using a focal immunoassay and an antigen-capture ELISA. *Journal of Clinical Microbiology* 30:2852-2858.
915. Marcom, K. A., L. D., Pearson, C. S., Chung, J. M., Poulson, and J. C., DeMartini. 1991. Epitope analysis of capsid and matrix proteins of North American ovine lentivirus field isolates. *Journal of Clinical Microbiology* 29:1472-1479.
916. Martawidjaja, M. 1985. The effect of season on the physiology of sheep in Yogyakarta. *Ilmu dan Peternakan* 2:15-17.
917. Martawidjaja, M. 1985. The effect of season and food consumption on growth rate in sheep. *Ilmu dan Peternakan* 2:19-22.
918. Martawidjaja, M. 1987. Perbandingan sistem kandang panggung dengan kandang lantai tanah (Comparison between platform type and litter type of sheep-goat houses). *Majalah Ilmu dan Peternakan* 3:79.

919. Martawidjaja, M., R. M., Gatenby, and S. W., Handayani. 1985. The relation between climatic environment and sheep-goat productive characteristics at different altitudes. *Ilmu dan Peternakan* 2:9-13.
920. Martinez, A., W., Getz, E., Geers, and S., Arnoux. 1991. Development and growth of dual-purpose goats: The Haiti experience. Proceedings Ninth Annual Scientific Workshop, ILRAD, Nairobi, Kenya, February 27-28, pp.180-195.
921. Martinez, D. 1982. A comparative study of the organization, management, and husbandry practices of three sheep production units in the Central Sierra of Peru. SR-CRSP Technical Report No. 11, NTIS #PB8-4-192731; Department of Economics and Planning, UNA, Lima and Winrock International.
922. Martinez, D. 1983. Economics of small ruminant production in the Peruvian Puna: Theoretical considerations and some evidence. M.S. Thesis. University of Missouri, Columbia.
923. Martinez, D. 1990. (Chapter 3) Economic Methods for Livestock Research and Development in the Andes. In *Improving Andean Sheep and Alpaca Production. Recommendations from a Decade of Research in Peru*, ed. C., McCorkle. : University of Missouri and SR-CRSP.
924. Martinez, D. 1990. (Capitulo 3) Metodos Economicos para la Investigacion y el Desarrollo Ganadero en los Andes. In *Mejoramiento de la Produccion Andina de Ovinos y Alpaca. Recomendaciones de una Decada de Investigacion en Peru*, ed. C., McCorkle. : INIAA y Programa Colaborativo de Apoyo a la Investigacion de Rumiantes Menores.
925. Martinez, D. 1993. Changes in livestock tenure western Kenya farming systems: A preliminary study. SR-CRSP Proceedings 11th Scientific Workshop, March 3-4, Nairobi, Kenya.
926. Martinez, D., and M., Barrera. 1989. Uso del Trabajo Familiar en Comunidades Agropastoriles Andinas. In *El Trabajo Familiar y el Rol de la Mujer en la Ganaderia de las Comunidades Alto-Andinas de Produccion Mixta*, ed. M., Fernandez. Lima, Peru: PVTC.
927. Martinez, D., and A., Cruz-Soriano. 1985. Baseline survey report of two alpaca production. SR-CRSP Technical Report No. 57; Comunidades Campesinas in Huancavelica, Peru.
928. Mathenge, J. W. 1981. Growth curve analysis of Rambouillet ewes. M.S. Thesis. Texas A&M University, College Station.

929. Mathius, I. W., M., Rangkuti, and L. P., Batubara. 1983. The use of peanut straw in sheep rations. Proc. Seminar Pemanfaatan Limbah Pangan dan Limbah Pertanian Untuk Makanan Ternak, Yohyakarta, Indonesia.
930. Mathius, I. W., and A., Semali. 1984. Pengaruh Pengaruh Penambahan Daun turi Terhadap Konsumsi Bahan Kering dan Daya Cerna Ransum Pada Domba (Intake and digestibility of *Sesbania Grandiflora* foliage by sheep). *Ilmu dan Peternakan* 1:173-176.
931. Mathius, I. W., and J. E., van Eys. 1983. Feeds and feeding of sheep in Sukawargi Village, West Java: A profile study. SR-CRSP Working Paper No. 12, Indonesia.
932. Mathius, I. W., J. E., van Eys, and H., Pulungan. 1985. *Gliricidia* foliage as a supplement to Napier grass-Cassava leaf diets for small ruminants. SR-CRSP Working Paper No. 64.
933. Mathius, I. W., J. E., van Eys, H., Pulungan, and M., Rangkuti. 1985. Evaluation of wilted Cassava leaves as protein supplement to Napier grass diets for growing lambs. *Proceedings 3rd Congress, Asian-Australasian Association of Animal Production, Swoul, Korea* 2:826-828.
934. Mathius, I. W., J. E., van Eys, and M., Pulungan. 1985. *Gliricidia* foliage as a supplement to Napier grass-Cassava leaf diets for small ruminants. SR-CRSP Working Paper No. 64.
935. Mathius, I. W., J. E., van Eys, and M., Rangkuti. 1984. Supplementation of Napier grass with three tree legumes: Effect on intake, digestibility and weight gain of lambs. SR-CRSP Working Paper No. 33.
936. Mathius, I. W., and J. E. J., van Eys. 1983. Utilization of Napier grass with and without *Sesbania grandiflora* by growing sheep. SR-CRSP Working Paper No.19, Indonesia.
937. Mathius, W., A., Djajanegara, L., Batubara, and M., Rangkuti. 1983. Pengaruh Tingkat Suatu Bahan Makanan Dalam Ransum Domba Yang Sedang Tumbuh. III. Bungkil Kelapa (The effect of level of feeding a feedstuff in rations for growing lambs. III. Coconut oil cake). *Ilmu dan Peternakan* 1:49.
938. Mathius, W., H., Pulangan, and N., Thomas. 1983. A preliminary analysis of results from the Nutrition Village Monitoring Program. SR-CRSP Working Paper No. 11, Indonesia.

939. Mathuva, M., J. F. M., Onim, H. A., Fitzhugh, and K., Otieno. 1985. Evaluation of potential interventions to increase forage production from cassava based cropping systems in Western Kenya. Proceedings of the 4th SR-CRSP Kenya Workshop.
940. Mathuva, M., M., Onim, H. A., Fitzhugh, and K., Otieno. 1985. Yield and quality evaluation of selected forage grasses. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
941. Mathuva, M., M., Onim, K., Otieno, and H. A., Fitzhugh. 1987. Forage potential of fodder grass/sesbania intercrop as compared to fodder grass/nitrogen interaction. Proceedings of the 6th SR-CRSP Workshop, Kabete.
942. Mathuva, M., M., Onim, K., Otieno, H. A., Fitzhugh, and K., Otieno. 1985. Forage production from cassava-based intercropping systems. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
943. Mathuva, M., M., Onim, K., Otieno, A., Mukhebi, and H., Fitzhugh. 1986. Effect of environment on biomass productivity and economies of intercropping maize with beans, pigeon pea, and sesbania. Proceedings of the 5th Annual SR-CRSP Workshop, Kabete, Kenya.
944. Matthewman, R. W., and J., De Boer. 1982. Economic constraints on dual-purpose goat production in Western Kenya. Proceedings of the SR-CRSP Kenya Workshop, pp.97-112.
945. Mawi, S., P., Bilinsky, A., Wilson, and M., Rangkuti. 1987. On-farm performance of small ruminant technologies in West Java: Evaluation of the introduction of *Gliricidia Maculata* to OPP farmers. SR-CRSP Working Paper No. 92, Bogor, Indonesia.
946. Mawi, S., and M., Gaylord. 1986. Evaluation of farmers' responses to the first Outreach Pilot Project (OPP) Farmers' meeting. SR-CRSP Working Paper No. 72, Bogor, Indonesia.
947. Mawi, S., and M., Sabrani. 1982. Sheep management systems in two different food cropping patterns. *Ilmu dan Peternakan* 1:10-13.
948. Mbabu, A., and M., Nolan. 1993. Socioeconomic Elements for Effective Herd Health Programs in Developing Countries. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:161-168.

949. Mbabu, A. N. 1988. The transformation of Kenya's Agrarian Sector: The case of Western Kenya. Ph.D., Rural Sociology Dissertation. University of Missouri, Columbia.
950. Mbabu, A. N. 1990. SR-CRSP Sociology Project. Research Highlights. KARI Annual Symposium, Nairobi.
951. Mbabu, A. N., and M. F., Nolan. 1990. Technology Development: A Value-based Exercise. Rural Sociological Society, Norfolk, VA.
952. Mbabu, A. N., M. F., Nolan, and J., Gilles. 1989. Concerns for Agricultural Development in Western Kenya. Proceedings of the Seventh SR-CRSP Scientific Workshop. SR-CRSP, Nairobi. pp.23-29.
953. Mbabu, A. N., M. F., Nolan, and J., Gilles. 1990. Participating Farmers' Production Strategies for Dual Purpose Goats in Western Kenya's (SR-CRSP) New and Old Clusters. Eighth SR-CRSP/Kenya Workshop, ILRAD, Nairobi.
954. Mbabu, A. N., M. F., Nolan, and J., Gilles. 1990. Utilization Pattern of the Dual Purpose Goat (DPG) among Participating Farmers in Western Kenya. Eighth SR-CRSP/Kenya Workshop, ILRAD, Nairobi.
955. Mbabu, N. 1992. The Transformation of the Kenyan Agrarian Sector: The Case of Western Kenya. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.
956. Mbwiria, S., and J. F., Bell. 1983. The role of selenium in small ruminant nutrition. Proceedings of the 2nd SR-CRSP Kenya Workshop, p.170.
957. Mbwiria, S. K. 1984. Selenium status in goats and sheep in selected areas of Kenya. M.S. Thesis. Washington State University, Pullman.
958. Mbwiria, S. K., J. O., Dickinson, and J. F., Bell. 1984. Blood selenium concentration of sheep and goats from selected areas of Kenya. Proceedings of the SR-CRSP Scientific Meeting, Kabete, Kenya, March 1984.
959. Mbwiria, S. K., J. O., Dickinson, and J. F., Bell. 1986. Blood selenium concentrations of sheep and goats from selected areas of Kenya. *Tropical Animal Health and Production* 18:159-165.
960. McCann, L. 1985. Valeur nutritive de quelques aliments marocains. Memoire de 3eme cycle Agron Thesis. Hassan II. Inst. Agron. Vet. Rabat, Morocco.



961. McCann, M. A. 1982. The effect of performance from early weaning to puberty on reproduction, mammary development and lactation in ewes lambing at 13 months of age. M.S. Thesis. North Carolina State University, Raleigh.
962. McCann, M. A., L., Goode, and E. V., Caruolo. 1982. Effects of diet and body condition prior to puberty on the performance of ewes lambing at 13 months of age. Proceedings of the Southern Section, ASAS.
963. McCann, M. A., L., Goode, E. V., Caruolo, and R. W., Harvey. 1983. Effect of accelerated growth and fattening during rearing on reproduction and lactation in ewes lambing at 13 months. *Journal of Animal Science* 57:403.
964. McCorkle, C. 1991. The roles of animals in social, cultural, and agro-economic systems. Proceedings of the USAID/ROCAP/UNIAAG/CATIA Symposium on Natural Resources and Animal Agriculture in Central America: Strategies for Sustainability, San Jose, Costa Rica, September 1991.
965. McCorkle, C. 1993. Livestock fill a galaxy of functions. *ILEIA Newsletter for Low External Input and Sustainable Agriculture* 2:29.
966. McCorkle, C. M. 1981. Management of animal health and disease in an indigenous Andean community. SR-CRSP Technical Report No. 5, NTIS #PB8-4-193903.
967. McCorkle, C. M. 1981. Organizational dialectics of animal management. SR-CRSP Technical Report No. 6, NTIS #PB8-4-192723.
968. McCorkle, C. M. 1983. Meat and Potatoes: Animal Management and the Agropastoral Dialectic in an Indigenous Andean Community with Implications for Development. Ph.D., Anthropology Thesis. Stanford University, Palo Alto.
969. McCorkle, C. M. 1983. Techno-environmental dialectics of herding in Andean agro-pastoralism. SR-CRSP Technical Report No. 30, NTIS #PB8-4-193036.
970. McCorkle, C. M. 1986. An introduction to ethnoveterinary research and development. *Journal of Ethnobiology* 6:129-149.

971. McCorkle, C. M. 1986. Integrative strategies of labor organization for crop-livestock production in an indigenous Andean community. Selected Proceedings of Kansas State University's 1986 Farming Systems Research Symposium - Farming Systems Research and Extension: Food and Feed, Kansas State University, pp.513-531.
972. McCorkle, C. M. 1987. Punas, Pastures, and Fields: Grazing Strategies and the Agropastoral Dialectic in an Indigenous Andean Community. In *Risk Management and Arid Land Use Strategies in the Andes: A Regional Anthropological Perspective*, ed. D. L., Browman. Boulder, CO: Westview Press.
973. McCorkle, C. M. 1987. Principles into practice. *Anthropology Newsletter* 28:2.
974. McCorkle, C. M. 1989. Introduction: Anthropology, Sociology, and International Agricultural R & D. In *The Social Sciences in International Agricultural Research: Lessons from the CRSPs*, ed. C. M., McCorkle. Boulder, CO: Lynne Rienner Publishers.
975. McCorkle, C. M. 1989. Veterinary Anthropology in the Small Ruminant CRSP/Peru. In *The Social Sciences in International Agricultural Research: Lessons from the CRSPs*, ed. C. M., McCorkle. Boulder, CO: Lynne Rienner Publishers.
976. McCorkle, C. M. 1989. Toward a Knowledge of Local Knowledge and its Importance for Agricultural RD&E. *Agriculture and Human Values* 6:4-12.
977. McCorkle, C. M. 1989. Veterinary Anthropology. *Human Organization* 48:156-162.
978. McCorkle, C. M. 1990. Introduction: A Decade of Research on Andean Small Ruminant Production. In *Improving Andean Sheep and Alpaca Production: Recommendations from a Decade of Research in Peru*, ed. C. M., McCorkle. Columbia, MO: University of Missouri Printing Services.
979. McCorkle, C. M. 1990. Social Research in International Agricultural R & D: Lessons from the Small Ruminant CRSP. *Agriculture and Human Values* 6:42-51.
980. McCorkle, C. M. 1990. *Improving Andean Sheep and Alpaca Production: Recommendation from a Decade of Research in Peru*. Columbia, Missouri: University of Missouri, Columbia.

981. McCorkle, C. M. 1991. Pooling labor and herds. *ILEIA Newsletter for Low External Input and Sustainable Agriculture* 7, 4/91, Dec:12-13.
982. McCorkle, C. M. 1992. Introduction. Agropastoral systems research in the SR-CRSP Sociology Project. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.
983. McCorkle, C. M. 1992. The Agropastoral dialectic and the organization of labor in a Quechua Community. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.
984. McCorkle, C. M. 1992. *Plants, Animals, and People Agropastoral Systems Research*. Boulder, Colorado: Westview Press.
985. McCorkle, C. M., and D. L., Esslinger. 1992. Communicating project results: A model from an international agricultural R & D programme. *The Journal of Development Communication* 1:3.
986. McCorkle, C. M., and J. L., Gilles. 1987. Stereotypes and Roles of Social Scientists in International Agricultural Development. *The Rural Sociologist* 7:216-224.
987. McCorkle, C. M., and E., Mathias-Mundy. 1990. Ethnoveterinary Medicine in Africa. Eighth SR-CRSP/Kenya Workshop, ILRAD, Nairobi.
988. McCorkle, C. M., and E., Mathias-Mundy. 1992. "Ethnoveterinary Medicine in Africa". *Africa: Journal of International African Institute* 62:59-93.
989. McCorkle, C. M., M. F., Nolan, K., Jamtgaard, and J. L., Gilles. 1989. Social Research in International Agricultural R & D: Lessons from the Small Ruminant CRSP. *Agriculture and Human Values* 6:42-51.
990. McCorkle, C. M., and M. D., Salman. 1985. Socioeconomic, environmental and management impacts upon the occurrence and control of livestock disease in Peruvian communities: An interdisciplinary study. SR-CRSP Pilot Project Paper, Columbia, Mo. and Fort Collins, Colorado.
991. McGuire, T. C., J. C., Carlson, and D. M., Mwamachi. 1985. Comparison of the effects of African Trypanosomiasis in four breeds of dairy goats. *Research in Veterinary Science* 39:252-253.

992. McGuire, T. C., J., Regnier, T., Kellom, and N. L., Gates. 1983. Failure in passive transfer of immunoglobulin G1 to lambs: Measurement of immunoglobulin G1 in ewe colostrums. *American Journal of Veterinary Research* 4:1064-1067.
993. Melo, L. R. T., C. A., Zometa, F. H., Machado, A. A. P., Fernandes, and M., Shelton. 1986. Performance of native meat purpose kids and lambs maintained in confinement during the dry season. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1383.
994. Melo Lima, F. A., A. A., Ponce de Leon, F. L. R., da Silva, and M., Shelton. 1986. Desempenho dos cruzamentos de ovinos deslanados da raca s. ines no nordeste do brazil. Proc. State of the Art Workshop.
995. Mendes, L. 1986. Range-animal ecology and Berger agropastoralists in Morocco's Western High Atlas. In *Selected Proceedings of Kansas State University's 1986 Farming Systems Research Symposium - Farming Systems Research and Extension: Food and Feed*. Manhattan, KS: Kansas State University.
996. Mendes, L. 1987. Private and communal land tenure in Morocco's Western High Atlas Mountains: Complements, not ideological opposites. In *Proceedings of the 1987 International Rangeland Development Symposium-Institutions for Rangeland Development: Strategies and Lessons Learned*, ed. J., O'Rourke. Morrilton, AR: Society for Range Management and Winrock International.
997. Mendes, L. 1988. Private and communal land tenure in Morocco's western High Atlas Mountains: Complements, not ideological opposites. ODI Pastoral Network Paper 26a, 16 pp.
998. Mendes, L. 1989. Ecological implications of traditional management of a communal range in the Moroccan High Atlas Mountains. M.S., Range Management Thesis. Utah State University.
999. Mendes, L. 1990. An ecological test of the tragedy of the commons on a traditional communal pasture (agdal) in Morocco's western High Atlas Mountains. M.S. Thesis. Utah State University.
1000. Mendes, L., and H., Narjisse. 1992. Range-Animal ecology and agropastoralism in Morocco's Western High Atlas Mountains. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.

1001. Mendoza, C. 1989. Efecto de la deprivacion de agua sobre el consumo y deigestibilidad de ovinos y alpacas. B.S. Thesis. UNA-La Molina, Lima.
1002. Merkel, R. C., S., Ginting, and K. R., Pond. 1992. Effect of duration and time of grazing on intake of sheep grazing under rubber in North Sumatra, Indonesia. *Proc. of the 6th AAP Anim. Sci. Congress.* 3:246.
1003. Mesquita, R. C. M. 1985. Seasonal feeding behavior and forage selection by goats in cleared and thinned deciduous woodlands in Northeast Brazil. M.S. Thesis. Utah State University, Logan.
1004. Millones, L. 1983. Modelos de comportamiento para la produccion nacional de lana de ovino en el Peru (Behaviorial model of national sheep wool production in Peru). M.S. Thesis. National Agrarian University (UNA), La Molina, Lima.
1005. Mink, S. 1980. Prospects for small farm goat production in a transmigration area of Indonesia: Results of a survey. SR-CRSP Technical Report No. 10, NTIS #PB8-4-187160; Winrock International, LPP and Woodrow Wilson School of Public and International Affairs, Princeton University.
1006. Mink, S. 1982. Prospects for small farm goat production in a transmigration area of Indonesia: Results of a survey. SR-CRSP Working Paper No. 2, Bogor, Indonesia.
1007. Misniwaty, A., and I., Kartamulia. 1993. Evaluation of anthelmintic distribution by the Animal Health Delivery Network (AHDN) in Gelang and its vicinity. SR-CRSP/SBPT Working Paper No. 147, October 1993.
1008. Mohamed, A. M. 1984. Characterization of five breeds of dairy goats. Ph.D. Dissertation. Texas A&M University, College Station.
1009. Mohamed, H. M. 1983. The effects of adaptation on in vitro digestibilities of tannin containing diets. M.S. Thesis. Utah State University, Logan.
1010. Mohammed Salim, K. 1983. Suppression of small ruminant ticks in Kakamega and Siaya by a low-cost tick control method. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.144-151.

1011. Mole, J. 1984. The effect of reproductive phase and hormone treatment on receptor sites for reproductive hormone in the ewe. M.S. Thesis. Utah State University, Logan.
1012. Montesinos, M. E. 1983. Seleccin de carneros corriedale mediante la aplicacion de pruebas de performance y progeny en el centro experimental chuquibambilla - UNTA. B.S. Thesis. Universidad Nacional Tecnica del Altiplano, Puno.
1013. Moore, J. A., T. G., Goodwin, and K. R., Pond. 1991. Digesta kinetic estimates as affected by model, marker and diet for sheep fed hay or pellets. *Journal of Animal Science* 69:517.
1014. Moore, J. A., K. R., Pond, M. H., Poore, and T. G., Goodwin. 1992. Influence of model and marker on digesta kinetic estimates for sheep. *Journal of Animal Science* 70:3528-3540.
1015. Moore, J. A., K. R., Pond, M. H., Poore, L. W., Whitlow, and B. E., Chase. 1992. Waste cotton as a feed resource for cattle and sheep. *Journal of Animal Science* 70:305.
1016. Morbeck, D. E., K. R., Pond, T. G., Goodwin, J. H., Britt, and L., Callan. 1990. Ovarian activity of seven breeds of sheep during the spring and summer in North Carolina. *Journal of Animal Science* 68:260.
1017. Mortimer, D. L. 1982. A socioeconomic assessment of small ruminant disease in Kenya. M.S. Thesis. Department of Agricultural Economics, Washington State University, Pullman.
1018. Mounsif, M. 1986. Carbohydrate trends in *Artemisia caudata*. M.S. Thesis. Texas Tech University, Lubbock.
1019. Mueller, D. L. 1981. Scaling relative preference for dietary items in an Ungulate. Ph.D. Dissertation. Utah State University, Logan.
1020. Muhuyi, W., E. Z., Drobnis, E. A., Nelson, and T. Y., Lin. 1982. Season, breed and age influences on production and freezability of dairy goat semen. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.283.
1021. Mukhebi, A. W., H. C., Knipscheer, and G., Sullivan. 1991. The impact of foodcrop production on sustained livestock production in semiarid regions of Kenya. *Agricultural Systems* 35:339-351.

1022. Mukhebi, A. W., and J. F. M., Onim. 1985. Economics of intercropping forage crops with maize in Kaimosi, Western Kenya. Proceedings of the 4th SR-CRSP Kenya Workshop.
1023. Mukhebi, A. W., and J. F. M., Onim. 1985. Economics of pre-weaning kid practices at Maseno Research Station, Western Kenya. Proceedings of the 4th SR-CRSP Kenya Workshop.
1024. Mukhebi, A. W., E., Reynolds, and H., Knipscheer. 1986. Socioeconomic methodologies in the Dual-purpose Goat Farming Systems Research in Western Kenya. In *FSSP Network Report No. 2*, ed. S., Kearl. Gainseville, Florida: Farming Systems Support Project.
1025. Mukhebi, A. W., E., Reynolds, H., Knipscheer, and A. J., DeBoer. 1985. Socioeconomic methodologies in the Dual-purpose Goat farming systems research in Western Kenya. Proceedings of the Regional Workshop on Livestock in Mixed Farming Systems: Research Methodologies and Priorities, ILCA, Addis Ababa, Ethiopia, pp.71-94.
1026. Mukhebi, A. W., J. E., Reynolds, F. B., Nyaribo, A. N., Mbabu, and R. H., Bernsten. 1984. A socioeconomic evaluation of the dual-purpose goat enterprise in small-scale farming systems in Western Kenya. Proceedings of the 3rd SR-CRSP Kenya Workshop, pp.95-108.
1027. Mukhebi, A. W., F., Ruvuna, and H., Blackburn. 1985. Economics of simulated pre-weaning kid rearing practices for the East African Goats in Kaimosi, Western Kenya. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, p.173-187.
1028. Mukhebi, A. W., R. S., Shavulimo, F., Ruvuna, and F., Rurangirwa. 1985. Economics of internal parasite control among goats in Western Kenya. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, p.160-172.
1029. Mukhebi, A. W., and A. E., Sidahmed. 1985. Economic evaluation of preweaning kid feeding practices. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
1030. Mukisira, E., and F., Hembry. 1985. A nutritional assessment of warm season forages by In Vivo and In Vitro Techniques. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
1031. Mukisira, E. A. 1984. Nutritional evaluation of selected warm season forages. M.S. Thesis. Louisiana State University, Baton Rouge.

1032. Mulholland, J. G., and J. B., Coombe. 1979. Supplementation of sheep grazing wheat stubble with urea, molasses and minerals: Quality of diet, intake of supplements and animal response. *Australian Journal of Experimental Agricultural Animal Husbandry* 19:23.
1033. Muljadi, A., M., Sabrani, A., Suparyanto, and D., Pramano. 1980. The effect of land and animal ownership systems on the possibility of sheep and goat development in Ciburuy, Bogor. *Lembaran LPP* 4:5-15.
1034. Muljadi, A. N., H. C., Knipscheer, and I. W., Mathius. 1984. The effect of season on the participation of family laborers in small ruminant farming systems in West Java. *Ilmu dan Peternakan* 1:267-273.
1035. Muljadi, A. N., H. C., Knipscheer, and I. W., Mathius. 1984. Seasonality in labor use for small ruminant production at three locations in West Java. SR-CRSP Working Paper No. 35.
1036. Muljadi, N. A. 1984. Economic role of small ruminant production in two areas of West Java, Indonesia. SR-CRSP Working Paper No. 31, Indonesia.
1037. Mulyadi, A. N., H. C., Knipscheer, and I. W., Mathius. 1984. The effect of seasons on the participation of family labor in small ruminant farming systems in West Java. *Ilmu dan Peternakan* 1:267-273.
1038. Muriu, D. N., E. K., Ndung'u, F. R., Rurangirwa, T. C., McGuire, and A., Wambugu. 1992. Contact exposure of goats, sheep and calves with goats infected with Mycoplasma strain F38. Proceedings of the SR-CRSP Kenya Workshop, Nairobi, Kenya.
1039. Musalia, L., P., Semenyé, and H., Fitzhugh. 1986. Preference ranking of forages by goats in Western Kenya. Proceedings of the 4th International Conference on Goats, Brasilia.
1040. Musalia, L. M., P. P., Semenyé, and H., Fitzhugh. 1989. Mineral status of dual-purpose goats and forage in Western Kenya. *Small Ruminant Research* 2:1-9.
1041. Mwamachi, D. M. 1987. Immune colostrum induces trypanotolerance in goat kids challenged with trypanosoma congolense. M.S. Thesis. Washington State University, Pullman.



1042. Mwamachi, D. M., F. R., Rurangirwa, T. C., McGuire, and S., Chema. 1986. Effect of colostrum from goats immunized with a clone of *Trypanosoma congolense* on survival of kids infected with the same clone. *Proceedings of the SR-CRSP Kenya Workshop, Kabete, Kenya.*
1043. Mwamachi, D. M., F. R., Rurangirwa, A. J., Musoke, and T. C., McGuire. 1991. Clone-specific immune colostrum induces increased resistance in goat kids challenged with *Trypanosoma congolense*. *Acta. Tropica* 49:27-36.
1044. Mwandotto, B. A. J. 1991. Small ruminant research in Kenya. *Proc. 1st biannual conference of the African Small Ruminant Research Network, ILCA.*
1045. Mwandotto, B. A. J., C. O., Ahuya, F., Ruvuna, and J., Taylor. 1990. Milk Yield Potential of the Kenya Dual Purpose Goat. *Proc. Eighth SR-CRSP Scientific Workshop. ILRAD, Nairobi, Kenya. March 7-8, pp. 12-14.*
1046. Mwandotto, B. A. J., F., Ruvuna, J. F., Taylor, and T. C., Cartwright. 1992. Breeding strategies for genetic improvement. In *On-farm research and technology for dual-purpose goats*, 1st ed., vol. 1, ed. P. P., Semenyé, T., Hutchcroft, and Small Ruminant Collaborative Reserach Support Program. Kenya: National Printing Press Ltd.
1047. Mwandotto, B. A. J., J. F., Taylor, and F., Ruvuna. 1992. Embryo transfer in Kenyan goats. *Proceedings Workshop on Embryo Transfer, Naivasha, Kenya* 1:29.
1048. Mwandotto, B. A. J., J. F., Taylor, and F., Ruvuna. 1992. Current status of the Kenya Dual Purpose Goat (KDPG) Breeding Project at Naivasha. *Proc. 10th Annual SR-CRSP Workshop, Nairobi. Feb. 26-27, 1992* 10:5-11.
1049. Mwandotto, B. A. J., J. F., Taylor, F., Ruvuna, C., Ahuya, and S., Mkuu. 1991. Milk yield and growth of East African, Galla, their first crosses (F1) with Toggenburg and Anglo-Nubian and the 4-way dual purpose goats (DPG) under station management. *Proceedings 9th Annual SR-CRSP Workshop, Nairobi, Kenya. March 1991.* 9:5-10.
1050. Mwangi, E., R., Heinonen, and F., Bell. 1983. Uncontrolled parasitism of ticks on native goats. *Proceedings of the 2nd SR-CRSP Kenya Workshop*, p.77.
1051. Mwangi, E., P., Sayer, J. C., Njanja, and J. F., Bell. 1985. Tick survey on goats and sheep in Siaya and Kakamega Districts, Kenya. *Tropical Animal Health and Production* 17:102-106.

