

IPM CRSP Trip Report

Country Visited: Kenya

Dates of Travel: October 30 to November 6, 2010

Traveler's Name and Affiliations: R. Muniappan, Program Director, IPM CRSP

Purpose of Trip: To attend the 8th IOBC International Workshop on Biological Control and management of *Chromolaena odorata* and other Eupatorieae and 1st IOBC International Workshop on Biological Control and Management of *Parthenium hysterophorus*.

Sites Visited: Nairobi, Kenya.

Description of Activities/Observations:

October 30th and 31st: Traveled to Nairobi from Blacksburg.

November 1st: 8.30 am to 10.30 am, chaired the inaugural session of the 8th IOBC International Workshop on Biological Control of *Chromolaena odorata* and other Eupatorieae at the World Agroforestry Center auditorium. At 11.00 am, I met with Mr. Mervyn Farroe, Director of Agriculture, Business and Environment Office, and Mr. Samson Okumu, Food Aid and Development specialist at the USAID office, Kenya. Dr. Monicah Waiganjo, Deputy Director, Kenya Agricultural Research Institute – Thika and Kenya Coordinator of IPM CRSP East Africa Program joined me in the meeting. Monicah and I explained various IPM CRSP activities of the East Africa regional project and *Parthenium* global theme project to Mervyn and Samson. Mervyn suggested that we work closely with the FINTRAC which has recently received a contract from USAID for an agricultural program in Kenya.

In the afternoon, I attended the IOBC *Chromolaena* Working Group workshop.

On November 2nd, I presented two papers: 1. Status of biocontrol of *Chromolaena odorata* in Micronesia and 2. The impact of two introduced biocontrol agents, *Pareuchaetes pseudoinsulata* and *Cecidochares connexa* on *Chromolaena odorata* on Guam, in the workshop.

On November 3rd, I attended the IPM CRSP *Parthenium* project review meeting from 8.00 am to 10.30 am at the CABI conference room. In the afternoon, with the participants of the workshop, I visited the Nairobi National Park to observe invasion of alien plants.

In the evening the IOBC honorary membership certificate was awarded to me at a function held at IUCN premises.

On November 4th, as the convenor of the IOBC Global Working Group on *Parthenium*, I gave an opening address to the 1st IOBC International Workshop on Biological Control and Management of *Parthenium hysterophorus*. There were several presentations on biology,

distribution, biological control and other management practices for *Parthenium hysterophorus* by participants from different African and Asian countries.

On November 5th I chaired the closing session on recommendations of the workshop. From 6.00 pm to 7.00 pm I participated in the IPM CRSP *Parthenium* global theme project planning meeting.

I returned to Blacksburg on November 6th at 9.00 pm.

Training Activities Conducted

Program type (workshop, seminar, field day, short course, etc.)	Date	Audience	Number of Participants		Training Provider (US university, host country institution, etc.)	Training Objective
			Men	Women		
<i>Chromolaena</i> Workshop	Nov. 1 and 2, 2010	scientists	30	10	IOBC Working Group, CABI- Kenya.	Review of recent developments
<i>Parthenium</i> Workshop	Nov. 3 to Nov. 5, 2010	Scientists	30	10	IOBC Working Group, CABI- Kenya.	Review of recent developments

Suggestions, Recommendations, and/or Follow-up Items:

List of Contacts Made:

Name	Title/Organization	Contact Info (address, phone, email)
Marvyn Farroe	Director - Agriculture, Business and Environment Office, USAID	mfarroe@usaid.gov
Samson Okumu	Food Aid and Development Specialist, USAID	sokumu@usaid.gov
Monicah Waiganjo	Deputy Director, KARI-Thika	monicahwaiganjo@yahoo.com
Jenifer Bisikwa	Agronomist, Makerere University	bisikwa@gmail.com
Roger Day	Deputy Director, Development, CABI Africa	rday@cabi.org
Annastasia Kawi	Scientist, NARI, Papua New Guinea	Anna.kawi@nari.org.pg
Ashok K. Khadun	Islets Restoration Manager, Mauritian Wildlife Foundation	akhadun@mauritian-wildlife.org
Lekishon Kenana	Scientist, Kenya Wildlife Service	lekishon@kws.go.ke
Costas Zachariades	PPRI, South Africa	zachariades@arc.agric.za
Lorraine Strathie	PPRI, South Africa	strathiel@arc.agric.za
Andrew McConnachie	PPRI, South Africa	mcConnachie@arc.agric.za

S.M. Rezaul Karim	Bangladesh Agricultural University	rkarimbau@yahoo.com
Michael Day	Alan Fletcher Research Station	Michael.day@deedi.qld.au
Oraphan Kernasa	NBCRC, Thailand	agropk@ku.ac.th
Janse van Rensburg	Tanzanian wildlife Research Institute	suevr@grumetiresserves.com
M. Robinson	University of West Indies, Jamaica	marsharob@gmail.com
K.V. Sankaran	Kerala Forest Research Institute, India	sankarankv@gmail.com
P. Saravanane	Karaikal, India	psaravanane@rediffmail.com
Uyi Osariyekemwen Uyi	Ambrose Alli University	senatoruyi@yahoo.co.uk
Arne Witt	CABI Africa	a.witt@cabi.org
Steve Adkins	University of Queensland	s.adkins@uq.edu.au
A. Million	Agriservice, Ethiopia	
Zelalem Bekeko	Haramaya University	zelalembekeko@yahoo.com
Sanjay Bhatia	University of Jammu, India	Nitujmu2002@yahoo.co.in
K. Dhilepan	Alan Fletcher Research Station, Australia	k.dhilepan@deedi.qld.gov.au
Krissie Clark	PAMS Foundation, Tanzania	krissis@pamsfoundation.com
Naeem Khan	University of Queensland	khan@uq.edu.au
Wondi Mersie	Virginia State Univesity	wmersie@vsu.edu
Asad Shabbir	University of Queensland	asad@uq.edu.au
Emily Wabuye	National Museum of Kenya	ewabuyele@museums.or.ke
Kassahun Zewdie	Ethiopian Institute of Agricultural Research	kassahunzewdie@yahoo.com

Programme for combined IOBC workshops: Nairobi, Kenya, 1-5 November 2010
ICRAF (World Agroforestry Centre) auditorium, United Nations Avenue, Gigiri, Nairobi