1052. Mwangi, E. N., P. D., Sayer, J. C., Njanja, and J. F., Bell. 1984. Tick survey on goats and sheep in Siaya and Kakamega Districts, Kenya. Proceedings of the SR-CRSP Scientific Meeting, Kabete, Kenya.
1053. Myers, F. J., B. R., Madewell, P. H., Gumerlock, and J. C., DeMartini. 1989. ras p21 expression in ovine pulmonary carcinoma. *Veterinary Immunological Immunopathology* 23:279-291.
1054. Myers, R. P. 1982. Perinatal mortality in lambs on a southeastern Wyoming ranch. M.S. Thesis. Colorado State University, Fort Collins.
1055. Narjisse, H. 1981. Acceptability of big sagebrush to sheep and goats: Role of monoterpenes. Ph.D. Dissertation. Utah State University, Logan.
1056. Narjisse, H. 1985. Evaluation des ressources pastorales et du comportement alimentaire des petite ruminants dans la steppe de l'oriental et le parcours forestier de Jaaba au Moyen Atlas. Projet petits ruminants: Premier Bilan, IAV Hassan II, Rabat Maroc.
1057. Narjisse, H. 1990. Feeding behavior of goats on rangelands. In *Goat nutrition*, ed. P. M., Fehr. : Pudoc Wagenigen.
1058. Narjisse, H., and E., Bare B. 1986. Seasonal changes in the dietary botanical composition of sheep and goats grazing in an oak forest. In *Rangelands: A resource under siege. Proceedings of the Second International Rangeland Congress*, ed. P. J., Joss, P. W., Lynch, and O. B., Williams. Adelaide: Australian Academy of Science.
1059. Narjisse, H., and E., Hansali M. 1985. Effects of tannins on nitrogen balance and the microbial activity of rumen fluid in sheep and goats. *Ann. Zoot.* 4:34.
1060. Narjisse, H., E., Houzmali, and B., Ibouddaten. 1988. Influence du traitement par l'uree et la supplementation par un complement mineral et vitamine sur la valeur alimentaire de l'alfa (*Stipa tenacissima*). *Hommes, Terre et Eaux* 18:72.
1061. Narjisse, H., and J. C., Malechek. 1982. Acceptability of big sagebrush (*Artemisia tridentata*) to experienced and native sheep and goats as affected by season and monoterpenoid level. Proceedings of the International Society of Range Management, Calgary, Alberta.

1062. Nastis, A. S., and J. C., Malechek. 1981. Digestion and utilization of nutrients in oak browse by goats. *Journal of Animal Science* 53:283-290.
1063. Nastis, A. S., and J. C., Malechek. 1988. Estimating digestibility of oak browse for goats by in vitro techniques. *Journal of Range Management* 41:255-258.
1064. Ndiritu, C. 1993. The SR-CRSP in Kenya, 1980-1993: Achievements and Impacts. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:201-208.
1065. Nelson, E. A., T. Y., Lin, E. S., Fonda, and E. A., Cogger. 1985. The effect of freezing rate. Glycerol level and equilibration time on motility and GOT release of frozen ram semen. *Journal of Animal Science* 1:187.
1066. Neumaier, M. C. 1983. The social organization of peasant goat production in Northeast Brazil. M.S., Rural Sociology Thesis. University of Missouri, Columbia.
1067. Neumaier, M. C. 1986. Peasant production in Northeast Brazil: The case of goat production in Cariris Velhos, Paraiba. SR-CRSP Technical Report No.73.
1068. Neumaier, M. C. 1986. Sociological aspects of peasant production in Paraiba: Suggestions for a peasant-oriented research and extension goat production program. Goats and Sheep in Northeast Brazil: Proceedings of the First Workshop of the SR-CRSP, Ministerio da Agricultura/EMBRAPA and SR-CRSP, p.415-434.
1069. Neumaier, M. C., C. A., Zometa, A., Rodrigues, R. H., Nobre, C. P., Primov, M. F., Nolan, and P. R. M., Leite. 1983. Biological performance and sociological responses to the introduction of new management techniques for goats among small producers in Northeast Brazil. *Journal of Dairy Science* 66:127.
1070. Nianogo, A. J., and N. M., Stott. 1982. Nitrogen balance in goats receiving either soybean meal or dried broiler litter as the primary nitrogen source. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.562.
1071. Nieves, R. A. 1987. Potential enteropathogenic mechanisms of *Escherichia coli* isolated from neonatal alpacas. M.S. Thesis. Colorado State University, Fort Collins.
1072. Njanja, J. C. 1985. Control of naturally-occurring nematode infections of goats in Kenya with Ivermectin. M.S. Thesis. Washington State University, Pullman.

1073. Njanja, J. C., J. F., Bell, and R. B., Wescott. 1985. Apparent lack of toxicity in adult East African goats on parenterally administered Ivermectin. *Bulletin of Animal Health and Production, Africa* 33:123-127.
1074. Njanja, J. C., F., Ruvuna, and R. B., Wescott. 1984. Evaluation of new anthelmintic for control of naturally nematode infections of goats in Kenya. Proceedings of the SR-CRSP Scientific Meeting, Kabete, Kenya.
1075. Njanja, J. C., R. B., Wescott, and F., Ruvuna. 1987. Comparison of Ivermectin and Thiabendazole for treatment of naturally occurring nematode infections of goats in Kenya. *Veterinary Parasitology* 23:205-209.
1076. Noble, A. 1981. Women and livestock in Western Kenya: An organizational analysis. M.S. Thesis. University of Missouri, Columbia.
1077. Noble, A. 1992. Women, men, goats, bureaucrats: The Samia women's dairy goat project. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.
1078. Noble, A., and M., Nolan. 1982. Women and goats in Western Kenya: Dilemmas for development. Proc. 3rd Int'l. Conf. on Goat Prod. and Dis., Tucson, AZ, pp.197-200.
1079. Noble, A. L. 1986. When is a women's project not a women's project? A case study of goat raising in Kenya. In *Women Creating Wealth: Transforming Economic Development - Selected Papers and Speeches from the Association of Women in Development Conference*, ed. R. S., Gallin, and A., Spring. Washington, DC: AWID.
1080. Noble, A. L., and M. F., Nolan. 1983. Sociological constraints and social possibilities for production of goats in Western Kenya. SR-CRSP Technical Report No.18, NTIS #PB8-4-238591.
1081. Nolan, M. F. 1980. Andean peasant economics and pastoralism. SR-CRSP Technical Report No. 1, NTIS #PB8-5-113876.
1082. Nolan, M. F. 1982. Dual Purpose Goats in Western Kenya: A summary of sociological constraints. Proc. SR-CRSP Kenya Workshop, pp.13-114.

1083. Nolan, M. F. 1985. Lambs to the slaughter or wolves in sheep's clothing? Some comments on the role of rural sociology in international agricultural programs. In *Rural Sociologists at Work: A Festschrift for M.E. John*, ed. B., Bealer. University Park, PA: The M.E. John Memorial Lecture Series Fund.
1084. Nolan, M. F. 1985. An overview of sociology in the small ruminant CRSP. *The Rural Sociologist* 5:280-284.
1085. Nolan, M. F., J. L., Gilles, and C. M., McCorkle. 1985. Anthropologists in the College of Agriculture: The Experience of Missouri's Small Ruminant Collaborative Research Support Program. The Anthropology Seminar, University of Missouri-Columbia.
1086. Nordfelt, W., C. R., Nordfelt, W., Foote, E., Nelson, and D., Foote. 1982. Induced breeding in dairy goats by increased photoperiod. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.570.
1087. Norman, M. D. 1982. An economic analysis of the dairy goat industry in Northern Arkansas and Southern Missouri. M.S. Thesis. University of Arkansas, Fayetteville.
1088. Norman, M. D., J. M., Redfern, J. A., Yazman, A. J., De Boer, and W. A., Halbrook. 1982. Production of dairy goat milk on small farms in Arkansas and Missouri. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.298.
1089. Norris, A. N. 1986. Immunization against androstenedione and biological activity of luteinizing hormone in the ewe. M.S. Thesis. Texas A&M University, College Station, TX.
1090. Norton, B. E. 1981. Rangelands: A frontier in development. *Utah Science* 42:44-47.
1091. Norton, B. E. 1986. Guidelines for determining stocking rates for saline shrubland. *Reclamation and Revegetation Research* 5:403-422.
1092. Norton, B. E. 1993. Functioning and productivity of rangeland ecosystems: A synthesis of the symposium. In *Proceedings of the Fourth International Rangeland Congress, Montpellier, France*, ed. A., Gaston, M., Kernik, and H.-N., Le Houerou. Montpellier, France: Association Francaise de Pastoralisme.

1093. Norton, B. E., J. C., Malechek, and C. W., Gay. 1993. An international education in range management. In *Proceedings of the Fourth International Rangeland Congress, Montpellier, France*, ed. A., Gaston, M., Kernik, and H.-N., Le Houerou. Montpellier, France: Association Francaise de Pastoralisme.
1094. Norton, B. E., and G., Zere. 1987. A perspective on the marketing component in the development of range livestock production in East Africa. In *Proceedings of the 1987 International Rangeland Development Symposium, Boise, Idaho*, ed. J. T., O'Rourke. Boise, Idaho: International Affairs Committee, Society for Range Management, and Winrock International Institute for Agricultural Development.
1095. Nova, C. 1985. Interrelationships between source and level of progesterone and number of fetuses at different stages during pregnancy in sheep. M.S. Thesis. Utah State University, Logan.
1096. Novoa, C. 1985. Reproduction of llamas and alpacas. *Proceedings of the Workshop on Llama Medicine, Santa Cruz, California*, (editor: Fowler, ME).
1097. Nunes, J. F., A. E. F. D., Silva, F. A. M., Lima, G. S., Riera, and F. A., Ponce de Leon. 1983. Caracteristiques de la Semence des caprines Locaux Moxoto en relation avec la morphologie du scrotum. *Proceedings of the Conference on Reproduction of Ruminants in Tropical Zones, Pointe-a-Pitre, Guadeloupe, West Indies*.
1098. Nunes, J. F., A. E. F. D., Silva, A. A., Simplicio, and G. S., Riera. 1983. Influence de la Saison Sexuelle sur les Caracteristiques du Cycle Oestrien de la Chevre Native du Brasil. *Proceedings of the Conference on Reproduction of Ruminants in Tropical Zones, Pointe-a-Pitre, Guadeloupe, West Indies*.
1099. Nyaribo, F. 1984. Integration of dual purpose goats in small farms in Western Kenya: A linear programming analysis. Ph.D. Dissertation. Washington State University, Pullman, WA.
1100. Nyaribo, F. B. 1983. Analysis of household consumption in Western Kenya during the short and long rains with a comparison of on-farm produced food and off-farm food purchases. *Proceedings of the 2nd SR-CRSP Kenya Workshop*, pp.152-162.

1101. Nyaribo, F. B., H. C., Knipscheer, and D. L., Young. 1990. Optional Strategies for Adoption of Dual Purpose Goats and Three Forage Technologies in Hamisi and Siaya Clusters. Proc. Eighth SR-CRSP Workshop, ILRAD, Kabete.
1102. Nyaribo, F. B., H. C., Knipscheer, and D. L., Young. 1990. Effects of Household Subsistence Requirements on Enterprise Mix and Farm Income in Hamisi Division. Proc. Eighth SR-CRSP Workshop, ILRAD, Kabete.
1103. Nyaribo, F. B., M., Mathuva, J. F. M., Onim, K., Otieno, and H. C., Knipscheer. 1991. Economic significance of crop residues and sesbania in support of dual purpose goat production. Proceedings of the Ninth Scientific Workshop, Small Ruminant CRSP, February 27-28, 1991, KETRI-Muguga, Kenya.
1104. Nyaribo, F. B., A. W., Mukhebi, and R. H., Bernsten. 1984. Implications of family labor use for adoption of the dual-purpose goat enterprises and small farms in Western Kenya. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya, March 5-6, 1984, pp.81-87.
1105. Nyaribo, F. B., J. F. M., Onim, and P. O., Semanye. 1991. A case study on dual purpose goat technology development in Western Kenya: Potential farm level impact and adoption. Proceedings of the Animal Production Systems Global Symposium, September 15-22, 1991, San Jose, Costa Rica.
1106. Nyaribo, F. B., J. F. M., Onim, and D. L., Young. 1991. Economics implications of forage innovations on smallholder farms in Western Kenya. Proceedings of the Joint Animal Feed Resources Network Workshop, March 4-8, 1991, Gaborone, Botswana.
1107. Nyaribo, F. B., and P. P., Semanye. 1990. Economics of Using Sweet Potato Vines (SPV) as a Replacer to Wean Dual Purpose Goat Kids. Maseno Research Station.
1108. Nyaribo, F. B., and D. L., Young. 1990. The Impacts of Land and Capital Constraints on the Economics of New Livestock Technology in Western Kenya. Selected paper, American Agricultural Economics Association Annual Meeting, Vancouver, B.C., August 4-8, 1990.
1109. Nyaribo, F. B., and D. L., Young. 1992. The Impacts of Capital and Land Constraints on the Economics of New Livestock Technology in Western Kenya. *Agricultural Economics* 6:353-364.

1110. Nyaribo, R., F, and E., Ospina. 1993. An overview of dual purpose goat technology development and economic returns on small farms in Western Kenya. In *Proceedings Small Ruminant Workshop, San Juan, Puerto Rico*, ed. M., Keane. San Juan, Puerto Rico: .
1111. Nyaribo-Roberts, F., and E., Ospina. 1993. An Overview of Dual Purpose Goat Technology Development and Economic Returns on Small Farms in Western Kenya. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:221-234.
1112. Odenya, W. O. 1982. Relationship of Coat Cover and Production Traits in the Dorper Breed of Sheep. M.S. Thesis. University of California, Davis.
1113. Odour, J. H., F. G., Ochieng, and P. E., Budamba. 1989. Chemical compositions and digestibilities of common major forages and crop residues in Western Kenya. *Proceedings of the 7th SR-CRSP Workshop, Kabete*.
1114. Okali, C., and H. C., Knipscheer. 1985. Small ruminant production in mixed farming systems: Case studies in research design. Fifth Annual Farming Systems Symposium, Kansas State University, October 13-17.
1115. Okeo, A. M., B. A. J., Mwandotto, R. O., Mosi, J. F., Taylor, and C. O., Ahuya. 1991. Some factors influencing age at eruption of permanent incisor pairs in goats. *Proceedings 9th Annual SR-CRSP Workshop, Nairobi, Kenya. March 1991.* 9:21-25.
1116. Okeyo, A. M., J. K., Kitilit, C. O., Ahuya, F., Ruvuna, and T. C., Cartwright. 1985. Disease and prolificacy characteristics of the Galla and the East African goat breeds at Ol'Magogo. *Proc. 4th SR-CRSP Kenya Workshop, Kakamega*, p.83.
1117. Okeyo, A. M., K., Male, F., Ruvuna, and M., Wanyoike. 1985. The behavior and feeding patterns of the East African, Galla and Toggenburg goats at Ol'Magogo. *Proc. 4th SR-CRSP Kenya Workshop, Kakamega*, p.75-77.
1118. Okeyo, A. M., B. A. J., Mwandotto, J. F., Taylor, F., Ruvuna, R. O., Mosi, and C. O., Ahuya. 1992. Reproductive Performance Rating of Indigenous Goat Genotypes and their Crosses in Kenya. *Proc. 10th Annual SR-CRSP Workshop, Nairobi. Feb. 26-27, 1992* 10.



1119. Okeyo, A. M., F., Ruvuna, T. C., Cartwright, and G. I., Lumiti. 1985. Fertility levels, postpartum intervals and other reproductive performance traits in East African, Galla and their crosses at Ol'Magogo. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, p.69-75.
1120. Okeyo, A. M., F., Ruvuna, T. C., Cartwright, and J. N., Maleche. 1986. Use of teething techniques to estimate age in goats. Proc. 5th SR-CRSP Workshop, Kabete, p. 151.
1121. Okeyo, A. M., M., Wanyoike, F., Ruvuna, W. N., Gichuru, T. C., Cartwright, and J., Wachira. 1985. Comparison of edible meat yields among different goat breeds and crosses at Ol'Magogo. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, pp.78-82.
1122. Okeyo, M. A. 1984. Comparative reproductive performance of Dorset Finn Sheep and Rambouillet Ewes and their F1 crosses. M.S. Thesis. University of California, Davis.
1123. Oliveira, E. R. 1987. Maintenance energy requirements of free ranging goats and sheep. Ph.D. Dissertation. Utah State University, Logan.
1124. Oliveira, E. R., and A., Simplicio. 1993. EMBRAPA/CNPC-SR-CRSP: A Successful Partnership in Northeast Brazil. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:67-72.
1125. Oliveira, E. R. de, N. N., Barros, T. W., Robb, W. L., Johnson, and K. P., Pant. 1986. Substituicao da torta de algodao pro feno de leguminosas em racoes baseadas em restolho da cultura do milho para ovinos em confinamento (Substitution of cottonseed cake by legume hay in corn stover-based rations for confined sheep). *Fesq. Agropec. Bras., Brasilia* 21:555-564.
1126. Oltenacu, E. A., A., Martinez, H. A., Glimp, and H. A., Fitzhugh. 1987. *The role of sheep and goats in agricultural development*. Morrilton, AR: Winrock International.
1127. Oluoch, E. A., N. S., Magnuson, T. C., McGuire, and A. F., Barbet. 1991. Trypanosoma brucei: Peptide mapping of partially homologous variable surface glycoproteins. *International Journal for Parasitology* 21:573-578.
1128. Oluoch, E. O. 1985. Peptide mapping of surface exposed regions of the variable surface glycoproteins of African Trypanosomes. M.S. Thesis. Washington State University, Pullman.

1129. Onim, J. F., M., Mathuva, K., Otieno, and H. A., Fitzhugh. 1989. Evaluation of multipurpose trees (MPTS) for their forage, fuelwood and soil fertility improvement potentials. Proceedings of the 7th SR-CRSP Workshop, Kabete.
1130. Onim, J. F. M. 1987. Multiple uses of pigeon pea. Proceedings of the Research on Grain Legumes in Eastern and Central Africa, ILCA/ICRISAT, 1987, p.115-120.
1131. Onim, J. F. M. 1987. Alternative uses of sesbania-A proposal to collect sesbania germplasm in the PANESA region. Proceedings PANESA Workshop, April 27-30, 1987, Arusha Tanzania.
1132. Onim, J. F. M. 1990. An assessment of sustainable land use systems research in east Africa. Proceedings of International Sustainable Land Use Systems, February 14-16, 1990, Hyatt Hotel, New Delhi, India, pp. 95-104.
1133. Onim, J. F. M. 1991. Sustainable agricultural production in crop-livestock system in western Kenya. Presentation at Farming Systems Research and Extension Symposium, Michigan State University, East Lansing, MI, October 7-12.
1134. Onim, J. F. M. 1993. Summary Report. Recommendations for Dual-Purpose Goats Solidification Project in Western Kenya. SR-CRSP/Lagrotech Consultants, Kisumu, Kenya.
1135. Onim, J. F. M., M., Mathuva, R., Hart, H., Fitzhugh, and K., Otieno. 1986. Recommendation domains for DP goat research in Western Kenya. Proceedings of the 5th Animal SR-CRSP Workshop, Kabete, Kenya, pp.48-53.
1136. Onim, J. F. M., M., Mathuva, K., Otieno, P. P., Semenye, and H. A., Fitzhugh. 1985. Feed resources for small ruminants in small holder farms in Western Kenya. Proceedings of the Workshop on Animal Feed Resources for Small-scale Livestock Producers/ Proceedings of the PANESA Workshop on Animal Feed Resources for Small-scale Livestock Producers, ILCA, Nairobi.
1137. Onim, J. F. M., P., Ochola, H. A., Fitzhugh, J., Oduor, and K., Otieno. 1990. Potential of goat manure as a valuable fertilizer for small scale farmers. Presented at 8th Kenya SR-CRSP Scientific Workshop, March 7-8, 1990, ILRAD, Nairobi, Kenya, p.20.

1138. Onim, J. F. M., P., Ochola, M., Mathuva, K., Otieno, and H. A., Fitzhugh. 1987. Dry matter, nitrogen and green manure yields of leucaena, sesbania and pigeon pea in a cutting frequency study at Maseno. Proceedings of the 6th SR-CRSP Workshop, Kabete.
1139. Onim, J. F. M., K., Otieno, and H. A., Fitzhugh. 1989. The SR-CRSP Kenya Program. Presented at Workshop on Integrating Research to Improve Agricultural Productivity, Capitol Hotel, Lilongwe, Malawi, November 27-30, 1989.
1140. Onim, J. F. M., K., Otieno, and H. A., Fitzhugh. 1990. Productivity of 0.5 ha model farm for small scale crop-livestock farmers in a sub-humid ecozone. Presented at 8th Kenya SR-CRSP Scientific Workshop, March 7-8, 1990, ILRAD, Nairobi, Kenya, p. 15.
1141. Onim, J. F. M., K., Otieno, and W., Getz. 1991. Border effect on maize grain yields by Leucaena, Sesbania, and Calliandra in alley cropping systems. Presentation at 8th Annual Small Ruminant Workshop, KETRI, Maguga, Kenya, February 27-28.
1142. Onim, J. F. M., K., Otieno, and W., Getz. 1991. Development of Maseno Double Cobber maize cultivar for high forage and grain yield. Presentation at 8th Annual Small Ruminant Workshop, KETRI, Maguga, Kenya, February 27-28.
1143. Onim, J. F. M., K., Otieno, M., Mathuva, and W., Getz. 1992. Adoption of feed resources improved technologies for dual-purpose goats by farmers in western Kenya. Paper presented at the 10th SR-CRSP Workshop, International Laboratory for Research in Animal Diseases, Nairobi, Kenya, February 26-27, 1992.
1144. Onim, J. F. M., P. P., Semenyé, and H. A., Fitzhugh. 1985. Nutritional constraints to small ruminants in Africa. In *Small ruminants in African Agriculture*, ed. R. T., Wilson, and D., Bourzat. Addis Ababa: ILCA.
1145. Onim, M., R., Hart, K., Otieno, and H. A., Fitzhugh. 1984. Potential of intercropping forages crops with maize in Western Kenya. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya.
1146. Onim, M., M., Mathuva, K., Otieno, R., Hart, and H. A., Fitzhugh. 1985. Potential of food-feed crops in Western Kenya. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.

1147. Onim, M., M., Mathuva, K., Otieno, A. E., Sidahmed, and H. A., Fitzhugh. 1985. Simplified hay making for small-scale farmers. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
1148. Onim, M., A. E., Sidahmed, R., Hart, D., Brown, S., Russo, and H. A., Fitzhugh. 1984. Matching feed resources to requirements for dual-purpose goats in Western Kenya. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya.
1149. Ordoveza, A. L., and W. L., Johnson. 1982. Utilization of urea by sheep and goats fed high roughage diets. Proceedings of the 19th Meeting of the Philippine Society of Animal Science and 2nd Congress of the Asian-Australasian Association of Animal Production, Manila, and SR-CRSP Technical Report No. 58.
1150. Ortega, I. M. 1991. Deer and cattle foraging strategies under different grazing practices and stocking rates. Ph.D. Dissertation. Texas Tech University, Lubbock.
1151. Osaona, L., E., Flores, and F. C., Bryant. 1989. Dietary composition and forage intake of sheep grazing under continuous and rotation pastures on central sierra rangelands. In *Research results in range management and improved forages. Tech. Art. T-9-584*, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.
1152. Otieno, K. 1993. Evaluation of multipurpose tree legumes for fodder: The case of sesbania sesban in Western Kenya. SR-CRSP 11th Scientific Workshop, ILRAD, Kabete, Kenya, March 3-4, 1993.
1153. Otieno, K., M. J., Bryant, J. F. M., Onim, and J. A., Kategile. 1991. The effect of site and cutting frequency on forage yield from Sesbania sesban in western Kenya. Presentation at AFRNET Sesbania Network Workshop, Jacaranda Hotel, Nairobi, Kenya, September 9-14.
1154. Otieno, K., J. F. M., Onim, B., Dzwela, and M. N., Mathuva. 1989. The effect of phosphorus on the germination and seedling growth of Sesbania provenances from Tanzania and Western Kenya. Proceedings of the 7th SR-CRSP Workshop, Kabete.
1155. Otieno, K., M., Onim, R., Hart, and H. A., Fitzhugh. 1984. Botanical composition and crude protein content of forages grazed and grazing behaviour of goats at Maseno Farm and SR-CRSP clusters. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya.

1156. Otieno, K., M., Onim, J., Kategile, S., Mengitsu, and M., Mathuva. 1987. *Sesbania* germplasm collection in Tanzania and Western Kenya. Proceedings of the 6th SR-CRSP Workshop, Kabete.
1157. Ouchkif, M. 1988. Influence d'incorporation de proportions elevees de pulpe de caroube sur la digestibilite et l'utilisation de la ration par les agneaux a l'engraissement. B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.
1158. Ounaini, F. 1991. Relation entre la croissance post-sevrage et les processus degestifs, metaboliques et endocriniens chez les agneaux D'Man, Sardi et croises alimentes avec du foin de luzerne. These de Doctorat Veterinaire Thesis. I.A.V. Hassan II, Rabat.
1159. Outmani, A., J.-M., Luginbuhl, F., Guessous, and W. L., Johnson. 1991. Utilization of wheat stubble pastures by gestating ewes. *Small Ruminant Research* 4:257-267.
1160. Oxley, J. W., L. C., Iniquez, and H. C., Knipscheer. 1989. The small ruminant collaborative research support program: Future Networking Opportunities. Paper presented to the Asian small ruminant networking meeting, Kuala Lumpur, Malaysia, August 21-23.
1161. Oyugi, L. A., A. W., Mukhebi, and H. C., Knipscheer. 1987. Preliminary optimal farm plans for adoption of dual-purpose goats in Hanisi, Kakamega district, Western Kenya. Sixth SR-CRSP Kenya Workshop, ILRAD, Nairobi, November 4-6.
1162. Padilha-Charles, T. N. 1985. Epedemiology of gastrointestinal nematode parasites of cattle and sheep grazing irrigated pastures in the Sacramento Valley, California, USA. Ph.D. Dissertation. University of California, Davis.
1163. Palmer, G. H., A. F., Barbet, A. J., Musoke, J. M., Katende, F. R., Rurangirwa, V., Shkap, E., Pipano, W. C., Davis, and T. C., McGuire. 1988. Recognition of conserved surface protein epitopes on *Anaplasma centrale* and *Anaplasma marginale* isolates from Israel, Kenya and the United States. *International Journal for Parasitology* 18:37-38.
1164. Panter, K. E. 1978. Reproductive and endocrine factors of Barbados x Rambouillet and St. Croix sheep. M.S. Thesis. Utah State University, Logan.

1165. Paredes, X. 1993. Retorno a la conservacion en manejo de pastos en el Altiplano Boliviano: el caso de San Jose de Llanga. Tesis de Licenciatura Thesis. .
1166. Paredes, X., R., Lizarraga, J., Jaillita, J., Vargas, and S., Scholz. 1993. Milk production in San Jose Llanga. IBTA Technical Bulletin No. 128; SR-CRSP Technical Report No. 6, April 1993.
1167. Pastrano, B., R., Rodrigo, D., Camacho, and G. E., Bradford. 1983. African sheep in Columbia. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
1168. Pearson, L. D., S. J., Brodie, and J. C., DeMartini. 1992. Comparison of methods for diagnosis of ovine lentivirus infection. 4th AASRP Symposium on the Health and Disease of Small Ruminants, Fort Collins, CO, June 10-12, 1992.
1169. Pearson, L. D., M. L., Poss, and J. C., DeMartini. 1989. Animal lentivirus vaccines: Problems and prospects. *Veterinary Immunological Immunopathology* 20:183-212.
1170. Perevolotsky, A. 1983. Goat raising in Piura: The human factor and the environmental context. Ph.D., Environmental Studies Thesis. University of California, Davis.
1171. Perevolotsky, A. 1984. Los pobladores de los despoblados: Goat herders in Piura, Peru. SR-CRSP Technical Report No. 33, NTIS #PB8-6-107075.
1172. Perevolotsky, A. 1984. The impact of the El Nino of 1983 on goat production in Piura: A follow-up study. SR-CRSP Technical Report No.34, NTIS #PB-6-109220.
1173. Perevolotsky, A. 1986. To Sell or Not to Sell--A Pastoralist's Dilemma: A Lesson from the Slaughterhouse. *Human Ecology* 14:287-310.
1174. Perevolotsky, A. 1987. Herder-farmer relationships in the Tropical Desert of Piura, Peru: The Role of Uncertainty and Variable Environment. In *Risk Management and Arid Land Use Strategies in the Andes: A Regional Anthropological Perspective*, ed. D. L., Browman. Boulder, CO: Westview Press.
1175. Perevolotsky, A. 1990. Goat Production Systems in Piura, Peru: A Multidisciplinary Analysis. *Agricultural Systems* 32:55-81.

1176. Perevolotsky, A. 1991. Goats and scapegoats-The overgrazing controversy in Piura, Peru. *Small Ruminant Research* 4:199-215.
1177. Perevolotsky, A. 1992. Integration versus conflict: Crops and Goats in Piura, Peru. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.
1178. Perevolotsky, D. 1989. Goat production systems in Pura, Peru: A multidisciplinary analysis. *Agricultural Systems* 31:1-27.
1179. Pettit, R. D. 1982. Mejoramiento de la pradera natural (Improvement of natural range). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
1180. Pettit, R. D. 1982. Plantas toxicas (Toxic plants). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
1181. Pettit, R. D. 1982. Sucesion vegetal - Condicion del pastizal (Plant succession - Pasture condition). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
1182. Pfister, J. A. 1983. Nutrition and feeding behavior of goats and sheep grazing deciduous shrub-woodland in Northeastern Brazil. Ph.D. Dissertation. Utah State University, Logan.
1183. Pfister, J. A. 1985. An effective fecal harness for free-grazing goats. *Journal of Range Management* 38:184-185.
1184. Pfister, J. A., J. S., de Queiroz, R. D., Kirmse, and J. C., Malechek. 1983. Rangelands and small ruminant production in Ceara State, Northeastern Brazil. *Rangelands* 5:72-76.
1185. Pfister, J. A., and R., Kirmse. 1982. Sampling caatinga vegetation: Proceedings of a shortcourse. SR-CRSP Technical Report Series No. 28, Utah State University, Logan, 57 pp.
1186. Pfister, J. A., and J. C., Malechek. 1983. Techniques for evaluating diets of grazing livestock. SR-CRSP Technical Report Series No. 27, Utah State University, Logan, 46 pp.

1187. Pfister, J. A., and J. C., Malechek. 1984. Accuracy of fecal analysis to estimate botanical composition of a known diet in Northeastern Brazil. *SR-CRSP Technical Report Series No. 26:12*.
1188. Pfister, J. A., and J. C., Malechek. 1986. Dietary selection by goats and sheep in a deciduous woodland of Northeastern Brazil. *Journal of Range Management* 39:24-28.
1189. Pfister, J. A., and J. C., Malechek. 1986. The voluntary forage intake and nutrition of goats and sheep grazing in a caatinga woodland of Northeastern Brazil. *Journal of Animal Science* 63:1078-1086.
1190. Pfister, J. A., and J. C., Malechek. 1986. Nutrition and feeding behavior of goats and sheep in a deciduous shrub-woodland of Northeastern Brazil. In *Proceedings of the 2nd International Rangeland Congress, Adelaide, Australia*, ed. P. J., Joss, R. W., Lynch, and C. B., Williams. Adelaide, Australia: International Rangeland Congress.
1191. Pfister, J. A., J. C., Malechek, and D. F., Balph. 1988. Foraging behavior of goats and sheep in the caatinga of Brazil. *Journal of Applied Ecology* 25:379-388.
1192. Pfister, J. A., F., San Martin, L., Rosales, D. V., Sisson, E., Flores, and F. C., Bryant. 1989. Grazing behavior of llamas, alpacas, and sheep in the Andes of Peru. *Applied Animal Behavior Science* 23:237-246.
1193. Pitono, A. D., E., Romjali, M. R., Dally, and R. M., Gatenby. 1992. Effect of pregnant mare serum gonadotropin (PMSG) injection on ovulation rate in ewes. *Jurnal Penelitian Peternakan Sungei Putih* 1:1-5.
1194. Pitono, A. D., E., Sembiring, R. M., Gatenby, and G. E., Bradford. 1992. Recent Advances in Animal Production: Performance of F1 (St. Croix x Local Sumatra) sheep in experimental station and village conditions in North Sumatra, Indonesia. *Proceedings of the Sixth AAAP (Asian-Australasian Association of Animal Production) Animal Science Congress* 3:138.
1195. Pitts, J. 1983. Cattle and vegetation response to short duration and continuous grazing. M.S. Thesis. Texas Tech University.



1196. Pitts, J. S., and F. C., Bryant. 1987. Steer and vegetation response to short duration and continuous grazing. *Journal of Range Management* 40:386-389.
1197. Plummer, W. E. 1979. Anterior pituitary and ovarian response to infused GNRH and progesterone pretreatment in ewes. M.S. Thesis. Utah State University, Logan.
1198. Ponce, A. G., and J., Astorga N. 1984. Forage production of orchard grass-alfalfa cultivated pastures during the rainy season in Southern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 1, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1199. Ponce de Leon, F. A., J., Santa Rosa, A. A., Simplicio, and G. S., Riera. 1983. Caracterizacao dos tipos de Cabras Nativas Brasileiras (I. Medidas biometricas e pesos de Carcaca). Proceedings of the IX ALPA Meeting, Santiago, Chile.
1200. Pond, K. R. 1993. Recent advances in small ruminant research in Indonesia: Recent and nutrition strategies for Indonesia. In *Advances in Small Ruminant Research in Indoesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1201. Pond, K. R., J. C., Burns, and D. S., Fisher. 1987. External markers - Use and methodology in grazing studies. Proceedings of the Grazing Livestock Nutrition Conference, University of Wyoming, Jackson, pp.49-54.
1202. Pond, K. R., W. C., Ellis, W. D., James, and A. G., Deswysen. 1985. Analysis of multiple markers in nutrition research. *Journal of Dairy Science* 68:745-750.
1203. Pond, K. R., T. G., Goodwin, D. E., Morebeck, J. W., Cooper, M., Roberts, and J. H., Britt. 1991. Reproductive cycling activities of Barbados blackbelly, St. Croix, Katahdin and wool breeds during winter, spring and summer. Proceedings-Hair Sheep Symposium (S. Wildeus, editor), pp.315-320.
1204. Pond, K. R., J.-M., Luginbuhl, J. C., Burns, D. S., Fisher, and S., Buntinx. 1990. Estimating intake using rare earth markers and controlled release devices. *Proceedings of the 45th Southern Pasture and Forage Crop Improvement Conference*:73-81.

1205. Pond, K. R., J.-M., Luginbuhl, J. C., Burns, D. S., Fisher, and T. G., Goodwin. 1990. Evaluation of the Captec controlled release chromic oxide capsule for sheep. *Journal of Animal Science* 68:52.
1206. Prabowo, A. 1986. Effect of dietary iron and silica on mineral utilization in lambs fed forage-based diets. M.S. Thesis. North Carolina State University, Raleigh.
1207. Prabowo, A. 1993. Evaluation of the mineral status of goats in South Sulawesi. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1208. Prabowo, A., D., Samaih, and M., Rangkuti. 1983. The use of Ampas Tahu as a concentrate in fattening sheep rations. Proc. Seminar Pemanfaatan Limbah Pangan dan Limbah Pertanian untuk Makanan Ternak, Yogyakarta, Indonesia.
1209. Prabowo, A., J. W., Spears, and L., Goode. 1985. Influence of dietary iron on growth, copper and zinc utilization in lambs fed a roughage based diets. *Journal of Animal Science* 61:505.
1210. Prabowo, A., J. W., Spears, and L., Goode. 1988. Effects of dietary iron on performance and mineral utilization in lambs fed a forage-based diet. *Journal of Animal Science* 66:2028.
1211. Prabowo, A., J. E., van Eys, I. W., Mathius, M., Rangkuti, and W. L., Johnson. 1984. Studies on the mineral nutrition of sheep in West Java, Indonesia. SR-CRSP/NCSU Working Paper No. 40.
1212. Primov, G. 1985. Northeast Brazil: Understanding goat production. *World Animal Review*; pp. 42-55.
1213. Primov, G. 1988. Limitaciones para la produccion comercial de carne de alpaca por los Indegenas Campesinos del Sur del Peru (Constraints on commercial alpaca meat production by Indian peasants in Southern Peru). In *Llamichos y Paqocheros: Pastores de Llamas y Alpacas*, ed. J., Flores. Cuzco, Peru: Editorial UNSAAC (Univesidad Nacional San Antonio Abad del Cuzco).
1214. Primov, G. 1992. The Role of Goats in Agropastoral Production Systems of the Brazilian Sertao. In *Plants, Animals, and People Agropastoral Systems Research*, ed. C. M., McCorkle. Boulder, CO: Westview Press.

1215. Primov, G. P. 1981. The regional structure of distribution of mutton in Cusco, Peru. SR-CRSP Technical Report No. 3.
1216. Primov, G. P. 1982. Small ruminant production in the Sertao of Ceara, Brazil: A sociological analysis. SR-CRSP Technical Report No.15, NTIS #PB8-4-193051.
1217. Primov, G. P. 1983. Small ruminant production in Bahia, Brazil. SR-CRSP Technical Report No.35, NTIS #PB8-4-190800.
1218. Primov, G. P. 1983. Alpaca meat production and exchange in Southern Peru. SR-CRSP Technical Report No. 31, NTIS #PB8-4-192681.
1219. Priyant, A. 1993. Estimation of market demand for small ruminants in Indonesia. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Bogor, Indonesia: SR-CRSP/CRIAS.
1220. Priyanti, A. 1993. Estimation of market demand for small ruminants in Indonesia. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1221. Priyanti, A., S., Mawi, and K., Suradisastra. 1988. Farmers responses to the Outreach Pilot Program (OPP): First Socioeconomic Evaluation. SR-CRSP Working Paper Series No. 94.
1222. Priyanti, A., B., Setiadi, D., Lubis, A., Abjid, and M., Rangkuti. 1988. Report on the Third Annual Outreach Pilot Project (OPP) Farmers Meeting. SR-CRSP Working Paper Series No. 93.
1223. Priyanti, A., T. D., Soedjana, S. W., Handayani, and P. J., Ludgate. 1989. Characteristics of high and low performance farmers in OPP villages. Proceedings of Pertemuan Ilmiah Ruminansia, November 1988, Cisaura, West Java.
1224. Priyanti, A., T. D., Soedjana, and P. J., Ludgate. 1990. Allocation of work and leisure time by potential labor among OPP farmers. Working Paper Series No. 113, SR-CRSP/Balitnak, Bogor.
1225. Priyanti, A., A., Wilson, D., Yulistani, P., Bilinsky, and S., Mawi. 1986. Report on the Second Annual Outreach Pilot Project (OPP) Farmers' Meeting. SR-CRSP Working Paper No.88, Bogor.

1226. Provenza, F. D. 1981. Some morphological and chemical response of (*Coleogyne ramosissima*) to goat browsing: Influences on dietary Blackbrush selection by goats and cattle. Ph.D. Dissertation. Utah State University, Logan.
1227. Provenza, F. D., J. E., Bowns, J. C., Malechek, P. J., Urness, and J. E., Butcher. 1983. Improving Blackbrush Ranges. *Utah Science* 43:90-95.
1228. Provenza, F. D., J. E., Bowns, P. J., Urness, J. C., Malechek, and J. E., Butcher. 1983. Biological manipulation of Blackbrush by goat browsing. *Journal of Range Management* 36:513-518.
1229. Provenza, F. D., and J. C., Malechek. 1983. Tannin allocation in Blackbrush (*Coleogyne Ramosissima*). *Biochemical Systematics and Ecology* 11:233-238.
1230. Provenza, F. D., and J. C., Malechek. 1984. Diet selection by domestic goats in relation to Blackbrush twig chemistry. *Journal of Applied Ecology* 21:831-841.
1231. Provenza, F. D., and J. C., Malechek. 1985. A comparison of food selection and foraging behavior in juvenile and adult goats. *Applied Animal Behavior Science* 13:49-61.
1232. Provenza, F. D., J. C., Malechek, P. J., Urness, and J. E., Bowns. 1983. Some factors affecting twig growth in blackbrush. *Journal of Range Management* 36:518-520.
1233. Pulungan, H., and A., Parakkasi. 1987. Studi perbandingan pencernaan bahan kering dari beberapa jenis bahan makanan ternak dengan tehnik in situdan in vitro (Comparative study of dry matter disappearance of some feedstuffs by in situ and in vitro techniques). *Majalah Ilmu dan Peternakan* 3:37.
1234. Pulungan, H., A. A., Reese, J. E., van Eys, and W. L., Johnson. 1985. Survey of small ruminant farmers in Sumatra. SR-CRSP Working Paper No. 47, Indonesia.
1235. Pulungan, H., J. E., van Eys, and M., Rangkuti. 1985. Penggunaan Ampas Tahu 5 ebagai Makanan Tambahan pada Domba Lepas Sapih Yang Menperoleh Rumput Lapangan (Utilization of soybean curd sludge as a supplement for confined sheep fed low quality forage). *Ilmu dan Peternakan* 1:331.

1236. Pulungan, H., J. E., van Eys, and M., Rangkuti. 1985. Utilization of Ampas Tahu, a soybean by-product, by growing goats. *Proceedings 3rd Congress, Asian-Australasian Association of Animal Production, Swoul, Korea* 2:763.
1237. Pulungan, H., J. E., van Eys, and M., Rangkuti. 1985. Utilization of Cassava root meal in the rations of young male lambs. *Ilmu dan Peternakan* 1:420.
1238. Queiroz, J. S., and B. E., Norton. 1992. An assessment of an indigenous soil classification used in the caatinga region of Ceara State, Northeast Brazil. *Agricultural Systems* 39:289-305.
1239. Quick, T. C., and B. A., Dehority. 1986. A comparative study of feeding behavior and digestive function in dairy goats, wool sheep and hair sheep. *Journal of Animal Science* 63:1516-1526.
1240. Quijandria, B. 1983. Caracterizacion de sistemas de produccion caprina en el Norte del Peru. SR-CRSP Technical Report No. 23.
1241. Quijandria, B., M., Callacna, M., Garcia, and T., Schlosser. 1983. Milk production in Criolla goats in the coastal area of Peru. *Journal of Animal Science* 57:164.
1242. Quirke, J. F., G. E., Bradford, T. R., Famula, and D. T., Torell. 1985. Ovulation rate in sheep selected for weaning weight or litter size. *Journal of Animal Science* 61:1421-1430.
1243. Quirke, J. F., H. H., Meyer, A., Lahlou-Kassi, J. P., Hanrahan, G. E., Bradford, and G. H., Stabenfeldt. 1987. Natural and induced ovulation rate in prolific and non-prolific breeds of sheep in Ireland, Morocco and New Zealand. *Journal of Reproductive Fertility* 8:309-316.
1244. Quirke, J. F., G. H., Stabenfeldt, and G. E., Bradford. 1983. Resumption of ovarian function in autumn lambing Dorset, Rambouillet and Finnish Landrace Ewes. *Theriogenology* 19:243-248.
1245. Quirke, J. F., G. H., Stabenfeldt, and G. E., Bradford. 1985. Onset of puberty and duration of the breeding season in Suffolk, Rambouillet, Finnish Landrace, Dorset and Finn-Dorset Ewe Lambs. *Journal of Animal Science* 60:1463-1471.

1246. Quirke, J. F., G. H., Stahenfeldt, and G. E., Bradford. 1988. Year and season effects on oestrus and ovarian activity in ewes of different breeds and crosses. *Animal Reproduction Science* 16:39-52.
1247. Quiroz, R. 1984. Particle size of forage masticate and its effect on digestion, rate of passage and intake by goats. M.S. Thesis. North Carolina State University, Raleigh.
1248. Quiroz, R. A., K. R., Pond, E. A., Tolley, and W. L., Johnson. 1988. Selection among nonlinear models for rate of passage studies in ruminants. *Journal of Animal Science* 66:2977.
1249. Rajab, M. H. 1987. Simulation of genetic and environmental interaction of three tropical hair sheep breeds for meat production (in Brazil). Ph.D. Dissertation. Texas A&M University, College Station.
1250. Rajab, M. H., H. D., Blackburn, T. C., Cartwright, and E. A. P., Figueiredo. 1991. Simulation of genetic and environmental interaction of three tropical hair sheep breeds. *Journal of Animal Science* 69:4397-4405.
1251. Rajab, M. H., T. C., Cartwright, P. F., Dahm, and E. A. P., Figueiredo. 1992. Performance of three tropical hair sheep breeds. *Journal of Animal Science* 70:3351-3359.
1252. Rajab, M. H., T. C., Cartwright, P. F., Dahm, and E. A. P., Figueiredo. 1993. Performances of three tropical hair sheep breeds. *Journal of Animal Science* 70:3351-3359.
1253. Rakes, J. A., J. A., Collins, F. B., Johnson, J. A., Yazman, and C. H., Mannasmith. 1980. The effect of stage of lactation on breed, on production, and composition of goat milk produced in Arkansas. *Journal of Dairy Science* 63.
1254. Raleigh, R. J., R. J., Kartchner, and L. R., Rittenhouse. 1980. Chromic oxide in range nutrition studies. Agricultural Experimental Station Bulletin 641, Oregon State University, Corvallis, pp.41.
1255. Ramdas, S. 1991. Lamb and wool production of Targhee and prolific breed crossbred ewes. M.S. Thesis. University of California, Davis.
1256. Ramdas, S., M., Dally, E., Bradford, and H., Sakul. 1993. Lamb and wool production of Targhee and prolific breed crossbred ewes. *Sheep Research Journal* 9:62-70.

1257. Ramirez, A. 1987. Alpaca *Clostridium perfringens* type A enterotoxemia: Purification and assays of the enterotoxin. Ph.D. Dissertation. Colorado State University, Fort Collins.
1258. Ramirez, A., L. H., Lauerman, D., Huaman, and A., Vargas. 1981. Preliminary introduction of *Clostridium perfringens* Type A enterotoxemia in alpaca (*Lama pacos*). Proceedings of the 4th International Conference on South American Cameloids, Punta Arenas, Chile.
1259. Ramirez, A., H., Ludena, and M., Acosta. 1981. Mortality in alpaca of the Central Agricultural Area of La Raya - Puno during 7 years. Proceedings of the 4th International Conference on South American Cameloids, Punta Arenas, Chile.
1260. Ramirez, I. A., and R. P., Ellis. 1985. Purification of an enterotoxin produced by *C. perfringens* Type A isolated from enterotoxin alpacas. Proceedings of the 86th Annual Meeting, ASM, Abstract No. B224.
1261. Ramirez, I. A., and R. P., Ellis. 1985. *C. perfringens* Type A enterotoxin: Diagnostic applications for enterotoxemia in alpacas. Proceedings of the 5th International Convention on South American Cameloids, June 1985, Cuzco, p.31.
1262. Ramirez, I. A., R. P., Ellis, J., Sumar, and V., Leyva. 1985. Enteropathogenic *E. coli* from neonatal alpacas: Isolation, intestinal ligations, and oral inoculation. Proceedings of the 5th International Convention on South American Cameloids, June 1985, Cuzco, p.32.
1263. Ramirez, I. A., M. D., Salman, and R. P., Ellis. 1985. Epizootics of enterotoxemia in neonatal alpacas caused by *C. perfringens*, Type A and the association of climatic factors. Proceedings of the 5th International Convention on South American Cameloids, June 1985, Cuzco, p.34.
1264. Rangkuti, M., and A., Djajanegara. 1983. Palatabilitas Tepung Davn Lamtoro (*Leucaena Leucosephala*) pada Domba dan Kembang (The palatability of *Leucaena* leaf meal by sheep and goats). *Ilmu dan Peternakan* 1:81.
1265. Rangkuti, M., I. W., Mathius, H., Pulungan, and J. E., van Eys. 1985. Evaluation of Cassava leaves as a protein supplement to Napier grass diets for goats. *Ilmu dan Peternakan* 1:489.

1266. Rangkuti, M., H., Pulungan, and J. E., van Eys. 1985. Effects of intermittent feeding of *Gliricidia maculata* on the utilization of Napier grass by growing sheep and goats. *Proceedings 3rd Congress, Asian-Australasian Association of Animal Production, Swoul, Korea* 2:778.
1267. Rangkuti, M., M., Sabrani, and Beriajaya. 1984. Goat production in Indonesia: Current status and potential for research. In *Goat Production and Research in the Tropics*, ed. J. W., Copland. Canberra: Australian Centre for International Agricultural Research.
1268. Rangkuti, M., T. D., Soedjana, H. C., Knipscheer, P., Sitorus, and A., Setiadi. 1984. *Sheep and goats in Indonesia (Proc. Sci. Mtg. on Small Ruminant Research)*. Bogor, Indonesia: Center of Res. Inst. for Anim. Science, Bogor.
1269. Rangkuti, M., T. D., Soedjana, H. C., Knipscheer, P., Sitorus, and A., Setiadi. 1984. *Proceedings: Pertemuan Ilmiah Penelitian Ruminansia Kecil (Scientific Meeting on Small Ruminant Research)*. Bogor, Indonesia, November 22-23, 1983.
1270. Raun, N. S. 1982. The emerging role of goats in world food production. *Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ*, pp.133-141.
1271. Ravuna, F. 1990. Realities and Practicalities of Livestock Research in Africa: Experience with the SR-CRSP in Kenya. Presented to the Summer Institute for African Agricultural Research, University of Wisconsin, Madison.
1272. Redfern, J. M., J. A., Yazman, A. J., De Boer, P. J., Howard, and M. D., Norman. 1985. *The Goat Milk Industry of Northern Arkansas and Southern Missouri*. Morrilton, Arkansas: Winrock International.
1273. Reese, A. A. 1988. Effect of energy supplementation on Indonesian sheep. Ph.D. Dissertation. North Carolina State University, Raleigh, NC.
1274. Reese, A. A., S., Ginting, P., Ketaren, W., Handayani, and M., Boer. 1987. Integrated small ruminant and tree-cropping systems in Indonesia. In *Small Ruminant Production Systems in South and Southeast Asia*, ed. C., Devendra. Ottawa: International Development Research Centre.



1275. Reese, A. A., S. W., Handayani, P. P., Keteren, and W. L., Johnson. 1987. Effect of energy supplementation on reproduction in Indonesian sheep. *Journal of Animal Science* 65:469.
1276. Reese, A. A., G. R., Reese, P., Ketaren, and W. L., Johnson. 1986. Estimating the growth potential of Indonesian sheep and goats using the Gompertz growth model. *Journal of Animal Science* 63:187.
1277. Reese, A. A., G. R., Reese, P., Keteren, and W. L., Johnson. 1986. Estimating the growth potential of Indonesian sheep and goats using the Gompertz growth model. *Journal of Animal Science* 63:187.
1278. Reese, A. A., Y., Taryo-Adiwiganda, S. W., Handayani, Sumarmadji, S., Ginting, and G. R., Reese. 1986. Integrating sheep with rubber plantations, 1985-1986. SR-CRSP Working Paper No. 77, Balai Penelitian Ternak, Bogor, Indonesia, N.C. State University, Raleigh (USA) and Research Institute for Rubber Plantations, Sungih Putih, No. Sumatra, Indonesia.
1279. Reffett, J. K., J. W., Spears, and T. T. J., Brown. 1988. Effect of dietary selenium and vitamin E on the primary and secondary immune response in lambs challenged with parainfluenza-3 virus. *Journal of Animal Science* 66:1520.
1280. Reffett, J. K., J. W., Spears, and T. T. J., Brown. 1988. Effect of dietary selenium on the primary and secondary immune response in calves challenged with infectious bovine rhinotracheitis virus. *Journal of Nutrition*:229.
1281. Reffett, J. K., J. W., Spears, and A., Prabowo. 1986. Lipid peroxidation and glutathione peroxidase, catalase and superoxide dismutase activities in lambs fed high dietary iron. *Nutrition Reports International* 34:977-984.
1282. Reif, J. S., E., Ameghimo, and M. J., Aaronson. 1989. Chronic exposure of sheep to a zinc smelter in Peru. *Environmental Research* 49:40-49.
1283. Reif, J. S., H. A., Samame, E., Ameghino, E., Lopez-Nieto, and J. C., DeMartini. 1989. Adverse reproductive outcome and antibody to *Toxoplasma gondii* in a cohort of Peruvian sheep. *Preventative Veterinary Medicine* 7:225-228.
1284. Reiner, R. J. 1985. Nutrition of alpacas grazing high evaluation rangeland in Southern Peru. Ph.D. Dissertation. Texas Tech University.

1285. Reiner, R. J., and F. C., Bryant. 1983. A different sort of sheep. *Rangelands* 5:106-108.
1286. Reiner, R. J., and F. C., Bryant. 1986. Botanical composition and nutritional quality of alpaca diets in two Andean Rangeland communities. *Journal of Range Management* 39:424-427.
1287. Reiner, R. J., and F. C., Bryant. 1986. Forage intake of alpacas grazing Andean Rangeland in Peru. *Journal of Animal Science* 64:868-871.
1288. Reiner, R. J., and F. C., Bryant. 1986. Diet content and alpacas in two range sites of the southern Andes of Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1289. Reiner, R. J., F. C., Bryant, and T., Huisa. 1986. Forage intake of grazing alpacas in Southern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1290. Reynolds, J. E. 1984. Seeking the "udder" truth about goats in Western Kenya: Conversations with community elders. Proc. 3rd SR-CRSP Kenya Workshop, pp.113-118.
1291. Reynolds, J. E. 1985. Response of smallholder farmers to feed resource intervention trials in Western Kenya. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, Kenya, pp.199-206.
1292. Reynolds, J. E. 1986. Livestock feed resources and smallholder farms: Experience in Western Kenya. SR-CRSP Technical Report No. 76, NTIS #PB89 160154/AS.
1293. Reynolds, J. E. 1986. On-farm feed preservation trials in Western Kenya: A preliminary report. SR-CRSP Technical Report No. 77, NTIS #PB89 159610/AS.
1294. Reynolds, J. E., P., Amuhinda, H., Kiguhi, E., Ochieng, E., Otieno, and M. F., Nolan. 1984. Field research and the Western Kenya Study Communities: Observations by the SR-CRSP Enumerators. Proc. 3rd SR-CRSP Kenya Workshop, pp.119-124.
1295. Reynolds, J. E., and A. N., Mbabu. 1984. The programme and the public: SR-CRSP exhibits at agricultural shows. Proc. 3rd SR-CRSP Kenya Workshop, pp.109-112.

1296. Reynolds, J. E., A. N., Mbabu, and M. F., Nolan. 1984. Extension services and the smallholder: A report of preliminary findings. Proc. 3rd SR-CRSP Kenya Workshop, pp.125-132.
1297. Reynolds, J. E., A. N., Mbabu, M. F., Nolan, J., Atichi, P., Amuhinda, H., Kiguhi, E., Ochieng, and E., Otieno. 1985. Extension services and the smallholder: The farmers' views. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, Kenya, pp.207-225.
1298. Reynolds, J. E., M. K., Salim, and F. B., Nyaribo. 1983. Problems and prospects for a small-scale tick control method. Some observations in the SR-CRSP dipping trials in Kakamega and Siaya Districts. Proc. 2nd SR-CRSP Kenya Workshop, pp.64-82.
1299. Riera, G. S. 1982. Reproductive efficiency and management in goats. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, pp.162-174.
1300. Riera, G. S., A. A., Simplicio, and W. C., Foote. 1982. Diagnostico de Prenhez em Cabras e Ovelhas (Pregnancy Diagnosis in Does and Ewes). *Pesq. Agropec. Bras., Brasilia* 17:1089-1092.
1301. Riera, G. S., A. A., Simplicio, and W. C., Foote. 1982. The accuracy of pregnancy diagnosis in goats using ultrasound. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.497.
1302. Riera, G. S., A. A., Simplicio, and K. P., Pant. 1982. Post-pubertal growth of goats in the Brazilian Semi-arid region. *Pesq. Agropec. Bras., Brasilia* 17:1525-1527.
1303. Rihani, N. 1991. Citrus fruit by-product nutritive value and utilization. In *Mediterranean forages and by-products. Options Mediterranennes. Serie A, No. 16.* CIHEAM, ed. J. L., Tisserand, and X., Alibes. : CIHEAM.
1304. Rihani, N., W. N., Garrett, and R. A., Zinn. 1993. Influence of level of urea and method of supplementation on characteristics of digestion of high-fiber diets by sneep. *Journal of Animal Science* 71:1657.
1305. Rihani, N., W. N., Garrett, and R. A., Zinn. 1993. Effect of source of supplemental nitrogen on the utilization of citrus pulp-based diets by sheep. *Journal of Animal Science* 71:2310-2321.

1306. Rihani, N., F., Guessous, and A., Berrami. 1988. *Utilisation de quelques sous-produits de l'agro-industrie pour l'engraissement des ovins*. IAV Hassan II Rabat, Morocco: Association Nationale pour la Production Animale: 18th Meeting of the ANPA, March 10-11.
1307. Rihani, N., F., Guessous, and A., Berrami. 1989. *Utilisation de quelques sous-produits de l'agroindustrie pour l'engraissement des ovins*. *Hommes, Terre et Eaux* 18:83-87.
1308. Rihani, N., F., Guessous, M., Elhata, and J.-M., Luginbuhl. 1992. Nutritive value and utilization of almond hulls in diets for sheep. *Journal of Animal Science* 70:190.
1309. Rihani, N., F., Guessous, and W. L., Johnson. 1986. Nutritive value of dried citrus and beet pulps produced in Morocco. *Journal of Animal Science* 63:428.
1310. Rihani, N., F., Guessous, M., Khal, and W. L., Johnson. 1984. Waste palm dates in diets for Moroccan sheep. *Journal of Animal Science* 59:306.
1311. Rihani, N., F., Guessous, and K. R., Pond. 1989. Effect of protein level on the feeding value of carob pulp-containing diets for sheep. *Journal of Animal Science* 67:493.
1312. Rihani, N., F., Guessous, and R. A., Zinn. 1989. *Utilisation de quelques sous-produits de l'agro-industrie pour l'engraissement des ovins*. *Hommes, Terre et Eaux* 18:83.
1313. Rihani, N., R., Guessous, and W. L., Johnson. 1986. Nutritive value of dried citrus and beet pulps produced in Morocco. *Journal of Animal Science* 63:428.
1314. Rios, M., I. A., Ramirez, R. P., Ellis, and J., Barsallo. 1985. The presence of *Streptococcus* sp. in alpacas in relation to management factors. *Proceedings of the 5th International Convention on South American Cameloids*, June 1985, Cuzco, p.40.
1315. Rios, M., A. F., Schlundt, and F. C., Bryant. 1984. Alpaca behavior under four stocking rates in the Southern Andes of Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 1, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.

1316. Rivera, H., B. R., Madewell, and E., Ameghino. 1987. Serologic survey of viral antibodies in the Peruvian Alpaca (*Lama pacos*). *American Journal of Veterinary Research* 48:189-191.
1317. Robb, T. W., N., Barros, W. L., Johnson, and E., Oliveira. 1983. Effect of ration fiber level, with and without molasses, for goats maintained in confinement and semiconfinement in Northeast Brazil. *Journal of Animal Science* 57:406.
1318. Rodriguez, H. L. 1981. Parametros geneticos y fenotipicos en ovinos. M.S. Thesis. Universidad Nacional Agraria, La Molina, Peru.
1319. Rodriguez, N., A., Florez, and E., Malpartida. 1986. Nutrient content of the key grass species of the Central Andes. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 3, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1320. Rogue, R. E., A., Florez, and A., Moreno. 1985. Economic analysis of lamb fattening and marketing in Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1321. Rohrer, G. A., J. F., Taylor, S. K., Davis, R. M., Waruiru, F., Ruvuna, B. A. J., Mwandotto, T. C., McGuire, and F., Rurangirwa. 1991. The use of a randomly amplified polymorphic DNA marker (RAPD) in an analysis of susceptibility to *Haemonchus* and *Coccidia* infestation in goats. *Journal of Animal Science* 69:2.
1322. Rohrer, G. A., J. F., Taylor, S. K., Davis, R. M., Waruiru, F., Ruvuna, B. A. J., Mwandotto, T. C., McGuire, and F., Rurangirwa. 1991. The use of randomly amplified polymorphic DNA markers in analyses of *Haemonchus* and *Coccidia* infestations in goats. *Proceedings 9th Annual SR-CRSP Workshop, Nairobi, Kenya. March 1991.* 9:71-85.
1323. Rohrer, G. A., J. F., Taylor, S. K., Taylor, R. M., Waruiru, F., Ruvuna, and B. A. J., Mwandotto. 1991. The Use of a Randomly Amplified Polymorphic DNA marker (RAPD) in an Analysis of Susceptibility to *Haemonchus* and *Coccidia* Infestation in Goats. Southern Section, American Society of Animal Science, Feb. 2-6, 1991. Fort Worth, TX.

1324. Romano-Munoz, J. L., T. G., Goodwin, and K. R., Pond. 1993. Effect of high environmental temperature on respiration rate, rectal temperature and plasma concentration of thyroid hormones of wool and hair sheep. *Journal of Animal Science* 71:20.
1325. Romjali, E., S., Elieser, A. D., Pitono, and R. M., Gatenby. 1992. Lama tidak berahi setelah beranak domba lokal Sumatera dan persilangannya dengan St. Croix dan Garut (Post-partum anoestrus in local Sumatra sheep and its crosses with St. Croix and Garut). *Jurnal Penelitian Peternakan Sungei Putih* 1:6-10.
1326. Romjali, E., and R. M., Gatenby. 1991. What is the best litter size? Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.23-27.
1327. Romjali, E., I., Inounu, and R. M., Gatenby. 1991. Synchronisation of oestrus in ewes using progesterone-impregnated sponges. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.41-43.
1328. Romjali, E., S. E., Sinulingga, and R. M., Gatenby. 1991. Puberty in ewe lambs. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.34-40.
1329. Romjali, E., S. E., Sinulingga, and R. M., Gatenby. 1991. Postpartum anoestrus in ewes. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.28-29.
1330. Romm, S. 1979. The progesterone and LH levels in female goats during selected reproductive stages and following hormone treatment. M.S. Thesis. Utah State University, Logan.
1331. Rosadio, R. H., J. C., DeMartini, J. M., Sharp, M. D., Lairmore, and H. I., Russell. 1985. Transmission of sheep pulmonary adenomatosis to neonatal lambs. Proceedings of the 35th Annual Meeting of American College of Veterinary Pathologists, December 1985, p.73.
1332. Rosadio, R. H., J. F., Evermann, and J. C., DeMartini. 1985. A preliminary serological survey of viral antibodies in Peruvian sheep. *Veterinary Microbiology* 10:91-96.
1333. Rosadio, R. H., M. D., Lairmore, H. I., Russell, and J. C., DeMartini. 1988. Retrovirus-associated ovine pulmonary carcinoma (sheep pulmonary adenomatosis) and lymphoid interstitial pneumonia (I. Lesion development and age susceptibility). *Veterinary Pathology* 25:475-483.

1334. Rosadio, R. R. 1987. The pathology and pathogenesis of retrovirus-induced ovine pulmonary carcinoma. Ph.D. Dissertation. Colorado State University, Fort Collins.
1335. Rosadio, R. R., J. M., Sharp, M. D., Lairmore, J. E., Dahlberg, and J. C., DeMartini. 1987. Lesions and retroviruses associated with naturally-occurring ovine pulmonary carcinoma (Sheep pulmonary adenomatosis). *Veterinary Pathology* 25:58-66.
1336. Ross, T. T. 1982. The effects of high environmental temperature on fetal development and selected physiological variables in three breeds. Ph.D. Dissertation. North Carolina State University, Raleigh.
1337. Ross, T. T., L., Goode, and A. C., Linnerud. 1985. Effects of high ambient temperature on respiration rate, rectal temperature, fetal development and thyroid gland activity in tropical and temperate breeds of sheep. *Theriogenology* 24:259-269.
1338. Rueda, J., E., Flores, and J., Pfister. 1989. Effects of stocking rate on botanical composition of the diet of sheep grazing high mountain range. In *Research results in range management and improved forages. Tech. Art. T-9-584*, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.
1339. Ruiton, J. 1982. The status of credit for small livestock holders in the high Andean region of Cajamarca department. Proceedings of the Peruvian Association of Animal Production, Cajamarca, Peru.
1340. Rurangirwa, F. R., S. M., Kihara, A. N., Wambugu, and T. C., McGuire. 1993. Integral membrane surface protein of Mycoplasma F38 (F38) mediates in vitro growth inhibition of F38. SR-CRSP Proceedings 11th Scientific Workshop, March 3-4, Nairobi, Kenya.
1341. Rurangirwa, F. R., B., Kouyate, M., Niang, and T. C., McGuire. 1990. CCPP: Antibodies to F38 polysaccharide in Mali goats. *Veterinary Record* 127:353.
1342. Rurangirwa, F. R., and T. C., McGuire. 1988. Identification of cloned gene fragments encoding proteins reacting with monoclonal antibodies which inhibit the growth of Mycoplasma sp., strain F38. Seventh International Congress of the International Organization for Mycoplasmaology, Baden near Vienna, Austria.

1343. Rurangirwa, F. R., T. C., McGuire, and S., Chema. 1986. Towards development of a vaccine against contagious caprine pleuropneumonia caused by F-38. Proceedings of the SR-CRSP Kenya Workshop, Kabete, Kenya.
1344. Rurangirwa, F. R., T. C., McGuire, S., Chema, and A., Kibor. 1987. Vaccination against contagious caprine pleuropneumonia caused by F-38. *Israel Journal of Medical Sciences* 23:641-643.
1345. Rurangirwa, F. R., T. C., McGuire, S., Chema, and A. C., Kibor. 1982. Vaccination against contagious caprine pleuropneumonia caused by F-38. Proceedings of the Third International Conference on Goat Production and Disease, Tucson, Arizona.
1346. Rurangirwa, F. R., T. C., McGuire, S., Chema, A. C., Kibor, and K., Bari. 1985. Diagnosis of contagious caprine pleuropneumonia (CCPP) caused by F-38 strain of Mycoplasma. Proceedings of the SR-CRSP Kenya Workshop, Kakamega, Kenya.
1347. Rurangirwa, F. R., T. C., McGuire, A., Kibor, J. K., Bari, S., Waghela, and A., Wambugu. 1984. Preliminary studies on induction of protective immunity in goats against CCPP by freeze-dried F-38 antigens. Proceedings of SR-CRSP Scientific Meeting, Kabete, Kenya, March 1984.
1348. Rurangirwa, F. R., T. C., McGuire, A., Kibor, and S., Chema. 1987. A latex agglutination test for field diagnosis of contagious caprine pleuropneumonia. *Veterinary Record* 121:191-193.
1349. Rurangirwa, F. R., T. C., McGuire, A., Kibor, and S., Chema. 1987. An inactivated vaccine for contagious caprine pleuropneumonia. *Veterinary Record* 121:397-402.
1350. Rurangirwa, F. R., T. C., McGuire, A. C., Kibor, and S., Chema. 1986. A latex agglutination test for field diagnosis of contagious caprine pleuropneumonia. Proceedings of the SR-CRSP Kenya Workshop, Kabete, Kenya.
1351. Rurangirwa, F. R., T. C., McGuire, N. S., Magnuson, A., Kibor, and S., Chema. 1987. Composition of a polysaccharide from mycoplasma (F-38) recognized by antibodies from goats with contagious pleuropneumonia. *Research in Veterinary Science* 42:175-178.



1352. Rurangirwa, F. R., T. C., McGuire, K., Mbai, L., Ndung'U, and A., Wambugu. 1989. Preliminary field test of an inactivated contagious caprine pleuropneumonia (CCPP) vaccine. SR-CRSP Kenya Workshop, Kabete, Kenya, February 1989, pp.33-36.
1353. Rurangirwa, F. R., T. C., McGuire, L., Mbai, L., Ndung'U, and A., Wambugu. 1991. Preliminary field test of lyophilised contagious caprine pleuropneumonia vaccine. *Research in Veterinary Science* 50:240-241.
1354. Rurangirwa, F. R., T. C., McGuire, A. J., Musoke, A., Kibor, C., Nkonge, and J. K., Bari. 1984. Attempts to characterize F-38 protein(s) which induce growth inhibiting antibodies in immunized and/or infected host. Proceedings of the SR-CRSP Scientific Meeting, Kabete, Kenya.
1355. Rurangirwa, F. R., T. C., McGuire, A. J., Musoke, and A. C., Kibor. 1986. Monoclonal antibody that differentiates F-38 group of mycoplasma from the other mycoplasma species. Sixth International Congress of the International Organization for Mycoplasmaology, Birmingham, Alabama.
1356. Rurangirwa, F. R., T. C., McGuire, and P. M., Rwambo. 1992. Maintaining a healthy flock. In *On-Farm Research and Technology for Dual-Purpose Goats*, ed. P. P., Semenyne, and T., Hutchcroft. Davis, CA: SR-CRSP.
1357. Rurangirwa, F. R., T. C., McGuire, A. N., Wambugu, and S. M., Kihara. 1991. Identification and characterization of target antigen of a monoclonal antibody (WM-25) which inhibits the growth of Mycoplasma strain F38. Proceedings of the SR-CRSP Workshop, Nairobi, Kenya, 1991.
1358. Rurangirwa, F. R., T. C., McGuire, A. N., Wambugu, and S. M., Kihara. 1992. Identification and characterization of a target antigen of a monoclonal antibody (WM-25) which inhibits the growth of mycoplasma strain F38. Ninth International Congress of the International Organization for Mycoplasmaology, Ames, Iowa.
1359. Rurangirwa, R. F., T. C., McGuire, A. J., Musoke, and A., Kibor. 1987. Differentiation of F38 mycoplasmas causing contagious caprine pleuropneumonia with a growth-inhibiting monoclonal antibody. *Infection and Immunity* 55:3219-3220.

1360. Russo, S. F., R., Hart, K., Otieno, and J., Owino. 1983. Forage producing strategies for small farms in Western Kenya. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.20-24.
1361. Russo, S. F., M., Mathuva, and R., Hart. 1982. Feed production systems for dual purpose goats on small farms in Western Kenya. Proceedings of the 1st SR-CRSP Kenya Workshop, Nairobi, Kenya.
1362. Russo, S. L., M., Mathuva, and R. D., Hart. 1982. Different strategies to increase forage production from maize, sorghum and bean cropping systems in Western Kenya. Proceedings of the American Society of Agronomy, p.49.
1363. Ruvuna, F., T. C., Cartwright, H. D., Blackburn, M. A., Okeyo, and S., Chema. 1988. Lactation performance of tropical goat breeds and growth rate of kids under different milking and rearing methods. *Journal of Animal Science* 46:237-242.
1364. Ruvuna, F., T. C., Cartwright, and A. M., Okeyo. 1985. The Kenya dual-purpose goat: its development and utility. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, p.52-57.
1365. Ruvuna, F., T. C., Cartwright, A. M., Okeyo, and H. D., Blackburn. 1987. Milk yield and growth rates of kids under different milking methods of tropical goat breeds. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1542.
1366. Ruvuna, F., T. C., Cartwright, A. M., Okeyo, H. D., Blackburn, and S., Chema. 1987. Characterization of indigenous goats of Kenya for dual-purpose potential (I. Pre- and post-weaning growth). *Proceedings of the IV International Conference on Goats, Brasilia* 2:1313.
1367. Ruvuna, F., T. C., Cartwright, A. M., Okeyo, H. D., Blackburn, and S., Chema. 1987. Characterization of indigenous goats of Kenya for dual-purpose potential (II. Weight and postpartum interval). *Proceedings of the IV International Conference on Goats, Brasilia* 2:1314.
1368. Ruvuna, F., T. C., Cartwright, A. M., Okeyo, J., Kariuki, and S., Gichora. 1986. Breeding goals toward molding the biological components that define overall excellence of a dual purpose goat. Proc. 5th SR-CRSP Workshop, Kabete, pp. 131-140.

1369. Ruvuna, F., T. C., Cartwright, A. M., Okeyo, W., Muhuyi, C., Ahuya, and J., Kitilit. 1984. Effects of partial suckling on lactation performance of Galla and East African Goats and the growth rates of the kids. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, pp.203-216.
1370. Ruvuna, F., T. C., Cartwright, M., Okeyo, and S. K., Tallam. 1988. Appraisal of mating strategy and selection criteria for evolving a dual purpose goat breed for Kenya. SR-CRSP Kenya Proceedings.
1371. Ruvuna, F., T. C., Cartwright, G. M., Smith, G. E., Bradford, Y., Berger, C., Ahuya, and J., Muia. 1983. Preliminary results of performance of different breeds of goats at Ol Magogo. Proceedings of the 2nd SR-CRSP Kenya Workshop, pp.83-98.
1372. Ruvuna, F., T. C., Cartwright, J. F., Taylor, C. O., Ahuya, and S., Chema. 1991. Factors affecting body weights of East African and Galla goats. *Small Ruminant Research* 4:339-347.
1373. Ruvuna, F., A. M., Okeyo, T. C., Cartwright, and G. I., Lumiti. 1985. Growth and suckling patterns of kids grazed with their dams. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, p.64.
1374. Ruvuna, F., F., Rurangirwa, G., Kiio, T., McGuire, T. C., Cartwright, S., Chema, and A. M., Okeyo. 1985. Dual-purpose goat potential in Tsetse Areas of Kenya; Growth and survival evaluation at Ukunda Research Station. Proc. 4th SR-CRSP Kenya Workshop, Kakamega.
1375. Ruvuna, F., F., Rurangirwa, G., Kiio, T. C., McGuire, T. C., Cartwright, S., Chema, and A. M., Okeyo. 1985. Dual-purpose goat potential in tsetse areas of Kenya. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, p.58.
1376. Ruvuna, F., F. R., Rurangirwa, J., Kiio, T. C., McGuire, T. C., Cartwright, S., Chema, and A. M., Okeyo. 1985. Dual purpose goat potential in tsetse areas of Kenya. Proceedings of the SR-CRSP Kenya Workshop, Kukamega, Kenya.
1377. Ruvuna, F., and J. F., Taylor. 1992. The Meat Goat Industry in Africa. *Proceedings International Meat Goat Symposium, Laredo, TX* 1:27-37.
1378. Ruvuna, F., and J. F., Taylor. 1993. Nucleus breeding in Livestock. *African Technology Forum* 6:32-33.

1379. Ruvuna, F., J. F., Taylor, and S. K., Davis. 1991. Animal improvement through embryo manipulation and transfer. In *Biotechnology in Kenya: Proc. National Conference on Plant and Animal Biotechnology*, ed. A. M., Mailu, J. O., Mugah, and P. O., Fungoh. Nairobi, Kenya: Initiatives Publishers, Initiatives Ltd.
1380. Ruvuna, F., J. F., Taylor, S. K., Davis, T. C., Cartwright, B. A. J., Mwandotto, D. O., Ahuya, J., Kogi, and F., Mkuu. 1993. Creation of the Kenya Dual Purpose Goat. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:183-192.
1381. Ruvuna, F., J. F., Taylor, S. K., Davis, and B. A. J., Mwandotto. 1990. A Goat Breeding Program Which Exploits Both Selection and Crossbreeding Effects in a Tropical Environment: Kenya Dual Purpose Goat Development. *Proc. Intl. Goat Symposium, Florida A&M University, October 22-26*.
1382. Ruvuna, F., J. F., Taylor, S. K., Davis, B. A. J., Mwandotto, and C. O., Ahuya. 1992. Application of a Nucleus Breeding System in the Development and Improvement of the KDPG. *Proc. 10th Annual SR-CRSP Workshop, Nairobi. Feb. 26-27, 1992* 10:12-17.
1383. Ruvuna, F., J. f, Taylor, S. K., Davis, B. A. J., Mwandotto, and C. O., Ahuya. 1992. Regression Models for Estimating Genetic Parameters From Crossbreeding Data. *Proc. 10th Annual SR-CRSP Workshop, Nairobi. Feb. 26-27, 1992* 10:18-25.
1384. Ruvuna, F., J. F., Taylor, J., Kogi, M., Jones, B. A. J., Mwandotto, C. O., Ahuwa, and S., Mkuu. 1993. Estimates of Breed Additive and Heterozygosity Parameters in the Kenya Dual Purpose Goat. *Proc. 11th Annual SR-CRSP Workshop, Nairobi. March 3-4, 1993* 11:111-117.
1385. Ruvuna, F., J. F., Taylor, M., Okeo, M., Wanyoike, and C., Ahuya. 1991. Effects of Breed and Castration on Slaughter Weight and Carcass Composition of Goats. *Proceedings 9th Annual SR-CRSP Workshop, Nairobi, Kenya. March 1991.* 9:11-20.
1386. Ruvuna, F., J. F., Taylor, M., Okeo, M., Wanyoike, and C., Ahuya. 1992. Effects of breed and castration on slaughter weight and carcass composition of goats. *Small Ruminant Research* 7:175-183.

1387. Ruvuna, F., J. F., Taylor, M., Okeyo, M., Wanyoike, and C., Ahuya. 1992. Effects of breed and castration on slaughter weight and carcass composition of goats. *Small Ruminant Research* 7:175-183.
1388. Ruvuna, F., R. M., Waruiru, J. F., Taylor, S. K., Davis, B. A. J., Mwandotto, F. R., Rurangirwa, and T. C., McGuire. 1992. Production parameters and resistance to gastrointestinal helminths of the Kenya Dual Purpose Goat. Proc. 5th Int. Goat Conf. India.
1389. Ruyle, G. B. 1983. Sheep diets and feeding behavior in single and common use grazing trials on Southwestern Utah Summer Range. Ph.D. Dissertation. Utah State University, Logan.
1390. Ruyle, G. B., and D. D., Dwyer. 1985. Feeding stations of sheep as an indicator of diminished forage supply. *Journal of Animal Science* 61:349-353.
1391. Rwambo, P., M., Shaw, and J. C., DeMartini. 1992. Studies on the morphogenesis of Nairobi sheep disease virus, a nairovirus. 11th Annual Meeting of the American Society for Virology, Ithaca, New York. July 11-15, 1992.
1392. Rwambo, P. M. 1991. Current research to develop a recombinant vaccine for control of Nairobi Sheep Disease. SR-CRSP Workshop, KETRI, Muguga, Kenya, February 27-28, 1991.
1393. Rwambo, P. M., S., Brodie, F., Mbithi, and J. C., DeMartini. 1993. Maedi virus/ovine lentiviruses: Virus isolation from sheep with chronic respiratory diseases in Laikipia District of Kenya and demonstration of antibodies to a highly conserved P27 capsid antigen. SR-CRSP Proceedings 11th Scientific Workshop, March 3-4, Nairobi, Kenya.
1394. Rwambo, P. M., and J. C., DeMartini. 1991. Characterization of the structural polypeptides of Nairobi sheep disease Virus, a Nairovirus. 10th Annual Meeting of the American Society for Virology, Fort Collins, CO. July 7-11, 1991.
1395. Rwambo, P. M., F., Mbithi, S., Brodie, and J. C., DeMartini. 1993. Virological and serological evidence for ovine lentivirus infections in Kenyan sheep flocks. Abstract W77-8. IX International Congress of Virology, Glasgow, Scotland. August 8-13, 1993.

1396. Rwambo, P. M., F., Mbithi, M., Shaw, and J. C., DeMartini. 1993. Serological evidence for the presence of ovine lentivirus infections in sheep flocks in Kenya. 11th SR-CRSP Scientific Workshop. Nairobi, Kenya, March 3-4, 1993.
1397. Rwambo, P. M., F., Mbithi, M., Shaw, and J. C., DeMartini. 1993. Nairobi Sheep Disease Virus: Morphology, structural proteins, and cDNA cloning of virala DNA. 11th SR-CRSP Scientific Workshop. Nairobi, Kenya, March 3-4, 1993.
1398. Sabrani, M., and H. C., Knipscheer. 1982. Sheep and goat markets in Central Java: A profile. SR-CRSP Working Paper No. 5, Bogor, Indonesia.
1399. Sabrani, M., and H. C., Knipscheer. 1982. Small ruminants for small farmers. *Indonesian Agricultural Research and Development Journal* 4:86-90.
1400. Sabrani, M., S., Mawi, D. S., Tjeppey, and H. C., Knipscheer. 1982. A profile of sheep and goat markets in West Java, Indonesia. SR-CRSP Working Paper No. 3, Bogor, Indonesia.
1401. Sabrani, M., and A., Muljadi. 1981. Prospects for small ruminant development with referance to land holdings in Ciburuy Village, Bogor. *Lembaran LPP* 1:1-4.
1402. Sabrani, M., A., Muljadi, and J., DeBoer. 1982. Small Ruminant Production on Small Farms in West Java, Indonesia: Preliminary Results of a Baseline Survey of Upland and Lowland Farming Systems. *Proc. III International Conference on Goat Production and Disease, Tucson, AZ*:358.
1403. Sabrani, M., and A. P., Siregar. 1981. The role of small ruminants in traditional Indonesian farming systems. *Indonesian Agricultural Research and Development Journal* 3.
1404. Sabrani, M., A. P., Siregar, R. J., Petheram, and H. C., Knipscheer. 1983. Livestock farming systems research for rural development in Indonesia. SR-CRSP Working Paper No. 20, Indonesia.
1405. Sabrani, M., P., Sitorus, and A. P., Siregar. 1982. Peranan Ternak Ruminansia Kecil Sebagai Sumber Protein Hewani di Pedesaan. *J. Litbang Pertanian* 1:68-72.

1406. Sahnoun, A. 1982. Valeur alimentation du treflede perse (*Trifolium Resupinatum* L.) produit en irrigue dans le Gharb (Feeding value of *Trifolium Resupinatum* L. produced in the Gharb). B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.
1407. Said, A. N., A. E., Sidahmed, K., Yilala, M., Onim, B., Amwayi, and E., Mokaya. 1985. Evaluation of local feeds produced on small farms in Western Kenya for the nutrition of dual-purpose goats: Digestibility, intake, and nitrogen retention of two forms (Fresh hay) of sesbania, pigeon pea and sudan grass. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
1408. Sakul, H., G. E., Bradford, R., BonDurant, G. B., Anderson, and S. E., Donahue. 1992. Cryopreservation of embryos as a means of germ plasm concentration in sheep. *Journal of Animal Science* 70:143.
1409. Sakul, H., G. E., Bradford, R., BonDurant, G. B., Anderson, and S. E., Donahue. 1993. Cryopreservation of embryos as a means of germ plasm conservation in sheep. *Theriogenology* 39:401-409.
1410. Sakul, H., M. R., Dally, and G. E., Bradford. 1992. Evaluation of Australian Merino and U.S. sheep breeds for feed and carcass traits. *Journal of Animal Science* 71:363-368.
1411. Salazar, E. 1984. Evaluacion productiva y reproductiva de ovino criollo. B.S. Thesis. Universidad Nacional del Centro del Peru, Facultad de Zootecnia, Huancayo, Peru.
1412. Salim, M., W., Ochieng, H. A., Fitzhugh, M., Sands, D., Brown, and A. E., Sidahmed. 1984. SR-CRSP dual-purpose goat in Western Kenya: History and record. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya.
1413. Salvatierra, H., and M., Fernandez. 1989. Disenos de ensayos para campos de comuneros (Field-trial designs for peasants' fields). In *Consideraciones para la investigacion participativa en comunidades campesinas alto-Andinas (Considerations for participative research in high-Andean peasant communities)*, ed. L., Lluvia editores for the SR-CRSP. Lima, Peru: SR-CRSP (Serie comunidades, reporte (sic) tecnico no. 98).
1414. Sammells, C. A. 1993. Llama meat: It is meat and right so to eat. *Bolivian Times*:15.

1415. Samsell, L. J., and J. W., Spears. 1985. Effect of dietary chromium on blood constituents in sheep. *Journal of Animal Science* 61.
1416. Sanchez, M. D. 1984. Energy expenditure and feed intake of beef cattle grazing Mediterranean grasslands. Ph.D. Dissertation. University of California, Davis, Davis, CA.
1417. Sanchez, M. D. 1990. Rotational grazing of sheep under an old rubber plantation at Sei Putih, North Sumatra. Proceedings of the 13th Annual Conference of the Malaysian Society of Animal Production, March 6-9, Malacca, Malaysia, pp. 13-17.
1418. Sanchez, M. D. 1990. The use of rubber seed as feed supplement for grazing sheep. Proceedings of the 5th Asian-Australasian Association of Animal Production Societies, Animal Science Congress, Taipei, Taiwan, pp. 144.
1419. Sanchez, M. D., and M., Boer. 1989. Supplementation of local and F1 local x St. Croix growing sheep grazing under rubber trees in North Sumatra. SR-CRSP Working Paper No. 104, Bogor, Indonesia.
1420. Sanchez, M. D., and K. R., Pond. 1989. Supplementation with molasses and broken rice. Small Ruminant-Collaborative Research Support Program Sei Putih Annual Research Report, Sei Putih, North Sumatra, pp. 21-24.
1421. Sanchez, M. D., and K. R., Pond. 1990. E-pass protein for growing lambs grazing under rubber plantations. Small Ruminant-Collaborative Research Support Program, Sei Putih Annual Research Report 1989-1990, Sei Putih, North Sumatra, Indonesia, pp. 26.
1422. Sanchez, M. D., and K. R., Pond. 1990. Salt blocks for mineral supplementation. Small Ruminant-Collaborative Research Support Program, Sei Putih Annual Research Report 1989-1990, Sei Putih, North Sumatra, Indonesia, pp. 41.
1423. Sanchez, M. D., and K. R., Pond. 1991. Nutrition of Sheep that are integrated with rubber tree production systems. In *Integrated Tree Cropping and Small Ruminant Production Systems*, ed. L. C., Iniguez, and M. D., Sanchez. : .
1424. Sanchez, M. D., and E., Sembiring. 1989. The use of molasses blocks at Sei Putih. Small Ruminant-Collaborative Research Support Program, Sei Putih Annual Research Report 1988-1989, pp. 25-28.



1425. Sands, M. W. 1983. Role of livestock on smallholder farms in Western Kenya. Ph.D. Dissertation. Cornell University, Ithaca, New York.
1426. Sands, M. W., H. A., Fitzhugh, and S., Chema. 1982. Livestock production on small farms of Western Kenya. *Journal of Animal Science* 55:200.
1427. Sands, M. W., H. A., Fitzhugh, and S., Chema. 1982. Seasonal variation in feed resources on small farms of Western Kenya. *Journal of Animal Science* 55:322.
1428. Sands, M. W., H. A., Fitzhugh, M., Job, J., Kekovole, P. N., Gachuki, and R. E., McDowell. 1982. Potential for dual purpose goats on small farms in Kenya. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p. 354.
1429. Sands, M. W., H. A., Fitzhugh, J., Kekovole, and P., Gachuki. 1982. Results of small farm systems survey with implication to the potential for dual purpose goats on small farms in Kenya. Proceedings of the SR-CRSP Kenya Workshop, pp.2-34.
1430. Sands, M. W., H. A., Fitzhugh, R. E., McDowell, and S., Chema. 1982. Mixed crop-animal systems on small farms in Western Kenya. SR-CRSP Technical Report No. 17, NTIS #PB8-4-190719.
1431. San Martin, F. 1987. Voluntary intake, selectivity and digestive efficiency of the South American camelids compared with sheep. Ph.D. Dissertation. Texas Tech University, Lubbock.
1432. San Martin, F. 1989. Voluntary intake in South American camelids and conversion factors to estimate ratios and stocking rates. In *Research results in range management and improved forages*. Tech. Art. T-9-584, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.
1433. San Martin, F., and F., Bryant. 1993. Comparative Nutrition of Sheep and Camelids. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:93-98.
1434. San Martin, F., F., Bryant, T., Arbaiza, and T., Huisa. 1988. Comparison of selectivity and nutrition in South American Camelids and sheep (II. Feed intake and diet quality of llama alpaca and sheep). In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F., Bryant. Lubbock, TX: Texas Tech University.

1435. San Martin, F., F., Bryant, T., Huisa, R., Farfan, and A., Rosales. 1988. Comparison of selectivity and nutrition in South American Camelids and sheep (I. Botanical composition of the diet in llama, alpaca, and sheep). In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
1436. San Martin, F., and F. C., Bryant. 1988. Comparison of liquid and particulate passage rate of llama and sheep. In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
1437. San Martin, F., and F. C., Bryant. 1989. Nutrition of domesticated South American llamas and alpacas. *Journal of Small Ruminant Research* 2:191-216.
1438. San Martin, F., and F. C., Bryant. 1989. Comparative digestibility between llamas and sheep as affected by diet quality. In *Research results in range management and improved forages. Tech. Art. T-9-584*, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.
1439. San Martin, F., and F. C., Bryan . 1991. *Investigaciones sobre pastos y forrajes de Texas Tech University en El Peru*, vol. 6. Lubbock, TX: Texas Tech University.
1440. San Martin, F., J. A., Pfister, L., Rosales, R., Farfan, and T., Huisa. 1989. Grazing behaviour of llamas, alpacas and sheep in the Andes of Peru. In *Research results in range management and improved forages. Tech. Art. T-9-584*, vol. 5, ed. F., San Martin, and F. C., Bryant. Lubbock, Texas: College of Agric. Sci. Texas Tech University.
1441. San Martin, F., A., Rosales, and R., Valdivia. 1984. Forage digestion rates and digestibility on alpacas and cattle. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 1, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1442. San Martin, H. F. 1982. Caracteristicas de los pastos cultivados nutricionales del ganado en pastoreo (Environmental factors and nutritional requirements of animals on pasture). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.

1443. Santa Rosa, J. 1984. Aspecto anatomo-histopatologico da hidrometra em cabras. *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:372.
1444. Santa Rosa, J., F. A., Ponce de Leon, G. S., Riera, and A. A., Simplicio. 1983. Caracterizacao do tipos de Cabras Nativas Brasileiras (II. Avaliacao de producao de visceras). Proceedings of the IX ALPA Meeting, Santiago, Chile.
1445. Santos, M. 1985. Efecto de carneros targhee, targhee x finnish landrace y junin sobre la logitud de mecha en cruces con borregas criollas del destete al ano de edad. B.S. Thesis. Universidad Nacional del Centro del Peru, Huancayo.
1446. Sarwono, B. D., I. B. G., Dwipa, I. G. L., Media, and H., Poerwoto. 1993. Goat production in rice-based farming systems in Lombok. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1447. Schacht, W. H., J. N., Long, and J. C., Malechek. 1988. Above ground production in cleared and thinned stands of semiarid tropical woodland. *Brazilian Forest Ecology Management* 23:201-214.
1448. Schacht, W. H., and J. C., Malechek. 1989. Nutrition of goats as influenced by thinning and clearing of deciduous woodland in northeastern Brazil. *Journal of Animal Science* 67:2487-2497.
1449. Schacht, W. H., and J. C., Malechek. 1990. Botanical composition of goat diets in thinned and cleared woodland in northeastern Brazil. *Journal of Range Management* 43:523-529.
1450. Schacht, W. S. 1986. Wood and forage production in cleared and thinned dry tropical woodland: Implications to goat nutrition. Ph.D. Dissertation. Utah State University, Logan.
1451. Schlundt, A. F. 1981. Distribution and movements of free-ranging alpaca. Proceedings of the 4th International Conference on South American Cameloids, Punta Arenas, Chile.

1452. Schlundt, A. F. 1982. Produccion de rumiantes menores en las praderas altoandinas del Peru (Production of small ruminants on the ranges of the high Andes of Peru). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
1453. Schoenian, S. G. 1988. Direct and correlated responses to selection for reproductive rate in Rambouillet sheep. M.S. Thesis. Montana State University, Bozeman, MT.
1454. Schoenian, S. G., and P. J., Burfening. 1990. Ovulation rate, lambing rate, litter size and embryonic survival of Rambouillet sheep selected for high and low reproductive rate. *Journal of Animal Science* 68:2263-2270.
1455. Scholz, S. 1991. Potential and actual income generated from sheep by small farmers in North Sumatra. SR-CRSP Annual Report, Sungei Putih.
1456. Scholz, S. 1993. Survey results from San Jose de Llanga, a community in the Bolivian Altiplano. IBTA Technical Bulletin No. 128;SR-CRSP Technical Report No. 6, March 1993.
1457. Scholz, S. 1993. The Plimsoll Line: Estimating Human Carrying Capacity. An Example from the Bolivian Altiplano. SR-CRSP Workshop, San Juan, Puerto Rico, September 1993.
1458. Scholz, S., and R., Quiroz. 1993. FSR/E and Livestock Research and Development Projects. International Telecomputer Conference sponsored by IDRC, 1993.
1459. Scholz, S., C., Vargas, A., Castillo, and R., Quiroz. 1993. The role of NGOs in development: The case of Bolivia. International Telecomputer Conference sponsored by IDRC, 1993.
1460. Sembiring, E., and M. D., Sanchez. 1990. Productivity of sheep from the Outreach Research Project in Sei Putih, North Sumatra. Small Ruminant-Collaborative Research Support Program, Sei Putih Annual Research Report 1989-1990, pp. 90-94.
1461. Sembiring, E., and S., Scholz. 1991. Socioeconomic survey of farmers in Membang Muda Outreach Project. SR-CRSP Working Paper No. 127, December.
1462. Semega, D., and L., El Maharzi. 1984. Estimation de la composition chimique des agneaux de races locales (Estimation of the chemical composition of sheep of local breeds). B.S./M.S. Thesis. ENA Meknes, Morocco.

1463. Semenye, P. 1993. Small ruminant research and development: Programme of action with special reference to the dual-purpose goat. Annual symposium, Animal Production Society of Kenya, Institute of Development Studies, Embu, November 17-18, 1993.
1464. Semenye, P., and W., Getz. 1993. How Farmer-Oriented Research with Dual Purpose Goats Evolved in Western Kenya. In *Proceedings Small Ruminant Workshop*, ed. E., Bradford, and M., Keene. San Juan, Puerto Rico: .
1465. Semenye, P. O., L., Musalia, and H., Fitzhugh. 1987. Small ruminant nutrition on small farms in Kenya. Bulletin on Animal Health and Production in Africa/ Proceedings of the Workshop on Improvement of Small Ruminants in Eastern and Southern Africa, OAU/IDRC, p.127-134.
1466. Semenye, P. P. 1989. Techniques for Measuring On-Farm Livestock Research: Problems and Issues. CIMMYT East Africa Technical Networkship on On-farm Research, Arusha, December 4-8, 1989.
1467. Semenye, P. P. 1989. Utilization of *Sesbania sesban* by Goats. PANESA Regional Workshop, Kisumu, November 1-3, 1989.
1468. Semenye, P. P. 1990. Toxicity response of goats fed on *Leucaena leucocephala* forage only. *Small Ruminant Research* 3:617.
1469. Semenye, P. P. 1991. Overcoming the dual-purpose goat production constraint of dry matter intake by feeding defoliated maize leaves. Conference on Sustainable Systems, Wye College, London, England, September, 2-4.
1470. Semenye, P. P. 1992. Techniques for measuring on-farm livestock research: Problems and issues. Paper presented at the International Workshop on Research and Development of Goat Production Systems in the Humid Tropics, July 6-9, 1992, Ile-Ife, Nigeria.
1471. Semenye, P. P., and T., Hutchcroft. 1992. On farm research and technology for dual-purpose goats. Small Ruminant Collaborative Research Support Program, Kenya.
1472. Semenye, P. P., A. N., Mbabu, B., Mwandotto, F., Nyaribo, J. M., Onim, and F., Rurangirwa. 1990. Research Highlights of the Small Ruminant Collaborative Research Support Programme. KARI 2nd Annual Scientific Conference, Panafric Hotel, Nairobi, September 5-7, 1990.

1473. Semenye, P. P., and L., Musalia. 1987. Improving reproduction in sheep and goats. Proceedings Animal Production Society of Kenya.
1474. Semenye, P. P., L., Musalia, and H., Fitzhugh. 1986. Dual purpose goat performance on station and on farms in Western Kenya. Proceedings of the 5th Animal SR-CRSP Workshop, Kabete, Kenya, pp.67-75.
1475. Semenye, P. P., L., Musalia, M., Onim, and H., Fitzhugh. 1987. *Leucaena leucocephala* and *Sesbania sesban* as sole diets for bucklings. Proceedings of the 6th Annual SR-CRSP Workshop, Kabete.
1476. Semenye, P. P., L., Musalia, and K., Otieno. 1992. Interaction of dual-purpose goats with subsistence crops and weeds. Paper presented at the International Workshop on Research and Development of Goat Production Systems in the Humid Tropics, July 6-9, 1992, Ile-Ife, Nigeria.
1477. Semenye, P. P., L., Musalia, D., Siamba, K., Otieno, M., Onim, and H., Fitzhugh. 1990. Development of the dual-purpose goat production in western Kenya: Nutrition and management perspective. Proceedings of the 8th SR-CRSP Annual Workshop, Nairobi, March 7-8, 1990.
1478. Semenye, P. P., and J. F. M., Onim. 1991. On-farm research: The SR-CRSP experience. Workshop on Collaboration of NGOs and Research Institutions in Participatory Research. Sponsored by Winrock International, Environment Liaison Centre International, Information Center for Low External Input agriculture, Alley Farming Network for Tropical Africa, and Overseas Development Institute, Kisumu, Kenya, September 14-22.
1479. Semenye, P. P., J. F. M., Onim, W. T., Conelly, and H. A., Fitzhugh. 1988. On-farm evaluation of dual-purpose goat production systems in Kenya. *Journal of Animal Science* 67:3096-3102.
1480. Semenye, P. P., D., Otieno, and W., Getz. 1991. Integration of dual-purpose goats with maize production. Presentation at 8th Annual Small Ruminant Workshop, KETRI, Maguga, Kenya, February 27-28.
1481. Semenye, P. P., M., Shisya, and W. R., Getz. 1992. Overcoming dual-purpose goats production constraints of dry matter intake by feeding defoliated maize leaves. Paper presented at the Second Biennial Conference of the Small Ruminant Research Network, December 7-11, 1992, Arusha, Tanzania.

1482. Semenye, P. P., D. N., Siamba, M., Shisya, and W., Getz. 1992. Nutritive values of Pennisetum purpureum, mixed grasses, Cajanus cajan, Sesbania sesban and Tylossema spp. Paper presented at the 10th SR-CRSP Workshop, International Laboratory for Research in Animal Diseases, Nairobi, Kenya, February 26-27, 1992.
1483. Semenye, P. P., D. N., Siamba, M., Shisya, and W. R., Getz. 1992. Can fodder diets increase goat production by a quantum leap? Paper presented at the All African Conference on Animal Agriculture, November 23-27, 1992, Nairobi, Kenya.
1484. Setiadi, B., and P., Sitorus. 1984. Performance of Etawah Grade and Kacang goats. SR-CRSP Working Paper No. 37, Bogor, Indonesia.
1485. Setiadi, B., P., Sitorus, and Subandriyo. 1985. Performance of Etawah Grade and Kacang Goats. *Proceedings of the 3rd AAAP Animal Science Congress* 1:275-277.
1486. Sghiri, A. 1991. Synchronization of oestrus and out-of-season lamb production: ram effect. *Proc., Maitrise de la reproduction*, May 29-30, 1991, CRITT, France.
1487. Shavulimo, F., A. E., Sidahmed, F., Gisemba, and O., Odero. 1984. Health problems in goats in Western Kenya. *Proceedings of SR-CRSP Scientific Meeting*, Kabete, Kenya, March 1984.
1488. Shavulimo, R. S. 1985. Gastrointestinal nematodes, with special reference to *Haemonchus contortus*, as a constraint to the introduction of exotic goat breeds in Western Kenya. M.S. Thesis. University of Reading, Reading, England.
1489. Shavulimo, R. S., F. R., Rurangirwa, T. C., McGuire, and S., Chema. 1986. Disease as a constraint to the introduction of exotic goats on smallholder farms in Western Kenya. *Proceedings of the SR-CRSP Kenya Workshop*, Kabete, Kenya.
1490. Shavulimo, R. S., F. R., Rurangirwa, T. C., McGuire, and S., Chema. 1986. A review of Helminthiasis in high, medium and low rainfall areas of Kenya. *Proceedings of the SR-CRSP Kenya Workshop*, Kabete, Kenya.
1491. Shavulimo, R. S., F. R., Rurangirwa, T. C., McGuire, and S., Chema. 1988. Diseases as a constraint to the introduction of exotic goats on smallholder farms in Western Kenya. *Bulletin of Animal Health and Production, Africa* 36:102-110.

1492. Shavulimo, R. S., F. R., Rurangirwa, F., Ruvuna, A. D., James, P. R., Ellis, and T. C., McGuire. 1988. Genetic resistance to gastrointestinal nematodes, with special reference to *Haemonchus contortus*, in three breeds of goats in Kenya. *Bulletin of Animal Health and Production, Africa* 36:233-241.
1493. Shavulimo, S. R., F. R., Rurangirwa, F., Ruvuna, A. D., James, P. R., Ellis, and T. C., McGuire. 1986. An evaluation for resistance against *Haemonchus contortus* in three goat breeds: East African, Gallan and East African x Toggenburg. Proc. 5th SR-CRSP Kenya Workshop, Kabete, p.113.
1494. Sheik, D., and C., Valdivia. 1993. Gender Differences in the Adoption of Dual Purpose Goat Technological Practices. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:209-220.
1495. Sheikh, D. 1992. A study of the adoption of dual purpose goat technology by small-scale farmers: A case study of Western Kenya. M.S. Thesis. Clemson University, Clemson, South Carolina.
1496. Sheikh, D., A. N., Mbabu, and M. F., Nolan. 1993. A comparison of dual purpose goat technology under project and farmer management. SR-CRSP Proceedings 11th Scientific Workshop, March 3-4, Nairobi, Kenya.
1497. Sheikh, D., and J. C. O., Nyankori. 1993. Differential adoptive behavior and gender of decision maker dual purpose goat technology in western Kenya. SR-CRSP Proceedings 11th Scientific Workshop, March 3-4, Nairobi, Kenya.
1498. Shelton, J. M., E. A. P., Figueredo, W. H., Sousa, and A. A. O., Fernandes. 1986. An overview of sheep and goat breeding research. Proceedings of the First Workshop of the SR-CRSP, p.65.
1499. Shelton, M. 1980. Approaches to improving reproductive efficiency in sheep. *Sheep and Goat Handbook* 1:150-159.
1500. Shelton, M. 1980. Breeding for improvement in fiber producing animals. In *Animal Agriculture. The Biology, Husbandry and Use of Domestic Animals.* : W.H. Freeman Co.
1501. Shelton, M. 1980. Factors affecting efficiency of lamb production. *Sheep and Goat Handbook* 1:348-357.
1502. Shelton, M. 1980. Meat Goat Production. *Sheep and Goat Handbook* 1:369-379.



1503. Shelton, M. 1980. Wool and Mohair Production and Marketing. In *Sheep and Goat Handbook*, vol. 1. : Agric. Fdtn. Inc. Proc. International Stockman's School.
1504. Shelton, M. 1981. Biology and efficiency of animal fiber production. *Sheep and Goat Handbook* 2:17-22.
1505. Shelton, M. 1981. Breeding for improvement in sheep production. *Sheep and Goat Handbook* 2:95-101.
1506. Shelton, M. 1981. Some alternative approaches to shearing sheep and goats. In *Sheep and Goat Handbook*, vol. 2. : Agric. Fdtn. Inc. Proc. International Stockman's School.
1507. Shelton, M. 1981. Influence of various exteroceptive factors on initiation of estrus and ovulation on female goats. *International Goat and Sheep Research* 1:156-162.
1508. Shelton, M. 1982. The potential for increased sheep and goat production in arid or tropical regions. In *Sheep and Goat Handbook*, vol. 2. San Antonio, TX: .
1509. Shelton, M. 1982. Methods of pregnancy diagnosis in Angora and Dry Meat-type goats. Proc. 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.496.
1510. Shelton, M. 1983. Crossbreeding with the "Barbado" Breed for Market Lamb or Wool Production in the United States. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
1511. Shelton, M. 1983. Management of Sheep to Maximize Lamb Production. *Sheep and Goat Handbook* 3:179-185.
1512. Shelton, M. 1983. Fiber production. In *Goat Production*, ed. C., Gall. : Academic Press.
1513. Shelton, M. 1983. The Barbados Blackbelly ("Barbado") Breed in Texas. In *Hair Sheep of Western Africa and the Americas*, ed. H. A., Fitzhugh, and G. E., Bradford. : Westview Press.
1514. Shelton, M. 1984. Traits to be considered in selecting angora goats. In *Sheep and Goat Handbook*, vol. 4. : Westview Press.
1515. Shelton, M. 1984. Breeding and improvement of Angora goats. Proceedings of the 2nd World Congress on Sheep and Beef Cattle Breeding, Pretoria, R.S.A.

1516. Shelton, M. 1984. Recent trends in sheep breeding and improvement programs. The contribution of Central Performance Test Programs. Proceedings of the 2nd World Congress on Sheep and Beef Cattle Breeding, Pretoria, R.S.A.
1517. Shelton, M. 1984. Feedings systems for goats for meat and milk production. Feeding of animals in the Caribbean. Proceedings of the Workshop CARDI and Sugar Cane Feeding Center, Trinidad, pp.179-188.
1518. Shelton, M. 1984. Feeding Angora goats. In *Sheep and Goat Handbook*, vol. 4. : Westview Press.
1519. Shelton, M. 1985. Abortion in Angora goats. In *Current therapy in theriogenology*. : W.B. Sanders Co.
1520. Shelton, M. 1986. A reoccurrence of the "silky" mutant in sheep. *SID Research Digest*:23-25.
1521. Shelton, M. 1986. Breed use and crossbreeding in goat production. Proceedings of the 3rd World Congress on Genetics Applied to Livestock Production, Lincoln, Nebraska.
1522. Shelton, M., A. A. O., Fernandes, and E. A. P., Figueredo. 1986. Fencing for goats. *Proceedings of the IV International Conference on Goats, Brasilia* 2:809.
1523. Shelton, M., and E. A. P., Figueredo. 1981. Types of sheep and goats in northeast brazil. *International Goat and Sheep Research* 1:258-268.
1524. Shelton, M., and J., Lawson. 1982. Effect of season on reproductive activity of meat-type goats in Texas, USA. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p. 341.
1525. Shelton, M., and J., Lawson. 1983. Developments in Goat Reproductive Biology. *Sheep and Goat Handbook* 3:535-541.
1526. Shelton, M., R., Lewis, T., Willingham, G. C., Smith, and J. W., Savell. 1987. Investigations relating to fat-tail sheep. SR-CRSP Technical Report Series No. 91.
1527. Shelton, M., and C., Lupton. 1986. Where there's wool, there's a way. *Science of food and agriculture*:6-11.
1528. Shelton, M., and J. O., Sanders. 1981. Breeding sheep and goats for tropical environments. Proc. Simposio Nacional do Caprino e Ovino Tropical, Fortaleza, Brazil.

1529. Shelton, M., E., Snowden, and E. A. P., de Figueredo. 1984. Meat production and carcass characteristics of the goat. SR-CRSP Technical Report No. 45.
1530. Shelton, M., and G., Snowden. 1983. Breeding for improvement of reproduction in sheep. *Sheep and Goat Handbook* 3:101-109.
1531. Shelton, M., P., Thompson, and C. J., Lupton. 1986. Experimental results of grading up meat type (Spanish) goats to Angoras. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1327.
1532. Shelton, M., P., Thompson, and G., Snowden. 1982. Effect of Monensin and Sulfamethiazine on performance and naturally occurring Coccidiosis in kid goats. *Southwestern Veterinarian* 35:327-331.
1533. Shen, D. T., L. W., Jen, and J. R., Gorman. 1982. The detection of antibody in goats by the enzyme-linked immunosorbent assay (ELISA). *Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ.*
1534. Shompole, P. S. 1988. Cloned DNA probes identify pathogenic Anaplasma in goats as Anaplasma ovis. M.S. Thesis. Washington State University, Pullman.
1535. Shompole, P. S. 1993. Identification of Babesia bigemina infected erythrocyte surface antigens. Ph.D. Dissertation. Washington State University, Pullman.
1536. Shompole, S. P., S. D., Waghela, F. R., Rurangirwa, and T. C., McGuire. 1989. Cloned DNA probes identify Anaplasma ovis in goats and reveal a high prevalence of infection. *Journal of Clinical Microbiology* 27:2730-2735.
1537. Siamba, D. N., and P. P., Semenyé. 1989. Preliminary results of factors affecting mortality of dual purpose goats (DPG) kids in Western Kenya. *Proceedings of the 7th SR-CRSP Workshop, Kabete.*
1538. Siamba, D. N., P. P., Semenyé, and M., Shisya. 1990. Effectiveness of wilting herbage on body weight, egg per gram of faeces and packed cell volume in dual-purpose goats at Maseno, western Kenya. *Proceedings of the 8th SR-CRSP Annual Workshop, Nairobi, March 7-8, 1990.*

1539. Sidahmed, A. E., J. F. M., Onim, A. W., Mukhebi, R. S., Shavulimo, A. J., De Boer, and H. A., Fitzhugh. 1985. On-farm trials with dual-purpose goats on small farms in Western Kenya. In *Research Methodology for livestock On-Farm Trials*, ed. T. C., Nordbloom, A. E. K., Hamid Ahmed, and G. R., Potts. Aleppo: ICARDA;IDRC.
1540. Sidahmed, A. E., J. E., Reynolds, and R. S., Shavulimo. 1985. On-farm Dual Purpose Goat production: Biological and social perspectives. Proc. 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
1541. Sidahmed, A. E., M., Salim, H. A., Fitzhugh, and L., Musalia. 1984. Performance of dual-purpose does and kids under different milking and nursing management systems. Proceedings of the 3rd SR-CRSP Kenya Workshop, Kabete, Kenya.
1542. Sidahmed, A. E., R. S., Shavulimo, J. E., Reynolds, H. A., Fitzhugh, J., Sagwa, J., Atichi, P., Pacha, P., Amuhinda, E., Otieno, H., Kiguhi, E., Mokaya, and K., Karimi. 1985. On-farm dual-purpose goat production: Biological and social perspective. Proceedings of the 4th SR-CRSP Kenya Workshop, Kakamega, Kenya.
1543. Silitonga, S., and J. D., Donker. 1983. Effect of mixing alfalfa and brome hays on intake and digestibility by sheep. *Journal of Animal Science* 57.
1544. Silitonga, S., S., Ginting, J. E., van Eys, and I., Inounu. 1985. Efficient Animal Production for Asian Welfare: Effects of level of feeding and litter size on milk yield and composition from Javanese ewes. *Proceedings 3rd Congress, Asian-Australasian Association of Animal Production, Swoul, Korea* 2:784.
1545. Silitonga, S. S., J. E., van Eys, and H., Pulungan. 1985. Efficient Animal Production for Asian Welfare: Leucaena supplementation to rice straw based diets for growing sheep. *Proceedings 3rd Congress, Asian-Australasian Association of Animal Production, Swoul, Korea* 2:839.
1546. Silitonga-Sitorus, S. 1985. Combinations of Cassava leaves and native grass in diets for goats. SR-CRSP Working Paper No. 66, Balai Penelitian Ternak, Bogor, Indonesia and N.C. State University, Raleigh, USA.
1547. Silitonga-Sitorus, S., S., Ginting, J. E., van Eys, and I., Inounu. 1985. Effects of level of feeding and litter size on milk yield and composition from Javanese ewes. SR-CRSP Working Paper No. 65, Balai Penelitian Ternak, Bogor, Indonesia and N.C. State University, Raleigh, USA.

1548. Silitonga-Sitorus, S., P., Pongsapan, J. E., van Eys, T., Manurung, and R. M., Gatenby. 1986. Urea, Cassava leaf and soysauce waste supplements for sheep given rice straw ad libitum. SR-CRSP Working Paper No. 9, Balai Penelitian Ternak, Bogor, Indonesia and N.C. State University, Raleigh, USA.
1549. Silitonga-Sitorus, S., J. E., van Eys, and H., Pulungan. 1985. Leucaena supplementation to rice straw-based diets for growing sheep. SR-CRSP Working Paper No. 52, Balai Penelitian Ternak, Bogor, Indonesia and N.C. State University, Raleigh, USA.
1550. Silva, F. L., Ribeiro, F. A., Melo Lima, and J. M., Shelton. 1986. Desempeño productivo e reproductivo da raza somalis. Proceedings of the First Workshop of the SR-CRSP, p.347.
1551. Silva, A., J., Chafloque, F., Villena, A., Schlundt, and R., Higaonna. 1985. Range sites and plant cover in the shrublands of Northern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 2, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1552. Silva, A. E. D., M. U. D., Silva, and D., Hansen. 1982. Brucelose (Brucella Abortus) como possivel causa de aborto, epididimoorquite em caprinos e ovinos no Ceara (Brucellosis as a possible casue of abortions, Epididymitis and Orchitis in goat and sheep in the State of Ceara. *Rev. Bras. Reprod. Anim., Belo Horizonte* 6:25-29.
1553. Silva, M. 1984. Concentracao proteico-minerais durante a lactacao, em Cabras. *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:370.
1554. Silva, M. 1984. Concentracao sericas de cobre e zinco, relacionadas ao estado fisiologico, em Cabras. *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:371.
1555. Silva, M. 1984. Parametros sanguineos em caprinos jovens (I. Determinacao aos seis meses de idade). *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:365.
1556. Silva, M. 1984. Parametros sanguineos em caprinos jovens (II. Determinacao aos nove meses de idade). *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:366.
1557. Silva, M. 1984. Parametros sanguineos em caprinos jovens (III. Determinacao aos 12 meses de idade). *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:367.

1558. Silva, M. 1984. Pelagem defeituosa e alopecia relacionados a deficiencia de zinco e cobre, em caprinos. *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:368.
1559. Silva, M. 1984. Teores proteicos no sangue de caprinos ao nascimento e na lactacao. *Proc. Cong. Brasileiro de Med. Vet., Belem, Para* 19:369.
1560. Simplicio, A. A. 1985. Reproduction in three native genotypes of goats under two feeding-management systems in Northeast Brazil; and progesterone and luteinizing hormone profiles during the estrous cycle and seasonal anestrus in Spanish goats in the United States. Ph.D. Dissertation. Utah State University, Logan.
1561. Simplicio, A. A., E. A. P., Figueiredo, G. S., Riera, and F. A. M., Lima. 1982. Reproductive and productive performance of the undefined (SRD) genotype of goats under their traditional management systems of Northeast Brazil. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.349.
1562. Simplicio, A. A., G. S., Riera, W. C., Foote, and J. F., Nunes. 1981. Puberdade em femeas caprinas nativas no nordeste do Brasil. In *Simposio Nacional de Reproducao Animal, Belo Horizonte, Minas Gerais, Brazil*. Minas Gerais, Brazil: .
1563. Simplicio, A. A., G. S., Riera, E. A., Nelson, and J. F., Nunes. 1981. Puberdade em machos caprinos da Raca Moxoto. In *Simposio Nacional de Reproducao Animal, Belo Horizonte, Minas Gerais, Brazil*. Minas Gerais, Brazil: .
1564. Simplicio, A. A., G. S., Riera, E. A., Nelson, and K. P., Pant. 1983. Seasonal variation in the semen and testis characteristics of Brazilian Somali Rams in the hot semiarid climate of tropical Northeast Brazil. *Journal of Reproduction and Fertilization* 66:735-738.
1565. Simplicio, A. A., G. S., Riera, and J. F., Nunes. 1981. Ciclo estral e estro do ovelhas da racas Morada Nova, Santa Ines e Somalis. In *Simposia Nacional de Reproducao Animal, Belo Horizonte, Minas Gerais, Brazil*. Minas Gerais, Brazil: .
1566. Simplicio, A. A., G. S., Riera, and J. F., Nunes. 1982. Estrous cycle and period evaluation in undefined breed type (SRD) for goats in Northeast Brazil. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.310.

1567. Simplicio, A. A., G. S., Riera, J. F., Nunes, and W. C., Foote. 1981. Idade, Peso e Atividade Ovariana a Puberdade em Borregas das Racas Morada Nova, Santa Ines e Somalis. In *Simposio Nacional de Reproducao Animal, Belo Horizonte, Minas Gerais, Brazil*. Minas Gerais, Brazil: .
1568. Sinulingga, S. E., E., Romjali, and R. M., Gatenby. 1991. Oestrous cycle in non-pregnant ewes. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.30-33.
1569. Siregar, A. P., M., Sabrani, R. J., Petheram, and H. C., Knipscheer. 1983. The role of livestock in farming systems research for rural development in Indonesia. Proceedings Crop-Livestock Research Workshop, IRRI, Apr 1 25-28, pp. 210-230.
1570. Sitepu, P. 1985. Goat productivity in the province of North Sumatra: A. Birth weight, sex and mortality of kids in Galang Sub-district. *Ilmu dan Peternakan* 2:1-3.
1571. Sitepu, P. 1985. Goat productivity in North Sumatra: B. Body measurements and morphogenetical characteristics of local goats in Galang Sub-district. *Ilmu dan Peternakan* 2:5-8.
1572. Sitorus, M. 1982. Kebutuhan Kambing Lokal Akan Energi Dan Protein (Energy and Protein Requirements for Local Goats). M.S. Thesis. Bogor Agricultural Institute, Bogor, Indonesia.
1573. Sitorus, P., and Subandriyo. 1982. Javanese Thin-Tail Sheep characteristics in highland, medium and lowland areas. *Proceedings 2nd World Congress on Genetics Applied to Livestock Production, Madrid, Spain* 8:781-785.
1574. Sitorus, P., Subandriyo, and I., Inounu. 1985. A study of some aspects of reproduction of Javanese Thin-tailed and Javanese Fat-tailed sheep. *Proceedings of the 3rd AAAP Animal Science Congress* 1:435-437.
1575. Sitorus, P., Subandriyo, and E., Triwulanningsih. 1982. Performance traits of Indonesian goats. Proc. 3rd Int'l. Conf. on Goat Prod. and Dis., Tucson, AZ, p.538.
1576. Sitorus, P., B., Tiesnamurti, and Subandriyo. 1986. The effect of litter size on birth weight, weaning weight and some puberty traits. SR-CRSP Working Paper No. 70, Bogor, Indonesia.
1577. Sitorus-Silitonga, S. S. 1983. Evaluating forages. Digestibility studies of alfalfa and brome hay using sheep. M.S. Thesis. University of Minnesota, St. Paul.

1578. Smith, B. M., K. R., Pond, and L., Goode. 1986. Effect of breed on intake, passage, and fill during major production stages in the ewe. *Journal of Animal Science* 63:2.
1579. Smith, G. C., R. R., Riley, J. W., Savell, and M., Shelton. 1982. Yields of carcass and dress-off items and carcass quality-quantity measures for Angora and Spanish goats. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, pp.469-471.
1580. Smith, G. M. 1983. Simulation models for evaluating the management of ruminants in developing countries. In *Feed Information and Animal Production*, ed. G. E., Robards, and R. G., Packham. : Commonwealth Ag. Bureaux.
1581. Smith, G. M., A. B., Carles, H. J., Schwartz, H., Blackburn, F., Ruvuna, and T. C., Cartwright. 1982. Analysis and synthesis of small ruminant production systems. Proceedings of the SR-CRSP Kenya Workshop, p.41.
1582. Smith, P. F., F. R., Rurangirwa, and T. C., McGuire. 1988. Structural features of the extracellular polysaccharide from *Mycoplasma* sp., Strain F38. Seventh International Congress of the International Organization for Mycoplasmaology, Baden near Vienna, Austria.
1583. Smith, V. R., P. J., Burfening, and J. G., Berardinelli. 1990. Follicular numbers in ewes selected for low (L) and high (H) reproductive rate. *Proc. West. Sec. Amer. Soc. Anim. Sci.* 41:390-392.
1584. Snowden, G., M., Shelton, J. W., Bassett, and P., Thompson. 1982. The influence of castration and testosterone or zeranol implants on body weight and fiber production of Angora goats. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.528.
1585. Snowden, G., M., Shelton, and P., Thompson. 1986. Evaluation of Finn-Cross and Rambouillet ewes under Texas range conditions. *SID Research Digest* 2:31-35.
1586. Snowden, G. D., and M., Shelton. 1982. Selection and breeding schemes for sheep. Proceedings of the International Ranchers Roundup, Del Rio, TX, pp.366-372.
1587. Snowden, G. D., and M., Shelton. 1985. Factors affecting sale price of performance tested Rambouillet rams. *SID Research Digest* 2:6-10.



1588. Snyder, S. P., J. C., DeMartini, E., Ameghino, and E., Caletti. 1983. Coexistence of pulmonary adenomatosis and progressive pneumonia in sheep in the Central Sierra of Peru. *American Journal of Veterinary Research* 44:1334-1338.
1589. Soedjana, T. D. 1982. Sheep and goat markets during the Islamic Holiday "Idul Adha" in Bandung, Indonesia. SR-CRSP Working Paper No. 7, Indonesia.
1590. Soedjana, T. D. 1983. Pemasaran Ternak Domba Pada Periode Hari Raya Kurban Di Kota Madya Bandung (Sheep Marketing During the Islamic Holiday "Idul Kurban" in Kotamadya Bandung). *Ilmu dan Peternakan* 1.
1591. Soedjana, T. D. 1993. Direction of future small ruminant research and development in Indonesia. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1592. Soedjana, T. D., A. J., De Boer, and H. C., Knipscheer. 1988. Potential uses of commercial technologies for sheep and goat smallholders in Indonesia. *Small Ruminant Research* 1:249-258.
1593. Soedjana, T. D., and H. C., Knipscheer. 1982. Productivity of sheep under upland farming conditions in Sikawargi Village, District of Garut, West Java. SR-CRSP Working Paper No.6, Indonesia.
1594. Soedjana, T. D., and H. C., Knipscheer. 1983. Economic productivity aspects of sheep enterprise in Sukawargi Village, Cisurupan, District of Garut. *Ilmu dan Peternakan* 1.
1595. Soedjana, T. D., and H. C., Knipscheer. 1984. The National Goat Program for Rural Smallholders in Indonesia. ASPAC Ext. Bull. No. 211, Food and Fertilizer Tech. Center, Taipei, Taiwan, p.13-19.
1596. Soedjana, T. D., H. C., Knipscheer, and A. J., DeBoer. 1983. The impact of expanding flocksize on farm income of small ruminant enterprises in West Java. *Ilmu dan Peternakan* 1:147-150.
1597. Soedjana, T. D., H. C., Knipscheer, and Sugiyanto. 1983. Small Ruminant Marketing in East Java. SR-CRSP Working Paper No. 17, Indonesia.

1598. Soedjana, T. D., A., Priyanti, P. J., Ludgate, and H. C., Knipscheer. 1989. Marketing margin and pricing efficiency in the small ruminant production areas of Java. Three volumes, Working Papers Series, 1991, SR-CRSP/Balitnak, Bogor.
1599. Soewardi, B., H. C., Knipscheer, and M., Sabrani. 1983. The role of livestock in watershed projects in Java. SR-CRSP Working Paper No.22, Bogor, Indonesia.
1600. Soi, R., T., McGuire, P., Rwambo, F., Rurangirwa, J., DeMartini, and T., Crawford. 1993. Current Status of Capripoxvirus Multivalent Vaccine for Small Ruminants. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:139-142.
1601. Sci, R. K., F. R., Rurangirwa, T. C., McGuire, J. C., DeMartini, and T. B., Crawford. 1993. Expressions of Rift Valley Fever Virus (RVFV) glycoproteins in a recombinant capripoxvirus. Abstract W38-4. 1. International Congress of Virology, Glasgow, Scotland. August 8-13, 1993.
1602. Soi, R. K., F. R., Rurangirwa, T. C., McGuire, J. C., DeMartini, P., Rwambo, and T. B., Crawford. 1993. Expression of Rift Valley Fever Virus (RVFV) glycoproteins in a recombinant capripoxvirus. SR-CRSP Proceedings 11th Scientific Workshop, March 3-4, Nairbooi, Kenya.
1603. Soltero, S. 1986. Evaluation of short duration grazing in the oak-bunchgrass range, Chihuahua, Mexico. M.S. Thesis. Texas Tech University.
1604. Soltero, S., F., Bryant, and A., Melgoza. 1989. Standing crop patterns under short duration grazing in northern Mexico. *Journal of Range Management* 42:20-21.
1605. Soltero-Gardea, S. 1991. Phytomass dynamics and deer and cattle nutrition under different grazing practices in the Texas Coastal Bend. Ph.D. Dissertation. Texas Tech University, Lubbock.
1606. Sosebee, R. D. 1982. Fisiologia vegetal (Plant physiology). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
1607. Sosebee, R. D. 1982. Manejo de pastura (Management of pasture). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.

1608. Sosebee, R. D. 1982. Suelos (Soils). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
1609. Soto, A. 1982. Animal health. M.S. Thesis. San Marcos University, Lima.
1610. Soto, H. 1989. Respuesta comparativa en el engorde estabulado del ovino, la alpaca y la llama. B.S. Thesis. UNA-La Molina, Lima.
1611. Sousa, W. H., P. B., Leonardo, W. C., Silva, C. A., Zometa, and M., Shelton. 1986. Partial substitution of goat milk by fresh whey for early weaned dairy kids. *Proceedings of the IV International Conference on Goats, Brasilia 2:1374.*
1612. Sousa, W. H., C. A., Zometa, N. N., Barros, and T. W., Robb. 1984. Influencia do sistema de alimentacao no desmame precoce de cabritos de exploracao leiteira (Influence of feeding system on early weaning of dairy goats). *Annals, 21st Meeting, Brazilian Society of Zootecnia.*
1613. Sousa, W. H., C. A., Zometa, P. R. M., Leite, and M., Shelton. 1985. Alimentacao de ovinos Santa Ines com palma forrageira. *EMEPA Technical Bulletin, pp.1-9.*
1614. Souza Neto, J. de. 1981. Analise econometrico da oferta de caprinos e ovinos no Ceara, Brazil (An econometric analysis of sheep and goat supply in Ceara State, Brazil). M.S. Thesis. Dept. of Agricultural Economics, Federal University of Ceara, Fortaleza, Brazil.
1615. Spears, J. W., and T. P., Oscar. 1986. Influence of nickel on ruminal urease activity and performance of lambs fed low quality roughages. *Journal of Animal Science 63:448.*
1616. Spears, J. W., T. P., Oscar, S. R., Starnes, and R. W., Harvey. 1986. Factors affecting biological responses to nickel supplementation in ruminants. *Proceedings of the 5th International Symposium on Iodine and Other Trace Elements.*
1617. Spears, J. W., and L. J., Samsell. 1986. Relative availability of zinc in zinc methionine and zinc oxide for ruminants. *Journal of Animal Science 63:402.*
1618. Stanford, N. S., and R. R., Campbell. 1984. Some rules for social scientists conducting research in Third World Countries. *The Rural Sociologist 4:291-298.*

1619. Stiller, D., W. L., Goff, S. P., Shompole, L. W., Johnson, H., Glimp, F. R., Rurangirwa, J. R., Gorham, and T. C., McGuire. 1989. Dermacentor andersoni stiles: A natural vector of Anaplasma ovis lestoguard on sheep in Idaho. Proceedings of the Eighth National Veterinary Hemoparasite Disease Conference, St. Louis, Missouri, p. 183.
1620. Stobart, R. 1983. Genetic and phenotypic analysis of liveweight maturing patterns and their relationship to ewe productivity in Columbia, Rambouillet and Targhee sheep. Ph.D. Dissertation. Texas A&M University, College Station.
1621. Stobart, R. H. 1985. Measures of growth and reproductive efficiency in range ewes. *Proceedings of the Western Section, ASAS* 36:113-116.
1622. Stobart, R. H., J. D., Bassett, T. C., Cartwright, and R. L., Blackwell. 1986. An analysis of body weights and maturing patterns in Western Range Ewes. *Journal of Animal Science* 63:729-740.
1623. Stobart, R. H., J. W., Bassett, T. C., Cartwright, and R. L., Blackwell. 1986. An analysis of body-weight and maturing patterns in western range ewes. *Journal of Animal Science* 63:729-740.
1624. Stobart, R. H., R. L., Blackwell, T. C., Cartwright, and J. W., Bassett. 1987. Relationships between growth and productivity of Range Ewes. *Journal of Animal Science* 65:929-935.
1625. Stobart, R. H., R. L., Blackwell, T. C., Cartwright, and J. W., Bassett. 1988. Relationship between growth and productivity of range ewes. *Journal of Animal Science* 65:929-935.
1626. Stolz, D. R., Z., Muhayan, and S., Hidayat W. 1993. Small ruminant mineral nutrition in Indonesia. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1627. Subandriyo. 1984. Factors affecting survival of range sheep in the U.S. and characterization of sheep in Indonesia. M.S. Thesis. Montana State University, Bozeman.
1628. Subandriyo. 1984. Genetic and non-genetic factors associated with litter size in sheep: A literature review. SR-CRSP Working Paper No.35.

1629. Subandriyo. 1985. Sheep production in three villages in West Java. SR-CRSP Working Paper No. 60, Bogor, Indonesia.
1630. Subandriyo. 1985. Litter weight of Indonesian sheep under village and experiment station conditions. SR-CRSP Working Paper No. 45.
1631. Subandriyo. 1985. Survival rates of Indonesian sheep under experiment station conditions. SR-CRSP Working Paper No. 74.
1632. Subandriyo. 1993. The Small Ruminant CRSP in Indonesia 1980-1993: Achievements and Impact. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:57-66.
1633. Subandriyo, R. L., Blackwell, and P. J., Burfening. 1993. Genetic and phenotypic factors affecting lamb survival. *Montana AgResearch* Fall 1993:37.
1634. Subandriyo, and R. M., Gatenby. 1993. *Advances in small ruminant research in Indonesia: Proceedings of a workshop held at the Research Institute for Animal Production, Ciawi Bogor, Indonesia, August 3-4, 1993.* Bogor, Indonesia: Gaya Teknik.
1635. Subandriyo, G., Setiadi, and P., Sitorus. 1986. Ovulation rate and litter size of Indonesian goats. SR-CRSP Working Paper No. 73.
1636. Subandriyo, P., Sitorus, G. E., Bradford, and R. L., Blackbell. 1985. Growth characteristics of Indonesian sheep. *Proceedings of the 3rd AAAP Animal Science Congress* 1:318-320.
1637. Subandriyo, P., Sitorus, G. E., Bradford, and R. L., Blackwell. 1985. Growth characteristics of Indonesian sheep. SR-CRSP Working Paper No. 44.
1638. Sudaryanto, B., and E., Djamaludin. 1988. Detoksikasi sianida daun ubikayu dan efek kroniknya pada kambing. *Warta Penelitian dan Pengebangan Pertanian* 9:10.
1639. Sugiyanto. 1983. A production function for sheep and goat enterprises in West Javanese Farming Systems. SR-CRSP Working Paper No. 15, Bogor, Indonesia.
1640. Sumar, J. 1983. Studies on reproductive pathology in alpacas. M.S. Thesis. Dept. Obstetrics and Gynaecology, Fac. Vet. Med., Swedish Univ. Agr. Sci. (Uppsala Sweden) and IVITA, Universidad Nacional Mayor de San Marcos, Lima, Peru.

1641. Sumar, J. 1985. Reproductive physiology in South American Camelids. In *Genetics of reproduction in sheep*, ed. R. B., Land, and D. W., Robinson. : Butterworths.
1642. Sumar, J., W., Bravo, G. S., Riera, and W. C., Foote. 1986. Endocrine control of the estrous cycle in sheep in the Southern Altiplano of Peru. SR-CRSP Technical Report Series No. 71, pp.11.
1643. Suradisastra, D., and M. F., Nolan. 1983. Social aspects of small ruminant production: A comprehensive study of West Java, Indonesia. SR-CRSP Working Paper No.13, Bogor, Indonesia.
1644. Suradisastra, K. 1983. Social aspects of small ruminant production: A comparative study of West Java, Indonesia. M.S. Thesis. University of Missouri, Columbia.
1645. Suradisastra, K. 1983. Attitudes and values: Implications in developing animal farming in the upland area. The Garut case. *Ilmu dan Peternakan* 1:93-97.
1646. Suradisastra, K. 1984. Traditional small ruminant farmers: Consumption of animal products. (Case I: Upland villages). *Ilmu dan Peternakan* 1:189-192.
1647. Suradisastra, K. 1987. Farmers' perception of extension in Western Kenya. Ph.D., Agricultural Education Dissertation. University of Missouri, Columbia.
1648. Suradisastra, K., and H. C., Knipscheer. 1984. Regular research field hearings (RRFH): A discussion of the contribution of farmers' opinions to farming systems research. SR-CRSP Working Paper No. 38, Res. Institute for Anim. Production, Bogor.
1649. Suradisastra, K., H. C., Knipscheer, and M. F., Nolan. 1984. Regular research field hearings: Livestock farmers' responses to new technologies. SR-CRSP Working Paper No. 33, Indonesia.
1650. Suradisastra, K., and M. F., Nolan. 1982. Small ruminant production in the humid tropics: A sociological perspective. Proc. Rural Sociological Soc., San Francisco, California.
1651. Suradisastra, K., and M. F., Nolan. 1983. Consumption of animal products among traditional sheep farmers in two West Java villages. SR-CRSP Working Paper No. 16, Bogor, Indonesia.

1652. Suradisastra, K., and M. F., Nolan. 1983. Social aspects of small ruminant production: A comparative study of West Java, Indonesia. SR-CRSP Working Paper No. 13, Indonesia and SR-CRSP Technical Report No. 19, NTIS #PB8-4-192699.
1653. Suradisastra, K., and M. F., Nolan. 1983. Traditional sheep farming in Garut, West Java (Indonesia): A sociological perspective. *Ilmu dan Peternakan* 1:141-146.
1654. Suradisastra, K., and S., Wahyuni. 1990. The Significance of women in small scale sheep farming activities in West Java. Proceedings of the First national Workshop on Women in Rice Farming System in Indonesia, April 6, 1989, Central Research Institute for Food Crops and International Rice Research Institute, Agency for Agricultural Research and Development, Bogor, Indonesia, AARD, CRIFC, IRRI.
1655. Taaroufi, A. 1987. Production, valeur nutritive et exploitation des prairies a' base demedicago par des ovins de l'U.R.E.O. de had soualem (S.N.D.E.). B.S./M.S. Thesis. IAV Hassan II, Rabat, Morocco.
1656. Tajuddin, I., D. T., Chong, M. S., Abd. Samat, and L., Najib. 1990. Towards better understanding of managing commercial sheep projects. Proceedings of the 13th Annual Conference of the Malaysian Society of Animal Production, March 6-9, Malacca, Malaysia, pp. 9-12.
1657. Taki, H. 1992. Reponses aux effets de la privation d'eau et de nourriture chez la chevre noire marocaine et les brebis D'Man et Sardi. These de Doctorat Veterinaire Thesis. I.A.V. Hassan II, Rabat.
1658. Talavera, V. 1982. Contenido, variacion estacional y efectos de suplementacion mineral en pastural alto andinas (Content, seasonal variation, and effects of mineral supplementation on high Andean pastures). Proceedings of the Shortcourse, Manejo, y Mejoramiento de Pastizales Naturales, Lima, Peru.
1659. Tallam, S. K. 1985. Validation of the TAMU goat simulation model and application to goat production systems in Kenya. M.S. Thesis. Texas A&M University, College Station.
1660. Tallam, S. K., T. C., Cartwright, and C. D., Lu. 1987. Validation of TAMU goat simulation model for intensive dairy goat production. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1539.

1661. Tallam, S. K., T. C., Cartwright, C. D., Lu, P. J., Howard, and H. D., Blackburn. 1985. Validation of Kenya goat simulation model for application to dairy goat production. Proc. 4th Sr-CRSP Kenya Workshop, Kakamega, p.114.
1662. Tangendjaja, B., B., Santoso, and E., Wina. 1993. Protected fat: preparation and digestibility. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1663. Tapia, M. E. 1982. Clasificacion, evaluacion y condicion de los pastizales del sur del Peru (Classification, evaluation and condition of the pastures of Southern Peru). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
1664. Taylor, J. F., S., Davis, K, F., Ruvuna, F., Rurangirwa, E., Bhebhe, J., Kogi, T., McGuire, D., Jasmer, and R. M., Waruiru. 1993. Quantitative and Molecular Approaches to Genetic Improvement of the Kenya Dual Purpose Goat. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:169-182.
1665. Taylor, J. F., M. A., Tomaszewski, J. P., Walter, and F., Ruvuna. 1989. Genetic Grouping and Best Linear Conditionally Unbiased Prediction Incorporating Relationships. *Journal of Dairy Science* 72:30-31.
1666. Tazi, M. 1992. Effect du niveau azote du regime sur l'utilisation de l'azote et les performances d'agneaux croises D'Man x Sardi en croissance-engraissement. Memoire de 3eme cycle Agron Thesis. Hassan II. Inst. Agron. Vet. Rabat, Morocco.
1667. Tengerdy, R. P., D. L., Meyer, L. H., Lauerman, D. C., Lueker, and C. F., Nockels. 1983. Vitamin E enhances immunity to *Clostridium perfringens*, Type D, in sheep. *British Veterinary Journal*:139-147.
1668. Thahar, A. and R. R., Petheram. 1983. Ruminant feeding systems in West Java, Indonesia. *Agricultural Systems* 10:87-97.
1669. Thalauw, J. 1983. A summary of exploratory research on various socio-economic aspects of the goat/sheep production system in Central Java (1981-1982). *Indonesian Agricultural Research and Development Journal* 5:3-4.



1670. Thomas, D. L., and G. E., Bradford. 1991. Evaluation of potential for hair sheep in integrated tree crop and small ruminant production systems in the humid tropics. Proc. Workshop on Integrated Tree Cropping and Small Ruminant Production Systems (IPS), Medan, North Sumatra, September 1990.
1671. Thomas, N. 1982. Constraints to improving small ruminant production on multi-enterprise small holdings in the humid tropics. Proc. 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.292.
1672. Thomas, N., W., Mathius, and M., Sabrani. 1982. Small ruminant production in West Java: Methodology and initial results. In *Livestock in Asia*, ed. J. C., Fine, and R. G., Lattimore. Ottawa, Canada: International Development Research Center. (N)
1673. Thomas, N., and M., Rangkuti. 1983. Small ruminant production in the small-farm perspective. SR-CRSP Working Paper No. 10, Bogor, Indonesia.
1674. Thomas, N., M., Rangkuti, W. L., Johnson, and G. E., Bradford. 1983. A small-farm sheep and goat production model for Indonesian conditions. SR-CRSP Working Paper No. 27, Bogor, Indonesia.
1675. Tibary, A., S., Manar, R., Boukhliq, and M., Adnani. 1988. Factors affecting estrus synchronization in two Moroccan breeds of sheep (Timahdite and D'Man). Proc. 11th Intern. Congr. Reprod. and A.I. Vol. 4., Dublin, Ireland.
1676. Tiesnamurti, B. 1987. Inheritance of prolificacy in Javanese Thin Tail Sheep. M.S. Thesis. University of California, Davis.
1677. Tiesnamurti, B., I., Inounu, P., Sitorus, and Subandriyo. 1985. Pre-weaning performance of Javanese lambs. SR-CRSP Working Paper No.42.
1678. Torres, R., and I. G., Unchupaico. 1984. Efectos de cruzamiento de carneros targhee y targhee finnish por junin. B.S. Thesis. Universidad Nacional del Centro del Peru, Huancayo.
1679. Tothill, J. C., J. N. G., Hargreaves, and R. M., Jones. 1978. Botanal-A comprehensive sampling and computing procedure for estimating pasture yield and composition (I. Field Sampling). Tropical Agronomy Technical Memorandum No. 8, Commonwealth Scientific and Industrial Research Organization (CSIRO), Australia, 14 pp.

1680. Tovar, A. 1990. Comparative intake of oat straw in llama, alpaca and sheep. B.S. Thesis. Huancayo University, Junin.
1681. Traldi, A. de S. 1983. Aspectos fisicos e morfologicos de semen de caprinos da Raca Moxoto, da puberdade a maturidade sexual. M.S. Thesis. UFMG, Belo Horizonte, MG, Brazil.
1682. Trowbridge, D. D., P. J., Burfening, and D. D., Kress. 1983. Early growth traits related to subsequent most probable producing ability. *Journal of Animal Science* 57:169.
1683. Tulley, D. 1982. Libido and scrotal circumference of rams as affected by season of the year, altered photoperiod and ram lambs of different breeds and selection lines. M.S. Thesis. Montana State University, Bozeman.
1684. Tulley, D., and P. J., Burfening. 1981. Libido and scrotal circumference in rams as affected by changes in photoperiod. *Proceedings of the Western Section, ASAS* 32:246.
1685. Tulley, D., and P. J., Burfening. 1981. Some factors affecting the sexual behavior of ram lambs. Animal and range research highlights. Montana Agricultural Experimental Station Research Report No. 180, pp.56-59.
1686. Tulley, D., and P. J., Burfening. 1981. Effect of seasons and artificial photoperiods on ram libido. Animal and range research highlights. Montana Agricultural Experimental Station Research Report No.180, pp.63-66.
1687. Tulley, D., and P. J., Burfening. 1984. Libido and scrotal circumference of rams as affected by season of the year and altered photoperiod. *Theriogenology* 20:435-448.
1688. Valdivia, C. 1983. A comparative analysis of capital accumulation in two Peruvian Sheep associative enterprises: Factors enhancing and restricting their development. M.S. Thesis. University of Missouri, Columbia.
1689. Valdivia, C. 1984. Acumulacion y desarrollo de cooperativas ovejeras (Accumulation and development in sheep cooperatives). Proceedings of the 7th Annual Science Meeting of the Peruvian Association of Animal Production, Lima, UNA Abstract 126.

1690. Valdivia, C. 1985. Factors affecting the process of accumulation in Peruvian sheep producer cooperatives: A case study of CAP El Diezmo Palcan. SR-CRSP Technical Report No. 52, p.21; Department of Economics and Planning, UNA, Lima and Winrock International.
1691. Valdivia, C. 1985. Capital accumulation and development of sheep production co-operatives: SAIS Ramon Castilla. SR-CRSP Technical Report Series 56.
1692. Valdivia, C. 1992. *Sustainable Crop-Livestock Systems for the Bolivian Highlands: Proceedings of an SR-CRSP Workshop*. Columbia, MO: University of Missouri-Columbia.
1693. Valdivia, C. 1993. Return to Investments in Small Ruminant Research in Indonesia: The SR-CRSP in West Java. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:45-56.
1694. Valdivia, R. R. 1982. Factores ambientales y requerimientos nutricionales del ganado en pastoreo (Environmental factors and nutritional requirements of animals on pasture). Proceedings of the Shortcourse, Manejo y Mejoramiento de Pastizales Naturales, Lima, Peru.
1695. Valenza, D. 1989. Digestibility of crop residues in llama, alpaca and sheep. B.S. Thesis. UNSAAC, Cuzco.
1696. Valer, R., D., Martinez, and B., Quijandria. 1984. Aspectos economicos de los sistemas de produccion de ganado caprino en los departamentos de Piura y Lambayeque (Economic aspects of goat production systems in Piura and Lambayeque States). Proceedings of the 7th Annual Science Meeting of the Peruvian Association of Animal Production, UNA, Lima, Abstract 107.
1697. Vallenas, G. 1990. Rate of digestion in alpaca of crop residues. B.S. Thesis. San Marcos University, Lima.
1698. van Eys, J. E. 1985. On-farm trial design. In *Research Methodology for Livestock On-farm Trials*, ed. T. L., Nordblom, A., Hamid, and G. R., Potts. : ICARDA-IDRC.
1699. van Eys, J. E., H. R., Gaskins, and W. L., Johnson. 1986. Effect of type and level of protein supplementation on the utilization of low quality Bermuda grass hay by sheep and goats. *Journal of Animal Science* 63:316.

1700. van Eys, J. E., H. R., Gaskins, and W. L., Johnson. 1987. Kinetics of digestion and thyroid status in goats fed protein supplemented roughage diets. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1523.
1701. van Eys, J. E., and W. L., Johnson. 1986. Tree leaves and agricultural byproducts as supplements to low quality roughage diets for sheep and goats. "Goats and Sheep in Northeast Brazil.", *Proceedings of the SR-CRSP Workshop, EMBRAPA-CNPC, Sobral CE (Brazil)*.
1702. van Eys, J. E., I. W., Mathius, P., Pongsapan, and W. L., Johnson. 1985. Foliage of tropical legume trees as low level supplement to Napier grass diets for growing goats. *Journal of Animal Science* 61:331.
1703. van Eys, J. E., I. W., Mathius, P., Pongsapan, and W. L., Johnson. 1986. Foliage of the tree legumes *Gliricida*, *Leucaena* and *Sesbania* as supplements to Napier grass diets for growing goats. *Journal of Agricultural Science, Cambridge* 107:227-233.
1704. van Eys, J. E., I. W., Mathius, H., Pulungan, and W. L., Johnson. 1983. Feeding value of fresh and ensiled tropical grasses for growing sheep. SR-CRSP Working Paper No. 26, Indonesia.
1705. van Eys, J. E., I. W., Mathius, H., Pulungan, M., Rangkuti, and W. L., Johnson. 1983. Forage composition of sheep and goat diets in West Java. SR-CRSP Working Paper No. 24, Indonesia.
1706. van Eys, J. E., I. W., Mathius, H., Pulungan, M., Rangkuti, and W. L., Johnson. 1984. Small ruminant production in West Java; Results of one year monitoring by the nutrition village monitoring program. SR-CRSP Working Paper No. 34.
1707. van Eys, J. E., I. W., Mathius, N., Thomas, M., Rangkuti, and W. L., Johnson. 1983. Forage composition of hand-fed sheep and goat diets in West Java. SR-CRSP Working Paper No. 24, Bogor, Indonesia.
1708. van Eys, J. E., M., Rangkuti, and W. L., Johnson. 1987. Feed resources and feeding systems for small ruminants in South and Southeast Asia. In *Small Ruminant Production Systems in South and Southeast Asia*, ed. C., Devendra. Ottawa, Canada: International Development Research Centre.

1709. van Eys, J. E., S., Silitonga, I. W., Mathius, and W. L., Johnson. 1985. On-farm trials of mineral supplementation for small ruminants in West Java, Indonesia. In *Research Methodology for Livestock On-farm Trials*, ed. T., Nordblom, K., Kealey-Valliere, G., Potts, and E., Thompson. : IDRC, ICARDA.
1710. Van Soest, P. J. 1982. *Nutrition Ecology of the Ruminant*. Corvallis, Oregon: O&B Books, Inc.
1711. Vargas, C., and S., Scholz. 1993. Gender consideration in livestock development. International Telecomputer Conference sponsored by IDRC.
1712. Velarde, R. 1984. Precios al productor vs precios de exportacion el la fibra de alpaca (Producer prices vs export prices for alpaca fiber). Proceedings of the 7th Annual Science Meeting of the Peruvian Association of Animal Production, UNA, Lima, Abstract 105.
1713. Velarde, R. 1984. Agentes y mecanismos de comercializacion en la fibra de alpaca (Agents and mechanisms in alpaca fiber marketing). Proceedings of the 7th Annual Science Meeting of the Peruvian Association of Animal Production, UNA, Lima, Abstract 106.
1714. Velasco, J., N., Condorena, D. D., Kress, P. J., Burfening, and R. L., Blackwell. 1981. Breed characteristics, color and weight inheritance of alpaca. *Journal of Animal Science* 53:156.
1715. Velasco, J. M. 1981. Indice de herencia de peso vivo al nacimiento. Proceedings of the Asoc. Peruana de Prod. Animal, Ayacucho, Peru.
1716. Vidal, H., T., Cordero, R., Cochran, and S., Calderon. 1983. Evaluacion de parametros digestivos y del consumo voluntario de residuos de cosecha en ganado caprino. SR-CRSP Technical Report No. 21.
1717. Vilca, R. V., and J., Astorga Neira. 1984. Soil-plant relationships on high altitude rangelands of Southern Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 1, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1718. Villafane, F., and J. C., DeMartini. 1991. Clasificacion de celulas neoplasticas en casos espontaneos e inducidos del carcinoma pulmonar ovino. *Revista Acovez* 15:5-9.

1719. Villena, F. 1987. Nutrition of goats grazing sand shinnery oak (*Quercus havardii*) ranges in west Texas. X.S. Thesis. Texas Tech University, Lubbock.
1720. Villena, F., and J. A., Pfister. 1988. Forage intake and nutrition of Angora and Spanish goats foraging sand shinnery oak (*Quercus havardii*). In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
1721. Villena, F., J. A., Pfister, C., Aguilar, B. E., Dahl, and M., Maiga. 1988. Diet selectivity in goats foraging sand shinnery oak (*Quercus havardii*) in the West of Texas. In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
1722. Villena, F., J. A., Pfister, and F. C., Bryant. 1988. Nutritive value and palatability of sand shinnery oak (*Quercus havardii*) for goats. In *Investigaciones sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 4, ed. F., San Martin, and F. C., Bryant. Lubbock, TX: Texas Tech University.
1723. Vivanco, H. W., W. C., Foote, C., Novoa, G., Sides, G. S., Riera, H., Cardenas, and J., Camacho. 1986. Estrus and ovulation in Criollo, Corriedale and Junin Sheep in the Central Sierra of Peru. SR-CRSP Technical Report Series No. 65, pp.24.
1724. Vivanco, H. W., W. C., Foote, C., Novoa, G., Sides, G. S., Riera, H., Cardenas, and J., Camacho. 1986. Fertility of Criollo and Junin female sheep in the Central Sierra of Peru. SR-CRSP Technical Report Series No. 66, pp.13.
1725. Vivanco, H. W., W. C., Foote, G. S., Riera, H., Cardenas, and J., Camacho. 1986. Hormone therapy to induce estrus and ovulation in sheep during the anestrous season. SR-CRSP Technical Report Series No. 68, pp.11.
1726. Vivanco, H. W., W. C., Foote, G. S., Riera, C., Novoa, J., Camacho, H., Cardenas, and V., Alarcon. 1986. Postpartum interval (PPI) in sheep lambing during the breeding and anestrous seasons in the high Central Sierra of Peru. SR-CRSP Technical Report Series No. 67, pp.11.

1727. Vivanco, H. W., C., Morales, and E., Nolte. 1982. Comparison between artificial insemination with frozen semen and natural mating in Criollo goats in the North Coast of Peru under Range Conditions. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.537.
1728. Vivanco, H. W., E. A., Nelson, W. C., Foote, G., Sides, C., Novoa, H., Cardenas, J., Camacho, and G. S., Riera. 1986. Puberty in Corriedale, Criollo and Junin male sheep in the Central Sierra of Peru. SR-CRSP Technical Report Series No. 69, pp.15.
1729. Vivanco, H. W., E. A., Nelson, W. C., Foote, G., Sides, C., Novoa, H., Cardenas, J., Camacho, and G. S., Riera. 1986. Scrotal circumference and semen characteristics of Criollo, Corriedale and Junin rams in the High Central Sierra of Peru. SR-CRSP Technical Report Series No. 70, pp.16.
1730. Vivanco, W. 1983. Evaluation of the age, breed, month, period of the year and season influences on the reproductive capabilities of rams at high altitude conditions in the Peruvian Highlands. M.S. Thesis. California State Polytechnic University, Pomona.
1731. Wachira, J. W., and R. S., Shavulimo. 1986. Health problems of goats in Western Kenya. Proceedings of the SR-CRSP Kenya Workshop, Kabete, Kenya.
1732. Waghela, S. D. 1989. Demonstration of a protective immune response against heartwater by immunization with surface antigens of *Cowdria ruminantium*. Ph.D. Dissertation. Washington State University, Pullman.
1733. Waghela, S. D., F. R., Rurangirwa, S. M., Mahan, C. E., Yunker, T. B., Crawford, A. F., Barbet, M. J., Burr ridge, and T. C., McGuire. 1991. A cloned DNA probe identifies *Cowdria ruminantium* in *Amblyomma variegatum* ticks. *Journal of Clinical Microbiology* 29:2571-2577.
1734. Wahyuni, S. 1990. Peranan Wanita Dalam Usahatam Ternak Keluarga, Cabang Ruminisia Kecil: Studi Kasus di Desa Srogol, Kecamatan Cijeruk, Kabupaten Bogor, Popinsi Java Barat (Women's Roles in Household Farming Systems, with a Focus on Small Ruminants: A Case Study in Srogol Village, Subdistrict of Cijeruk, Bogor, West Java). M.S., Rural Sociology Thesis. Fakultas Pascasarjana, Institut Pertanian Bogor.

1735. Wahyuni, S., and R. M., Gatenby. 1985. The role of women in small ruminant production - A case study in Ciburuy, West Java. Animal Science Congress, Seoul, Korea, and SR-CRSP Working Paper No. 50, Bogor.
1736. Wahyuni, S., and M., Gaylord. 1985. Womens's role in small ruminant production: Motivations, perceptions and problems. SR-CRSP Working Paper No. 57.
1737. Wahyuni, S., S., Kedi, and E., Juarini. 1983. Women's involvement in small ruminant production in Cirebon, West Java. SR-CRSP Working Paper No. 14, Bogor, Indonesia.
1738. Wahyuni, S., and H. C., Knipscheer. 1985. Women's decision-making role in small ruminant production: The conflicting views of husband and wives. SR-CRSP Working Paper No. 43, Res. Institute for Ani. Production, Bogor.
1739. Wahyuni, S., H. C., Knipscheer, and M., Gaylord. 1987. Women's decision-making role in small ruminant production: The conflicting views of husbands and wives. *Agricultural Administration and Extension* 24:91-98.
1740. Wahyuni, S., H. C., Knipscheer, and M. F., Nolan. 1983. Family division of labor in small ruminant production: A comparison of the views of husbands and wives. SR-CRSP Working Paper No. 34.
1741. Wahyuni, S., and P. J., Ludgate. 1990. Dissemination of small ruminant production information in OPP villages in the Bogor district of West Java. Paper presented at the 13th Annual Malaysia Society for Animal Production Conference 1990 (March), Malacca, Malaysia.
1742. Wahyuni, S., P. J., Ludgate, and K., Suradisastra. 1990. Group dynamics study with Outreach Pilot Project farmers. Paper presented at Asian Farming System Symposium, November, 1990, Bangkok, Thailand.
1743. Wahyuni, S., A., Suparyanto, Isbandi, and R. M., Gatenby. 1993. Re-evaluation of Outreach Pilot Project. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1744. Wahyuni, S., K., Suradisastra, and E., Juarini. 1983. Women's involvement in small ruminant production in Cirebon, West Java. SR-CRSP Working Paper No. 14, Indonesia.



1745. Wahyuni, S. 1992. "The Sociology of animal Health: A comparison of knowledge between women and men; recent advances in animal production". *Proc. of the 6th AAP Anim. Sci. Congress. III, AHAT, Bangkok. Nov 23-28, 1992:85.*
1746. Wahyuni, S. 1992. "Women focused strategy in increasing small ruminant production". *Proc. of the 6th AAP Anim. Sci. Congress. III, AHAT, Bangkok. Nov 23-28, 1992:84.*
1747. Wahyuni, S. 1993. Gender issues for small ruminant development. In *Advances in Sustainable Small Ruminant - Tree Cropping Integrated Systems*, ed. S., Sivraj, P., Agamuthu, and T., Mukherjee. Kuala Lumpur, Malaysia: Institute of Advanced Studies.
1748. Wahyuni, T. H., P., Widyaningrum, and Z., Siregar. 1993. Comparison of the performance of local and virgin island crossbred lambs in an oil palm plantation. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1749. Waldron, J. C., R. M., Gatenby, P., Sitorus, and Subandriyo. 1985. Growth rates of lambs in villages in West Java. SR-CRSP Working Paper No. 67, Bogor, Indonesia.
1750. Wan Mohamed, W. E. 1977. Utilization of ground vegetation in rubber plantations for animal rearing. Proceedings of the Rubber Research Institute of Malaysia, Planter's Conference, October 17-19, Kuala Lumpur, Malaysia, pp. 265-272.
1751. Wan Mohamed, W. E. 1986. Integration of small ruminants with rubber and oil palm cultivation in Malaysia. Small Ruminant Production Systems in South and Southeast Asia, Proceedings of a Workshop, October 6-10, Bogor, Indonesia, pp. 239-256.
1752. Warren, L. 1981. Diets of various breeds of sheep and goats grazing in common on selected plant communities in West Texas. M.S. Thesis. Angelo State University, San Angelo, TX.
1753. Warren, L., and M., Shelton. 1984. Genetic influence on diet selectivity of ruminants. *Proceedings of the 2nd World Congress on Sheep and Beef Cattle Breeding 2:1-6.*

1754. Warren, L., M., Shelton, and D. N., Ueckert. 1983. Genetic influence on foraging behavior (diet selection) of ruminants (sheep and goats). SR-CRSP Technical Report No. 32, NTIS #PB8-4-188895.
1755. Warren, L., D., Ueckert, and M., Shelton. 1982. Diet selectivity of various types of goats and sheep under Texas (USA) conditions. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.519.
1756. Warren, L., D. N., Ueckert, M., Shelton, and A. D., Chamrad. 1984. Spanish goat diets on mixed-brush rangeland in the South Texas Plains. *Journal of Range Management* 37:340-342.
1757. Warren, L. E., D. N., Ueckert, and J. M., Shelton. 1984. Comparative diets of Rambouillet, Barbado, and Karakul sheep and Spanish and Angora goats. *Journal of Range Management* 37:172-179.
1758. Waruiru, R. M., F. N., Karanu, E. J., Gichanga, S., Mkuu, B. A. J., Mwandotto, F., Ruvuna, J. F., Taylor, D. P., Jasmer, F. R., Rurangirwa, and T. C., McGuire. 1992. Prevalence of gastrointestinal nematodes, coccidia and lungworms in a goat herd at Ol'magogo, Naivasha. Proceedings of the SR-CRSP Kenya Workshop, Nairobi, Kenya.
1759. Waruiru, R. M., F. N., Karanu, B. A. J., Mwandotto, F., Ruvuna, E. J., Gichanga, J. F., Taylor, D., Jasmer, F., Rurangirwa, and T. C., McGuire. 1991. Evidence of resistance to *Haemonchus contortus* infection in goats on artificial challenge. Proc. 9th annual SR-CRSP workshop, Nairobi, March, 1991.
1760. Waruiru, R. M., F. R., Rurangirwa, D. P., Jasmer, T. C., McGuire, J. M., Nginyi, P. M., Thimbu, F., Ruvuna, and T., Cartwright. 1989. Resistance to *Haemonchus contortus* infection in goats on artificial infection: Preliminary findings. SR-CRSP Kenya Workshop, Kabete, Kenya, February 1989. pp.37-45.
1761. Welch, B. L., H., Narjisse, and E. D., McArthur. 1982. *Artemisia Tridentata* Monoterpenoid effect on ruminant digestion and forage selection. In *Aromatic Plants: Basic and Applied Aspects*, ed. N., Margaris, A., Koedam, and D., Vohou. The Hague: Martinus Nijhoff, Publishers.

1762. Wescott, R., and B., LeaMaster. 1982. Efficacy of Ivermectin against naturally and experimentally induced nematodiasis in sheep. *American Journal of Veterinary Research* 43:531-533.
1763. West, T. L. 1981. Alpaca production in Puno, Peru. SR-CRSP Technical Report No. FIS #PB8-4-193770.
1764. Whisenant, S. G., D. N., Ueckert, and J. E., Huston. 1985. Evaluation of selected shrubs for arid and semi-arid game ranges. *Journal of Wildlife Management* 49:529.
1765. Whittier, J. C. 1981. Production of cattle and sheep under continuous and rotational grazing systems on high elevation summer range. M.S. Thesis. Utah State University, Logan.
1766. Wilcox, B. 1982. Plant communities and soils of the Central Andes of Peru. M.S. Thesis. Texas Tech University, Lubbock.
1767. Wilcox, B. 1984. The Puna-high elevation grassland of the Andes. *Rangelands* 6:99-101.
1768. Wilcox, B. P., B. L., Allen, and F. C., Bryant. 1988. Selected properties of soils in the high Andean Puna of Central Peru. *Geoderma* 42:79-94.
1769. Wilcox, B. P., and F. C., Bryant. 1984. Plant communities of the Central Andes of Peru. In *Investigacion sobre pastos y forrajes de Texas Tech University en el Peru*, vol. 1, ed. L. C., Fierro, and R., Farfan. Lubbock, TX: Texas Tech University.
1770. Wilcox, B. P., and F. C., Bryant. 1987. An evaluation of range condition on one range site in the Andes of Central Peru. *Journal of Range Management* 40:41-45.
1771. Wilcox, B. P., F. C., Bryant, and B. L., Allen. 1986. Grassland communities and soils on a high elevation rangeland of Central Peru. *Phytologia* 61:231-250.
1772. Williams, E. S., J. C., DeMartini, and S. P., Snyder. 1985. Lymphocyte blastogenesis, complement fixation and fecal culture as diagnostic tests for paratuberculosis in North American wild ruminants and domestic sheep. *American Journal of Veterinary Research* 46:2317-2321.

1773. Williams, R. J., A. P., Knight, J. A., Smith, F. D., Boudinot, J. C., DeMartini, and J. E., Dahlberg. 1989. Preliminary pharmacokinetics of 2',3'-dideoxycytidine in neonatal goats. *Journal of Veterinary Pharmacology and Therapeutics* 12:334-339.
1774. Willingham, T., M., Shelton, and J. W., Bassett. 1984. Fleece quality as affected by britch removal. *SID Research Digest* 1:26.
1775. Wilson, A., B. G., Adiwinata, and R., Gatenby. 1993. Studies on the Epidemiology and Control of Important Diseases fo Sheep at Sungei Putih, North Sumatra. *Proceedings Small Ruminant Workshop; San Juan, Puerto Rico* 1:29-32.
1776. Wilson, A. J., I., Carmichael, R. M., Gatenby, M., Hutaaruk, and E., Romjali. 1991. Helminth parasitism in sheep grazing in rubber plantation in North Sumatra. Annual Report, SR-CRSP Sungai Putih, North Sumatra, Indonesia, pp.47-49.
1777. Wina, E., J., Adnan, and B., Tangendjaja. 1993. Coumarin in *Gliricidia Sepium*: The effect of drying, its In Vitro degradation and its effect on In Vitro digestibility. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1778. Wina, E., S., Sitorus, Y., Tarigan, H., Angkoso, S., Hasbi, I., Sutikno, and B., Tangendjaja. 1993. Screening of secondary compounds in tree and creeping legumes. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1779. Wina, E., I., Yuliati, Y., Tarigan, and B., Tangendjaja. 1993. Reduction in In Vitro digestibility of Elephant Grass by methanol extracts from tree legumes. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.
1780. Wodzicka-Tomaszewska, M., and I. M., Mastika. 1993. Effects of feeding molasses-urea blocks on growth rate and onset of puberty in Ettawa-cross goats. In *Advances in Small Ruminant Research in Indonesia*, ed. Subandriyo, and R. M., Gatenby. Ciawi-Bogor, Indonesia: Research Institute for Animal Production.

1781. Wright, H. J., D. S., Adams, and F. J., Trigo. 1983. Meningoencephalitis after hot-iron disbudding of goat kids. *Veterinary Medicine/Small Animal Clinician* 4:599-601.
1782. Yabann, W. K. 1984. Plant monoterpenoids as factors in diet selection and grazing behavior of sheep. M.S. Thesis. Utah State University, Logan.
1783. Yazman, J. A. 1979. Economics of commercial dairy goat milk production in Central Arkansas. Proceedings of the 1979 California Dairy Goat Day, University of California, Davis, CA.
1784. Yazman, J. A. 1980. Rajas caprinas, alimentacion y produccion de leche en los Estados Unidos. Proc. Primer Encuentro Int'l. para Impulsar a Produccion de Leche de Cabra, Mexico, Diego Palacio, Diego, Mexico.
1785. Yazman, J. A., and C. H., Mannasmith. 1982. Bioeconomics of commercial dairy goat milk production in Central Arkansas. Proceedings of the 3rd International Conference on Goat Production and Disease, Tucson, AZ, p.290.
1786. Yazman, J. A., L., Turillo, and H. A., Fitzhugh. 1980. Systems of feedings preweaning dairy goat kids. Proceedings of the California Dairy Goat Day, University of California, Davis, CA, pp.42-52.
1787. Yunker, C. E., S. M., Mahan, S. D., Waghela, T. C., McGuire, F. R., Rurangirwa, A. F., Barbet, and L. A., Wassink. 1993. Detection of *Cowdria ruminantium* by means of a DNA probe, pCS20 in infected bont ticks, *Amblyomma hebraeum*, the major vector of heartwater in Southern Africa. *Epidemiology and Infection* 110:95-104.
1788. Zimmerman, G. L., L. W., Jen, J. E., Cerro, K. L., Farnsworth, and R. B., Wescott. 1982. Diagnosis of *Fasciola Hepatica* infections in sheep by an enzyme-linked immunosorbent assay. *American Journal of Veterinary Research* 43:2097-2100.
1789. Zometa, C. A., L. F. D., Coelho, M., Shelton, and W. H., Sousa. 1986. Performance of dairy purpose young female goats fed urea and molasses during extended drought periods in Northeast Brazil. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1385.

1790. Zometa, C. A., W. C., da Silva, M., Shelton, W. H., Sousa, and E. A., Figueiredo. 1986. Response of dairy purpose and meat type kids to different management strategies. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1382.
1791. Zometa, C. A., P. R., de Leite, and W. H., da Sousa. 1985. Características morfológicas das cabras de aptidão leiteira. EMEPA Document No. 6.
1792. Zometa, C. A., A. A. O., Fernandes, L. R. T., Melo, F. H., Machado, and M., Shelton. 1986. General carcass characteristics of native kids and lambs raised in confinement. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1384.
1793. Zometa, C. A., P. R. M., Leite, M., Shelton, M. G. G., Cunha, M. D. F., Silva, L. F., Dantas Coelho, and W., da Silva Correia. 1985. Manejo alimentare de ovinos e caprinos. EMEPA Technical Bulletin, pp.1-31.
1794. Zometa, C. A., P. R. M., Leite, M., Shelton, R., Lewis, and W. H., Sousa. 1986. The response of lactating native and exotic breeds of dairy goats to complete rations involving varying levels of urea and two energy sources (Algaroba pods vs. corn) in semi-arid Brazil. *Proceedings of the IV International Conference on Goats, Brasilia* 2:1390.
1795. Zometa, C. A., A., Rodrigues, J. M., Shelton, and P. R. M., Leite. 1983. Effect of energy and nitrogen supplementation on the performance of dairy goat replacements grazing on native pasture in Northeast Brazil. *Journal of Animal Science* 57:300.

## KEYWORD INDEX

### BOLIVIA

The numbers listed below correspond to the reference number in the alphabetical listing. This index is organized by country, programs, and participating institutions.

#### **BOLIVIA (complete list)**

109, 232, 237, 447, 476, 586, 598, 638, 721, 734, 735, 978, 979, 980, 981, 982, 983, 1000, 1150, 1165, 1166, 1177, 1214, 1414, 1433, 1439, 1456, 1457, 1458, 1459, 1605, 1692, 1711

#### **BOLIVIA: ECONOMICS**

721, 1165, 1166, 1456, 1457, 1458, 1459, 1711

#### **BOLIVIA: PRODUCTION SYSTEMS**

109, 232, 476, 586, 598, 638, 978, 979, 980, 981, 982, 983, 1000, 1150, 1177, 1214, 1605

#### **BOLIVIA: RANGE MANAGEMENT**

109, 232, 447, 476, 586, 598, 638, 978, 979, 980, 981, 982, 983, 1000, 1150, 1177, 1214, 1433, 1439, 1605

#### **BOLIVIA: SOCIOLOGY**

109, 476, 586, 598, 638, 734, 735, 978, 979, 981, 982, 983, 1000, 1177, 1214, 1414, 1692

#### **BOLIVIA: TEXAS TECH UNIVERSITY**

232, 237, 1150, 1433, 1439, 1605

#### **BOLIVIA: UNIVERSITY OF MISSOURI-COLUMBIA**

109, 476, 586, 598, 638, 734, 735, 978, 979, 980, 981, 982, 983, 1000, 1177, 1214, 1414, 1692

#### **BOLIVIA: WINROCK INTERNATIONAL**

721, 1165, 1166, 1456, 1457, 1458, 1459, 1711

## KEYWORD INDEX

### BRAZIL

The numbers listed below correspond to the reference number in the alphabetical listing. This index is organized by country, programs, and participating institutions.

#### BRAZIL (complete list)

1, 10, 11, 31, 51, 52, 53, 54, 69, 70, 71, 72, 78, 79, 80, 81, 82, 83, 84, 85, 110, 117, 131, 139, 140, 193, 207, 208, 209, 210, 211, 212, 213, 225, 227, 228, 262, 263, 264, 265, 266, 267, 268, 275, 287, 288, 333, 334, 342, 345, 347, 348, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 407, 412, 414, 415, 416, 417, 427, 450, 461, 462, 463, 464, 465, 492, 493, 494, 495, 496, 497, 498, 499, 551, 558, 561, 573, 593, 605, 608, 609, 610, 611, 617, 639, 641, 642, 643, 644, 645, 646, 647, 648, 657, 658, 659, 661, 662, 663, 664, 666, 667, 682, 694, 700, 701, 739, 740, 741, 742, 743, 744, 745, 747, 748, 777, 778, 779, 780, 781, 782, 783, 800, 802, 803, 804, 805, 806, 807, 808, 809, 814, 816, 831, 849, 850, 851, 852, 865, 872, 886, 894, 898, 899, 900, 901, 904, 905, 961, 993, 994, 1003, 1009, 1019, 1020, 1063, 1066, 1067, 1068, 1069, 1070, 1086, 1089, 1097, 1098, 1123, 1124, 1125, 1149, 1162, 1182, 1183, 1184, 1187, 1188, 1189, 1190, 1191, 1212, 1216, 1217, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1247, 1248, 1249, 1300, 1301, 1302, 1317, 1336, 1337, 1389, 1390, 1443, 1447, 1448, 1449, 1450, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1550, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1578, 1579, 1584, 1585, 1586, 1587, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1624, 1681, 1699, 1701, 1752, 1753, 1754, 1755, 1756, 1757, 1761, 1764, 1765, 1774, 1782, 1789, 1790, 1791, 1792, 1793, 1794, 1795

#### BRAZIL: ANIMAL HEALTH

1, 10, 11, 110, 207, 208, 209, 210, 211, 212, 213, 333, 334, 345, 412, 414, 415, 416, 809, 1162, 1443, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559

#### BRAZIL: ECONOMICS

69, 70, 71, 72, 342, 389, 392, 393, 394, 395, 396, 397, 398, 641, 642, 643, 645, 646, 647, 648, 814, 1614

#### BRAZIL: NORTH CAROLINA STATE UNIVERSITY

31, 51, 52, 78, 79, 80, 81, 83, 84, 85, 193, 225, 227, 228, 265, 266, 267, 268, 287, 288, 347, 348, 390, 427, 573, 609, 610, 611, 617, 682, 739, 740, 741, 742, 743, 744, 745, 747, 748, 777, 778, 780, 781, 783, 886, 961, 1070, 1125, 1149, 1247, 1248, 1317, 1336, 1337, 1578, 1612, 1615, 1616, 1617, 1699, 1701



**BRAZIL: NUTRITION**

31, 51, 52, 78, 79, 81, 83, 84, 85, 193, 225, 227, 228, 265, 266,  
267, 268, 287, 288, 347, 348, 390, 427, 573, 609, 610, 611, 617,  
682, 739, 740, 741, 742, 743, 744, 745, 747, 777, 778, 780, 781,  
783, 886, 961, 1070, 1125, 1149, 1247, 1248, 1317, 1336, 1337,  
1448, 1578, 1612, 1615, 1616, 1617, 1699, 1701

**BRAZIL: PRODUCTION SYSTEMS**

117, 268, 393, 492, 639, 644, 645, 647, 648, 1066, 1067, 1068,  
1069, 1212, 1216, 1217, 1249, 1517, 1624

**BRAZIL: RANGE MANAGEMENT**

262, 263, 264, 391, 392, 393, 427, 593, 605, 657, 658, 659, 661,  
662, 663, 664, 666, 667, 694, 778, 800, 802, 803, 804, 805, 806,  
807, 808, 898, 899, 900, 904, 905, 1003, 1009, 1019, 1063, 1123,  
1182, 1183, 1184, 1187, 1188, 1189, 1190, 1191, 1226, 1227, 1228,  
1229, 1230, 1231, 1232, 1389, 1390, 1447, 1448, 1450, 1761, 1765,  
1782

**BRAZIL: REPRODUCTION/BREEDING MANAGEMENT**

81, 85, 117, 268, 407, 462, 492, 551, 558, 608, 610, 682, 700, 742,  
744, 783, 831, 961, 1020, 1070, 1086, 1097, 1098, 1249, 1300, 1301,  
1302, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1624, 1681

**BRAZIL: SOCIOLOGY**

1066, 1067, 1068, 1069, 1212, 1216, 1217

**BRAZIL: TEXAS A&M UNIVERSITY**

79, 81, 85, 117, 492, 747, 778, 781, 1249, 1624

**BRAZIL: UNIVERSITY OF CALIFORNIA, DAVIS**

1, 10, 11, 110, 207, 208, 209, 210, 211, 212, 213, 333, 334, 345,  
412, 414, 415, 416, 809, 1162, 1443, 1552, 1553, 1554, 1555, 1556,  
1557, 1558, 1559

**BRAZIL: UNIVERSITY OF MISSOURI-COLUMBIA**

1066, 1067, 1068, 1069, 1212, 1216, 1217

**BRAZIL: UTAH STATE UNIVERSITY**

262, 263, 264, 391, 392, 393, 407, 551, 558, 593, 605, 608, 657,  
658, 659, 661, 662, 663, 664, 666, 667, 694, 700, 742, 744, 800,  
802, 803, 804, 805, 806, 807, 808, 831, 898, 899, 900, 901, 904,  
905, 1003, 1009, 1019, 1020, 1063, 1086, 1097, 1098, 1123, 1182,  
1183, 1184, 1187, 1188, 1189, 1190, 1191, 1226, 1227, 1228, 1229,  
1230, 1231, 1232, 1238, 1300, 1301, 1302, 1389, 1390, 1447, 1448,  
1449, 1450, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1681,  
1761, 1765, 1782

**BRAZIL: WINROCK INTERNATIONAL**

69, 70, 71, 72, 342, 389, 392, 393, 394, 395, 396, 397, 398, 639,  
641, 642, 643, 644, 645, 646, 647, 648, 814, 816, 872, 1614

## KEYWORD INDEX

### INDONESIA

The numbers listed below correspond to the reference number in the alphabetical listing. This index is organized by country, programs, and participating institutions.

#### INDONESIA (complete list)

39, 40, 41, 43, 44, 49, 65, 68, 87, 88, 89, 90, 102, 169, 173, 178, 183, 184, 190, 191, 192, 238, 241, 284, 285, 341, 344, 352, 359, 361, 362, 401, 402, 403, 408, 409, 411, 525, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 602, 603, 604, 650, 651, 652, 653, 654, 655, 673, 675, 676, 678, 679, 680, 681, 683, 703, 704, 705, 706, 707, 708, 709, 710, 712, 713, 714, 715, 716, 717, 746, 749, 750, 767, 768, 769, 770, 772, 773, 774, 775, 776, 785, 813, 815, 817, 818, 819, 820, 822, 823, 824, 825, 826, 827, 828, 857, 858, 859, 860, 868, 871, 878, 879, 880, 881, 883, 885, 889, 891, 909, 917, 918, 919, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 945, 946, 947, 1002, 1005, 1006, 1007, 1013, 1014, 1015, 1033, 1034, 1035, 1036, 1037, 1083, 1193, 1194, 1200, 1203, 1206, 1207, 1208, 1209, 1210, 1211, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1233, 1234, 1235, 1236, 1237, 1264, 1265, 1266, 1267, 1268, 1269, 1273, 1274, 1275, 1276, 1277, 1278, 1281, 1324, 1325, 1326, 1327, 1328, 1329, 1337, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1419, 1421, 1422, 1423, 1424, 1446, 1455, 1460, 1461, 1484, 1485, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1643, 1644, 1645, 1646, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1656, 1662, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1676, 1677, 1693, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1775, 1776, 1777, 1778, 1779, 1780

#### INDONESIA: BREEDING MANAGEMENT/REPRODUCTION

65, 88, 89, 90, 169, 178, 183, 184, 190, 191, 192, 525, 574, 575, 576, 577, 579, 580, 581, 650, 706, 707, 708, 709, 710, 713, 714, 716, 717, 859, 917, 919, 1193, 1275, 1325, 1327, 1328, 1329, 1484, 1485, 1568, 1570, 1571, 1573, 1574, 1575, 1576, 1627, 1628, 1629, 1630, 1631, 1635, 1636, 1637, 1674, 1677, 1749

#### INDONESIA: ECONOMICS

39, 40, 41, 43, 44, 284, 285, 344, 352, 359, 361, 362, 402, 673, 705, 767, 768, 769, 770, 772, 773, 775, 776, 785, 813, 815, 818, 819, 823, 824, 825, 826, 827, 828, 857, 858, 871, 947, 1005, 1006, 1007, 1033, 1034, 1035, 1036, 1219, 1221, 1222, 1267, 1268, 1269, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1455, 1461, 1589, 1590, 1593, 1594, 1595, 1596, 1597, 1599, 1639, 1648, 1649, 1673, 1674, 1693, 1740

**INDONESIA: HAIR SHEEP**

49, 183, 408, 409, 574, 577, 578, 604, 651, 706, 707, 708, 709,  
710, 774, 891, 1013, 1194, 1203, 1325, 1326, 1327, 1328, 1329,  
1423, 1568, 1632, 1654, 1670

**INDONESIA: NORTH CAROLINA STATE UNIVERSITY**

43, 68, 87, 238, 241, 401, 403, 408, 409, 411, 572, 573, 602, 603,  
604, 655, 675, 676, 678, 679, 680, 681, 683, 746, 749, 750, 767,  
889, 891, 909, 918, 929, 930, 931, 932, 933, 934, 935, 936, 937,  
938, 1002, 1013, 1014, 1015, 1200, 1203, 1206, 1207, 1208, 1209,  
1210, 1211, 1220, 1225, 1233, 1234, 1235, 1236, 1237, 1264, 1265,  
1266, 1273, 1274, 1275, 1276, 1277, 1278, 1281, 1324, 1337, 1419,  
1421, 1422, 1423, 1424, 1446, 1460, 1543, 1544, 1545, 1546, 1547,  
1548, 1549, 1572, 1577, 1578, 1591, 1626, 1638, 1656, 1662, 1671,  
1672, 1673, 1674, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705,  
1706, 1707, 1708, 1709, 1747, 1748, 1750, 1751, 1777, 1778, 1779,  
1780

**INDONESIA: NUTRITION**

43, 87, 238, 241, 401, 403, 408, 409, 525, 572, 573, 602, 603, 604,  
655, 675, 676, 678, 679, 683, 713, 714, 746, 749, 750, 889, 891,  
909, 918, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 1002,  
1013, 1014, 1015, 1200, 1203, 1206, 1207, 1208, 1209, 1210, 1211,  
1225, 1233, 1234, 1235, 1236, 1237, 1264, 1265, 1266, 1273, 1274,  
1275, 1276, 1277, 1278, 1281, 1324, 1337, 1419, 1421, 1422, 1423,  
1424, 1460, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1572, 1577,  
1578, 1626, 1638, 1656, 1671, 1672, 1673, 1674, 1698, 1699, 1700,  
1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1750, 1751,  
1778, 1779, 1780

**INDONESIA: PRODUCTION SYSTEMS**

40, 65, 192, 344, 361, 362, 403, 411, 582, 651, 652, 654, 673, 680,  
681, 703, 704, 705, 750, 785, 818, 819, 822, 824, 826, 827, 860,  
868, 947, 1005, 1006, 1033, 1034, 1035, 1036, 1194, 1274, 1325,  
1402, 1403, 1404, 1629, 1639, 1643, 1644, 1648, 1650, 1652, 1654,  
1668, 1669, 1672, 1673, 1674, 1706, 1708, 1734, 1735, 1736, 1737,  
1738, 1739, 1740, 1744

**INDONESIA: PROLIFIC SHEEP**

173, 604, 651, 712, 715, 1193, 1326, 1676

**INDONESIA: SOCIOLOGY**

344, 582, 651, 652, 653, 654, 673, 703, 704, 705, 826, 868, 945,  
946, 1083, 1221, 1225, 1643, 1644, 1645, 1646, 1648, 1649, 1650,  
1651, 1652, 1653, 1654, 1668, 1669, 1693, 1734, 1735, 1736, 1737,  
1738, 1739, 1740, 1744, 1745, 1746, 1747

**INDONESIA: UNIVERSITY OF CALIFORNIA, DAVIS**

49, 65, 88, 89, 90, 102, 169, 173, 178, 183, 184, 190, 191, 192,  
341, 525, 574, 575, 576, 577, 578, 579, 580, 581, 604, 650, 706,  
707, 708, 709, 710, 712, 713, 714, 715, 716, 717, 859, 860, 917,  
919, 1193, 1194, 1325, 1326, 1484, 1485, 1570, 1571, 1573, 1574,  
1575, 1576, 1627, 1628, 1629, 1630, 1631, 1632, 1634, 1635, 1636,  
1637, 1670, 1674, 1676, 1677, 1749, 1775

**INDONESIA: UNIVERSITY OF MISSOURI-COLUMBIA**

344, 582, 651, 652, 653, 654, 703, 704, 705, 826, 868, 945, 946,  
1083, 1225, 1643, 1644, 1645, 1646, 1648, 1649, 1650, 1651, 1652,  
1653, 1654, 1668, 1669, 1693, 1734, 1735, 1736, 1737, 1738, 1739,  
1740, 1744, 1745, 1746

**INDONESIA: WINROCK INTERNATIONAL**

39, 40, 41, 43, 44, 284, 285, 344, 352, 359, 361, 362, 402, 673,  
750, 768, 769, 770, 772, 773, 774, 775, 776, 785, 813, 815, 817,  
818, 819, 820, 822, 823, 824, 825, 826, 827, 828, 857, 858, 871,  
878, 879, 880, 881, 883, 885, 947, 1005, 1006, 1007, 1033, 1034,  
1035, 1036, 1037, 1219, 1221, 1222, 1223, 1224, 1267, 1268, 1269,  
1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1455, 1461, 1569,  
1589, 1590, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1639,  
1648, 1649, 1673, 1674, 1739, 1740, 1741

## KEYWORD INDEX

### KENYA

The numbers listed below correspond to the reference number in the alphabetical listing. This index is organized by country, programs, and participating institutions.

#### KENYA (complete list)

2, 3, 4, 5, 7, 8, 9, 18, 19, 20, 21, 22, 48, 61, 74, 75, 76, 77,  
103, 106, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121,  
122, 123, 124, 125, 126, 127, 128, 129, 130, 132, 133, 134, 141,  
142, 143, 146, 147, 148, 149, 150, 151, 152, 153, 174, 180, 196,  
197, 198, 199, 200, 201, 202, 203, 205, 206, 214, 215, 216, 217,  
218, 219, 221, 222, 224, 229, 269, 276, 277, 283, 293, 294, 295,  
296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308,  
309, 315, 322, 323, 324, 325, 328, 332, 335, 337, 349, 355, 356,  
357, 358, 360, 363, 364, 366, 367, 368, 369, 371, 372, 373, 375,  
376, 377, 378, 379, 380, 381, 382, 400, 410, 482, 483, 492, 500,  
501, 506, 507, 510, 513, 514, 518, 524, 568, 569, 570, 590, 591,  
614, 669, 670, 672, 674, 685, 686, 687, 692, 729, 730, 731, 732,  
733, 738, 750, 751, 762, 764, 765, 766, 784, 790, 791, 792, 793,  
799, 810, 811, 829, 830, 853, 856, 867, 911, 914, 915, 925, 928,  
939, 940, 941, 942, 943, 944, 948, 949, 950, 951, 952, 953, 954,  
955, 956, 957, 958, 959, 965, 987, 988, 991, 992, 1008, 1010, 1017,  
1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1038,  
1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049,  
1050, 1051, 1052, 1064, 1072, 1073, 1074, 1075, 1076, 1077, 1078,  
1079, 1080, 1082, 1085, 1099, 1100, 1101, 1102, 1103, 1104, 1105,  
1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1115, 1116, 1117,  
1118, 1119, 1120, 1121, 1122, 1127, 1128, 1129, 1130, 1131, 1132,  
1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143,  
1144, 1145, 1146, 1147, 1148, 1152, 1153, 1154, 1155, 1156, 1161,  
1163, 1168, 1239, 1249, 1250, 1251, 1252, 1271, 1290, 1291, 1292,  
1293, 1294, 1295, 1296, 1297, 1298, 1321, 1322, 1323, 1340, 1341,  
1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352,  
1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363,  
1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374,  
1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385,  
1386, 1387, 1388, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1407,  
1412, 1425, 1426, 1427, 1428, 1429, 1430, 1463, 1464, 1465, 1466,  
1467, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479,  
1480, 1481, 1482, 1483, 1487, 1488, 1489, 1490, 1491, 1492, 1493,  
1494, 1495, 1496, 1497, 1533, 1534, 1535, 1536, 1537, 1538, 1539,  
1540, 1541, 1542, 1580, 1581, 1582, 1600, 1601, 1602, 1619, 1620,  
1622, 1624, 1647, 1659, 1660, 1661, 1664, 1665, 1718, 1731, 1732,  
1733, 1758, 1759, 1760, 1762, 1781, 1787, 1788

**KENYA: ANIMAL HEALTH**

2, 3, 7, 8, 9, 74, 75, 76, 77, 196, 197, 198, 199, 200, 201, 202, 203, 205, 206, 229, 322, 325, 335, 360, 366, 367, 368, 369, 371, 372, 373, 375, 376, 377, 378, 379, 380, 381, 382, 400, 482, 568, 569, 570, 614, 685, 686, 687, 729, 730, 731, 732, 733, 762, 764, 765, 790, 791, 793, 829, 853, 911, 914, 915, 956, 957, 958, 959, 991, 992, 1017, 1038, 1041, 1042, 1043, 1050, 1051, 1052, 1072, 1073, 1074, 1075, 1127, 1128, 1163, 1168, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1376, 1391, 1392, 1394, 1395, 1396, 1397, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1533, 1534, 1535, 1536, 1582, 1600, 1601, 1619, 1718, 1731, 1732, 1733, 1758, 1760, 1762, 1781, 1787, 1788

**KENYA: BREEDING MANAGEMENT**

18, 19, 20, 48, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 130, 132, 133, 134, 141, 142, 143, 174, 180, 200, 201, 221, 283, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 328, 332, 372, 483, 492, 501, 692, 730, 799, 856, 928, 1008, 1027, 1028, 1043, 1045, 1112, 1116, 1117, 1119, 1120, 1121, 1122, 1127, 1249, 1271, 1323, 1341, 1353, 1357, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1373, 1374, 1375, 1381, 1493, 1580, 1581, 1620, 1622, 1624, 1659, 1660, 1661, 1665, 1733

**KENYA: COLORADO STATE UNIVERSITY**

196, 197, 198, 199, 200, 201, 202, 203, 205, 206, 229, 322, 325, 363, 364, 366, 367, 368, 369, 371, 372, 373, 375, 376, 377, 378, 379, 380, 381, 382, 614, 685, 686, 687, 762, 914, 915, 1168, 1391, 1392, 1394, 1395, 1396, 1397, 1600, 1601, 1718

**KENYA: DUAL PURPOSE GOAT**

20, 21, 22, 106, 123, 124, 125, 128, 129, 133, 134, 215, 295, 300, 302, 303, 305, 306, 307, 309, 323, 337, 349, 410, 518, 590, 670, 766, 830, 944, 953, 954, 955, 1024, 1025, 1026, 1044, 1045, 1046, 1047, 1048, 1049, 1064, 1077, 1082, 1103, 1104, 1105, 1106, 1107, 1109, 1110, 1115, 1118, 1135, 1148, 1250, 1251, 1252, 1271, 1321, 1322, 1323, 1361, 1364, 1368, 1370, 1372, 1374, 1375, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1407, 1412, 1428, 1429, 1463, 1464, 1466, 1467, 1472, 1474, 1479, 1495, 1537, 1538, 1539, 1540, 1541, 1542, 1664, 1665, 1759

**KENYA: ECONOMICS**

103, 125, 355, 356, 357, 358, 360, 590, 738, 810, 811, 944, 1017, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1079, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1298, 1464, 1539

**KENYA: GENETICS**

20, 21, 128, 129, 133, 134, 142, 309, 349, 410, 1044, 1045, 1047, 1049, 1115, 1250, 1251, 1271, 1321, 1322, 1323, 1372, 1377, 1379, 1381, 1385, 1387, 1388, 1665, 1759

**KENYA: PRODUCTION SYSTEMS**

18, 19, 21, 48, 61, 111, 112, 113, 114, 115, 116, 117, 118, 119,  
120, 121, 122, 123, 124, 125, 126, 127, 129, 130, 132, 141, 142,  
143, 146, 147, 148, 149, 150, 151, 152, 153, 174, 180, 214, 215,  
216, 217, 218, 219, 221, 222, 224, 269, 276, 283, 293, 294, 295,  
296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308,  
315, 323, 328, 332, 349, 355, 410, 483, 492, 506, 507, 510, 513,  
514, 518, 524, 669, 670, 672, 674, 692, 750, 766, 784, 792, 799,  
856, 928, 939, 940, 941, 942, 943, 944, 955, 1008, 1010, 1022,  
1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1039, 1040, 1044,  
1049, 1077, 1080, 1101, 1102, 1103, 1105, 1106, 1107, 1108, 1113,  
1115, 1116, 1117, 1119, 1120, 1121, 1129, 1130, 1135, 1136, 1138,  
1144, 1145, 1146, 1147, 1148, 1154, 1155, 1156, 1249, 1250, 1321,  
1322, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369,  
1370, 1371, 1372, 1373, 1374, 1375, 1379, 1381, 1385, 1388, 1407,  
1412, 1425, 1426, 1427, 1428, 1429, 1430, 1465, 1466, 1467, 1472,  
1474, 1475, 1479, 1493, 1537, 1539, 1540, 1541, 1542, 1580, 1581,  
1620, 1622, 1624, 1659, 1660, 1661, 1759

**KENYA: SOCIOLOGY**

4, 5, 276, 277, 323, 324, 867, 948, 949, 950, 951, 952, 953, 954,  
955, 987, 988, 1024, 1025, 1026, 1076, 1077, 1078, 1079, 1080,  
1082, 1085, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298,  
1494, 1540, 1542, 1647

**KENYA: TEXAS A&M UNIVERSITY**

18, 19, 20, 21, 22, 48, 106, 111, 112, 113, 114, 115, 116, 117,  
118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130,  
132, 133, 134, 141, 142, 143, 283, 293, 294, 295, 296, 297, 298,  
299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 328, 332,  
349, 410, 483, 492, 692, 751, 799, 830, 856, 925, 928, 1008, 1027,  
1028, 1044, 1045, 1046, 1047, 1048, 1049, 1115, 1116, 1117, 1118,  
1119, 1120, 1121, 1152, 1249, 1250, 1251, 1252, 1271, 1321, 1322,  
1323, 1340, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371,  
1372, 1373, 1374, 1375, 1377, 1378, 1379, 1380, 1381, 1382, 1383,  
1384, 1385, 1386, 1387, 1388, 1393, 1493, 1496, 1497, 1580, 1581,  
1602, 1620, 1622, 1624, 1659, 1660, 1661, 1664, 1665, 1759

**KENYA: UNIVERSITY OF MISSOURI-COLUMBIA**

4, 5, 276, 277, 323, 324, 337, 867, 948, 949, 950, 951, 952, 953,  
954, 955, 965, 987, 988, 1024, 1025, 1026, 1076, 1077, 1078, 1079,  
1080, 1082, 1085, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297,  
1298, 1479, 1494, 1495, 1540, 1647

**KENYA: WINROCK INTERNATIONAL**

61, 103, 125, 146, 147, 148, 149, 150, 151, 152, 153, 214, 215,  
216, 217, 218, 219, 221, 222, 224, 269, 315, 324, 355, 356, 357,  
358, 360, 506, 507, 510, 513, 514, 518, 524, 590, 591, 669, 670,  
672, 674, 738, 750, 766, 784, 792, 810, 811, 911, 939, 940, 941,  
942, 943, 944, 1008, 1010, 1017, 1021, 1022, 1023, 1024, 1025,  
1026, 1028, 1029, 1030, 1039, 1040, 1099, 1100, 1101, 1102, 1103,

**Winrock International cont...**

1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1113, 1129, 1130,  
1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141,  
1142, 1143, 1144, 1145, 1146, 1147, 1148, 1152, 1153, 1154, 1155,  
1156, 1161, 1298, 1360, 1361, 1362, 1407, 1412, 1425, 1426, 1427,  
1428, 1429, 1430, 1463, 1464, 1465, 1466, 1467, 1470, 1471, 1472,  
1473, 1474, 1475, 1476, 1477, 1478, 1480, 1481, 1482, 1483, 1537,  
1538, 1539, 1541, 1542

**KENYA: WASHINGTON STATE UNIVERSITY**

2, 3, 7, 8, 9, 74, 75, 76, 77, 335, 360, 363, 364, 368, 400, 482,  
568, 569, 570, 729, 730, 731, 732, 733, 764, 765, 790, 791, 793,  
829, 853, 956, 957, 958, 959, 991, 992, 1017, 1038, 1041, 1042,  
1043, 1050, 1051, 1052, 1072, 1073, 1074, 1075, 1127, 1128, 1163,  
1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351,  
1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1376, 1487, 1488,  
1489, 1490, 1491, 1492, 1493, 1533, 1534, 1535, 1536, 1582, 1600,  
1619, 1664, 1731, 1732, 1733, 1758, 1760, 1762, 1781, 1787, 1788



## KEYWORD INDEX

### MOROCCO

The numbers listed below correspond to the reference number in the alphabetical listing. This index is organized by country, programs, and participating institutions.

#### MOROCCO (complete list)

6, 23, 46, 47, 55, 57, 58, 59, 73, 91, 92, 93, 95, 96, 97, 98, 99, 100, 101, 105, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 177, 184, 185, 226, 271, 274, 310, 311, 316, 317, 318, 319, 346, 419, 420, 421, 422, 423, 424, 425, 426, 440, 441, 442, 444, 449, 450, 560, 585, 587, 588, 589, 594, 595, 596, 601, 618, 619, 620, 621, 623, 624, 626, 627, 628, 629, 630, 631, 649, 668, 684, 702, 718, 719, 720, 753, 754, 755, 756, 757, 758, 759, 760, 761, 789, 833, 834, 835, 836, 854, 855, 887, 888, 892, 960, 962, 963, 995, 996, 997, 998, 999, 1018, 1032, 1055, 1056, 1061, 1157, 1158, 1159, 1201, 1243, 1279, 1280, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1406, 1462, 1486, 1615, 1617, 1655, 1657, 1666, 1675

#### MOROCCO: BREEDING MANAGEMENT

92, 95, 96, 98, 99, 100, 101, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 168, 169, 170, 172, 177, 184, 185, 310, 318, 449, 649, 833, 834, 835, 836, 1158, 1243, 1657, 1675

#### MOROCCO: NORTH CAROLINA STATE UNIVERSITY

6, 23, 91, 93, 97, 105, 154, 156, 167, 171, 226, 271, 274, 425, 426, 440, 444, 450, 560, 618, 619, 621, 623, 624, 626, 627, 628, 629, 630, 631, 684, 702, 718, 719, 720, 753, 754, 755, 756, 757, 758, 759, 760, 761, 789, 854, 855, 887, 888, 892, 960, 962, 963, 1032, 1157, 1158, 1159, 1201, 1279, 1280, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1406, 1462, 1615, 1617, 1655, 1666

#### MOROCCO: NUTRITION

6, 23, 93, 105, 154, 167, 171, 226, 271, 274, 425, 426, 450, 560, 618, 621, 623, 624, 626, 627, 629, 630, 631, 684, 702, 718, 719, 720, 753, 754, 756, 758, 759, 760, 761, 854, 855, 887, 888, 962, 963, 1032, 1157, 1159, 1201, 1279, 1280, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1312, 1313, 1406, 1462, 1615, 1617, 1655, 1666

#### MOROCCO: PRODUCTION SYSTEMS

97, 423, 424, 588, 589, 596, 620, 628, 720, 755, 757, 995, 1307, 1311

#### MOROCCO: PROLIFIC SHEEP

92, 99, 100, 157, 160, 161, 162, 163, 166, 594, 619, 626, 760, 761, 1158, 1159

**MOROCCO: RANGE MANAGEMENT**

46, 47, 55, 59, 73, 155, 311, 316, 317, 319, 346, 419, 420, 421, 422, 423, 424, 441, 442, 668, 995, 996, 1018, 1055, 1061

**MOROCCO: REPRODUCTION**

95, 98, 158, 159, 164, 165, 168, 169, 170, 177, 184, 185, 310, 318, 649, 833, 834, 835, 963, 1243, 1486, 1675

**MOROCCO: SOCIOLOGY**

55, 585, 587, 588, 589, 594, 595, 596, 601, 995, 996, 998

**MOROCCO: TEXAS TECH UNIVERSITY**

46, 73, 155, 311, 316, 317, 319, 346, 419, 420, 421, 422, 441, 442, 668, 1018, 1055, 1061

**MOROCCO: UNIVERSITY OF CALIFORNIA, DAVIS**

92, 95, 96, 98, 99, 100, 101, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 168, 169, 170, 172, 177, 184, 185, 310, 318, 449, 620, 649, 833, 834, 835, 836, 1158, 1243, 1486, 1657, 1675

**MOROCCO: UNIVERSITY OF MISSOURI-COLUMBIA**

55, 585, 587, 588, 589, 594, 595, 596, 601, 995, 996, 998

**MOROCCO: UTAH STATE UNIVERSITY**

46, 47, 57, 58, 59, 73, 155, 311, 316, 317, 319, 346, 419, 420, 421, 422, 423, 424, 441, 442, 668, 997, 999, 1055, 1056, 1061

## KEYWORD INDEX

### PERU

The numbers listed below correspond to the reference number in the alphabetical listing. This index is organized by country, programs, and participating institutions.

#### PERU (complete list)

12, 13, 14, 15, 16, 17, 24, 25, 27, 28, 29, 30, 32, 33, 34, 37, 38, 50, 62, 63, 64, 66, 67, 94, 107, 108, 112, 114, 116, 117, 118, 119, 120, 124, 130, 135, 136, 137, 144, 145, 194, 195, 229, 230, 231, 233, 234, 235, 236, 239, 243, 244, 246, 247, 248, 249, 250, 252, 253, 254, 255, 257, 258, 259, 260, 270, 272, 273, 278, 279, 280, 281, 282, 289, 290, 291, 292, 299, 307, 312, 313, 314, 320, 325, 327, 329, 330, 331, 332, 336, 338, 343, 363, 365, 368, 372, 383, 384, 385, 386, 387, 388, 399, 405, 418, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 445, 446, 448, 451, 452, 453, 455, 456, 457, 458, 459, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 477, 478, 479, 480, 481, 484, 485, 486, 487, 488, 489, 490, 491, 503, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 549, 550, 553, 554, 555, 557, 559, 562, 563, 564, 571, 583, 584, 599, 600, 606, 612, 613, 615, 632, 633, 634, 635, 636, 637, 640, 688, 689, 690, 692, 695, 696, 697, 698, 722, 723, 724, 725, 726, 727, 728, 736, 737, 763, 794, 795, 796, 797, 798, 832, 837, 838, 840, 841, 842, 843, 844, 845, 856, 862, 863, 864, 869, 870, 873, 874, 875, 876, 893, 895, 896, 907, 908, 913, 921, 922, 923, 924, 926, 927, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 986, 990, 1001, 1004, 1011, 1012, 1020, 1053, 1054, 1065, 1071, 1081, 1084, 1095, 1096, 1151, 1164, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1178, 1179, 1180, 1181, 1192, 1195, 1196, 1197, 1198, 1213, 1215, 1218, 1240, 1241, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1314, 1315, 1316, 1318, 1319, 1320, 1330, 1331, 1332, 1333, 1334, 1335, 1338, 1339, 1411, 1413, 1431, 1432, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1445, 1451, 1452, 1453, 1454, 1551, 1583, 1588, 1603, 1604, 1606, 1607, 1608, 1609, 1610, 1618, 1621, 1623, 1625, 1640, 1641, 1642, 1658, 1660, 1663, 1667, 1678, 1680, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1694, 1695, 1696, 1697, 1712, 1713, 1714, 1715, 1716, 1717, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1763, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773

#### PERU: ANIMAL HEALTH

12, 13, 14, 15, 27, 28, 29, 32, 33, 34, 37, 38, 50, 229, 325, 365, 368, 372, 383, 384, 385, 386, 387, 388, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 459, 503, 571, 615, 689, 695, 763, 794, 795, 796, 797, 798, 837, 838, 840, 841, 842, 843, 844, 893, 895, 908, 966, 990, 1053, 1054, 1071, 1169, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1282, 1283, 1314, 1316, 1331, 1332, 1333, 1334, 1335, 1588, 1609, 1667, 1772, 1773

**PERU: BREEDING MANAGEMENT**

25, 94, 112, 114, 116, 117, 118, 119, 120, 124, 130, 135, 136, 137, 243, 246, 247, 248, 249, 252, 253, 257, 258, 259, 260, 270, 272, 278, 289, 290, 291, 292, 299, 307, 312, 314, 327, 332, 338, 372, 559, 563, 613, 692, 696, 697, 856, 862, 863, 864, 873, 913, 1012, 1240, 1241, 1318, 1445, 1453, 1454, 1583, 1621, 1623, 1625, 1660, 1678, 1682, 1683, 1684, 1685, 1686, 1687, 1714, 1715

**PERU: COLORADO STATE UNIVERSITY**

12, 13, 14, 15, 27, 28, 29, 32, 33, 34, 37, 38, 50, 229, 325, 363, 365, 368, 372, 383, 384, 385, 386, 387, 388, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 459, 503, 571, 615, 689, 695, 763, 794, 795, 796, 797, 798, 837, 838, 840, 841, 842, 843, 844, 893, 895, 908, 990, 1053, 1054, 1071, 1169, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1282, 1283, 1314, 1316, 1331, 1332, 1333, 1334, 1335, 1588, 1609, 1667, 1772, 1773

**PERU: ECONOMICS**

107, 399, 446, 469, 544, 869, 870, 874, 875, 876, 921, 922, 923, 924, 926, 927, 1004, 1081, 1339, 1688, 1689, 1690, 1691, 1696, 1712, 1713

**PERU: MONTANA STATE UNIVERSITY**

25, 94, 135, 136, 137, 243, 244, 246, 247, 248, 249, 250, 252, 253, 254, 255, 257, 258, 259, 260, 270, 272, 278, 289, 290, 291, 292, 312, 313, 314, 327, 338, 559, 563, 613, 696, 697, 862, 863, 864, 873, 913, 1012, 1240, 1241, 1318, 1445, 1453, 1454, 1583, 1621, 1623, 1625, 1678, 1682, 1683, 1684, 1685, 1686, 1687, 1714, 1715

**PERU: NUTRITION**

63, 64, 112, 124, 231, 234, 273, 330, 448, 485, 486, 491, 1001, 1151, 1192, 1284, 1338, 1432, 1437, 1438, 1439, 1440, 1610, 1680, 1695, 1697, 1719

**PERU: PRODUCTION SYSTEMS**

63, 64, 112, 114, 116, 117, 118, 119, 120, 124, 130, 234, 273, 279, 299, 307, 330, 332, 448, 451, 453, 470, 471, 472, 473, 474, 475, 479, 480, 485, 486, 539, 555, 692, 722, 725, 726, 736, 737, 856, 874, 921, 923, 924, 926, 927, 971, 974, 975, 976, 977, 978, 1001, 1151, 1172, 1173, 1175, 1178, 1192, 1218, 1240, 1241, 1338, 1432, 1437, 1438, 1440, 1610, 1660, 1680, 1695, 1697, 1763

**PERU: RANGE MANAGEMENT**

16, 17, 24, 62, 63, 64, 66, 67, 112, 130, 144, 145, 194, 195, 230, 231, 233, 234, 235, 236, 239, 273, 279, 280, 281, 282, 289, 290, 291, 329, 330, 331, 343, 448, 455, 456, 457, 458, 484, 485, 486, 487, 488, 489, 490, 491, 529, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 562, 564, 606, 640, 690, 698, 728, 845, 907, 978, 1001, 1151, 1179, 1180, 1181, 1192, 1195, 1196, 1198, 1284, 1285, 1286, 1287, 1288, 1289, 1315, 1319, 1320, 1338, 1431, 1432, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1451, 1452, 1551, 1603, 1604, 1606, 1607, 1608, 1610,

**range management cont...**

1658, 1663, 1680, 1694, 1695, 1697, 1716, 1717, 1719, 1720, 1721,  
1722, 1766, 1767, 1768, 1769, 1770, 1771

**PERU: REPRODUCTION**

30, 244, 250, 254, 255, 292, 313, 320, 336, 405, 418, 481, 549,  
550, 553, 554, 555, 557, 583, 584, 612, 688, 832, 896, 1011, 1020,  
1065, 1095, 1096, 1164, 1197, 1330, 1411, 1640, 1641, 1642, 1723,  
1724, 1725, 1726, 1727, 1728, 1729, 1730

**PERU: SOCIOLOGY**

107, 108, 445, 446, 451, 452, 453, 466, 467, 468, 469, 470, 471,  
472, 473, 474, 475, 477, 478, 479, 480, 599, 600, 632, 633, 634,  
635, 636, 637, 722, 723, 724, 725, 726, 727, 736, 737, 966, 967,  
968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 986, 990,  
1081, 1084, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1213, 1215,  
1218, 1413, 1618, 1763

**PERU: TEXAS A&M UNIVERSITY**

112, 114, 116, 117, 118, 119, 120, 124, 130, 299, 307, 332, 692,  
856, 1621, 1623, 1625, 1660

**PERU: TEXAS TECH UNIVERSITY**

16, 17, 24, 62, 63, 64, 66, 67, 112, 130, 144, 145, 194, 195, 230,  
231, 233, 234, 235, 236, 239, 273, 279, 280, 281, 282, 329, 330,  
331, 343, 448, 455, 456, 457, 458, 484, 485, 486, 487, 488, 489,  
490, 491, 529, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540,  
541, 542, 543, 545, 562, 564, 606, 640, 690, 698, 845, 907, 1001,  
1151, 1179, 1180, 1181, 1192, 1195, 1196, 1198, 1284, 1285, 1286,  
1287, 1288, 1289, 1315, 1319, 1320, 1338, 1431, 1432, 1434, 1435,  
1436, 1437, 1438, 1439, 1440, 1441, 1442, 1451, 1452, 1551, 1603,  
1604, 1606, 1607, 1608, 1610, 1658, 1663, 1680, 1694, 1695, 1697,  
1716, 1717, 1719, 1720, 1721, 1722, 1766, 1767, 1768, 1769, 1770,  
1771

**PERU: UNIVERSITY OF MISSOURI-COLUMBIA**

107, 108, 445, 446, 451, 452, 453, 466, 467, 468, 469, 470, 471,  
472, 473, 474, 475, 477, 478, 479, 480, 599, 600, 632, 633, 634,  
635, 636, 637, 722, 723, 724, 725, 726, 727, 736, 737, 966, 967,  
968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 986, 990,  
1081, 1084, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1178, 1213,  
1215, 1218, 1413, 1618, 1763

**PERU: UTAH STATE UNIVERSITY**

30, 320, 336, 405, 418, 481, 549, 550, 553, 554, 555, 557, 583,  
584, 612, 688, 832, 896, 1011, 1020, 1065, 1095, 1096, 1164, 1197,  
1330, 1411, 1640, 1641, 1642, 1723, 1724, 1725, 1726, 1727, 1729,  
1730

**PERU: WINROCK INTERNATIONAL**

399, 469, 544, 728, 869, 870, 874, 875, 876, 921, 922, 923, 924,  
926, 927, 1004, 1339, 1688, 1689, 1690, 1691, 1696, 1712, 1713

## KEYWORD INDEX

### INTERNATIONAL-MISCELLANEOUS

The numbers listed below correspond to the references number in the alphabetical listing. This index is organized by country, program, and participating institutions.

#### INTERNATIONAL (complete list)

45, 56, 104, 182, 350, 351, 353, 354, 505, 508, 509, 511, 512, 515, 516, 517, 519, 520, 521, 522, 523, 660, 665, 671, 801, 902, 906, 910, 911, 912, 1057, 1058, 1059, 1060, 1062, 1090, 1091, 1092, 1093, 1094, 1126, 1185, 1186, 1270

#### ANIMAL HEALTH

910, 911

#### BREEDING MANAGEMENT

182, 516, 522

#### ECONOMICS

45, 104, 350, 351, 353, 519, 522, 671, 1270

#### PRODUCTION SYSTEMS

45, 104, 182, 353, 354, 505, 508, 509, 512, 515, 516, 517, 519, 520, 521, 522, 523, 671, 910, 912, 1126, 1270

#### RANGE MANAGEMENT

56, 902, 906, 1057, 1058, 1090, 1091, 1092, 1093, 1186

#### UNIVERSITY OF CALIFORNIA, DAVIS

182, 516

#### UTAH STATE UNIVERSITY

56, 660, 665, 801, 902, 906, 1057, 1058, 1059, 1060, 1062, 1090, 1091, 1092, 1093, 1094, 1185, 1186

#### WINROCK INTERNATIONAL

45, 104, 182, 350, 351, 353, 354, 505, 508, 509, 511, 512, 515, 516, 517, 519, 520, 521, 522, 523, 671, 910, 911, 912, 1126, 1270

### UNITED STATES-MISCELLANEOUS

#### UNITED STATES (complete list)

204, 242, 245, 251, 256, 321, 339, 370, 374, 592, 597, 656, 693, 989, 1031, 1087, 1088, 1253, 1272, 1783, 1784, 1785, 1786

#### ANIMAL HEALTH

204, 370, 374

**BREEDING MANAGEMENT**

242, 245, 251, 256, 339, 1253

**COLORADO STATE UNIVERSITY**

204, 370, 374

**ECONOMICS**

693, 1087, 1088, 1272, 1783, 1785

**MONTANA STATE UNIVERSITY**

242, 245, 251, 256, 339

**PRODUCTION SYSTEMS**

321, 592, 597, 656, 989, 1031, 1253, 1783, 1784, 1785, 1786

**UNIVERSITY OF MISSOURI-COLUMBIA**

597, 989

**WINROCK INTERNATIONAL**

321, 592, 656, 693, 1031, 1087, 1088, 1253, 1272, 1783, 1784, 1785,  
1786