Start time	Programme	Authors (Presenter)	Chairperson
Monday 1 November	Eighth IOBC International Workshop on Biological Control and Management of <i>Chromolaena odorata</i> and other Eupatoriaceae		
07h45-08h30	Registration		
08h30	Housekeeping/announcements		
08h40	Opening address		Chairperson: R. Muniappan
09h00	Open IOBC chromolaena workshop (convenor)	Costas Zachariades	
09h20	Keynote address: Africa - a continent invaded	Arne Witt	
09h50	Tanzania under threat: what is the way forward?	Mduma, S.; Hamza, K.; Harris, B.; Janse van Rensburg, S.	
10h10	Discussion		
10h20	Group photograph		
10h30	Tea		
Theme:	Distribution, spread and impacts of <i>Chromolaena odorata</i>		Chairperson: L. Strathie
11h00	Recent spread of <i>Chromolaena odorata</i> in Africa	Zachariades, C. ; Janse van Rensburg, S.; Witt, A.	
11h20	Abundance of <i>Chromolaena odorata</i> (L.) King and Robinson (Asteraceae: Eupatoriaceae), influence on entomofauna and implications for farmers' activities in south-western Nigeria	Adebayo, R.A.	
11h40	Infestation of <i>Chromolaena odorata</i> in Bangladesh: a new threat to the country	Karin, S.M.R.	
12h00	<i>Chromolaena odorata</i> in Nigeria: extent of spread, problems and control	Uyi, U.O. ; Egbon, I.N.; Igbinoso, I.B.; Adebayo, R.A.; Ogiangbe, O.N.	
12h30	Lunch		
Theme:	Distribution, spread and impacts of <i>Chromolaena odorata</i> (contd.)		Chairperson: M. Day
13h30	Seventeen years on from the Abidjan workshop, is biocontrol of chromolaena more acceptable in West and Central Africa?	Zachariades, C.	
Theme:	Control and management of <i>Chromolaena odorata</i>		
13h50	Control and management of <i>Chromolaena odorata</i> on Round Island, Mauritius	Khadun, A.K.	
14h10	Invasive weed management in potato-based cropping systems of South India	Saravanane, P. ; Nanjappa, H.V.; Ramachandrappa, B.K.	
Theme:	Ecology		
14h30	Response of ant communities to an alien invasive plant (<i>Chromolaena odorata</i>) - the effect of temporal variation in invasion and clearing	Tantsi, N. ; Somers, M.J.	
14h50	Discussion		
15h10	Tea		
Theme:	Biological control of <i>Chromolaena odorata</i>		Chairperson: U.O.Uyi
15h40	Biocontrol of <i>Chromolaena odorata</i> in Papua New Guinea	Day, M. ; Bofeng, I.; Nabo, I	
16h00	Biological control of <i>Chromolaena odorata</i> (L.) (Asteraceae: Eupatoriaceae) in Thailand	Kernasa, O. ; Buchatian, P.; Suasa-ard, W.	
16h20	Discussion		
17h00	End of day 1		
18h00	GISP-sponsored cocktail evening at ICRAF		

Tuesday 2 November: Eighth IOBC International Workshop on Biological Control and Management of <i>Chromolaena odorata</i> and other Eupatoriaceae		
08h00-08h30	Registration	
08h30	Housekeeping/announcements	
Theme:	Biological control of <i>Chromolaena odorata</i> (contd.)	
08h40	Status of Biological Control of <i>Chromolaena odorata</i> in Micronesia	Muniappan, R. ; Reddy, G.V.P.
09h00	Biocontrol of <i>Chromolaena odorata</i> (L.) King and Robinson (Asteraceae) in Timor Leste	Day, M.D. ; Brito, A.A.; Da Costa Guterres, A.; Da Costa Alves, A.P.; Paul, T.; Wilson, C.G.
09h20	Biological control of <i>Chromolaena odorata</i> in South Africa	Strathie, L.W. ; Zachariades, C.; Dube, N.; Retief, E.
09h40	Status of <i>Chromolaena odorata</i> and its biocontrol in West Africa	Uyi, U.O.
10h00	Field host range of <i>Melanagromyza eupatoriella</i> in Jamaica with potential as a biological control agent on <i>Chromolaena odorata</i> in South Africa	Robinson, M. ; Zachariades, C.; Robinson, D.; Cohen, J.
10h20	Discussion	
10h30	Tea	
11h00	Host specificity testing of <i>Dichrorampha odorata</i> (Lepidoptera: Tortricidae), a potential biological control agent of <i>Chromolaena odorata</i> (Asteraceae) in South Africa	Dube, N. & Zachariades, C.
11h20	The impact of two introduced biocontrol agents, <i>Pareuchaetes pseudoinsulata</i> (Lepidoptera: Arctiidae) and <i>Cecidochaeres connexa</i> (Diptera: Tephritidae), on <i>Chromolaena odorata</i> (Asteraceae) on Guam	Reddy, G.V.P.; Kikuchi, R.S.; Muniappan, R.
11h40	Social perceptions and ecological impacts of biological control of <i>Chromolaena odorata</i> (Asteraceae: Eupatoriaceae) by <i>Pareuchaetes pseudoinsulata</i> (Lepidoptera: Arctiidae) on the forest ecology of Ghana	Braimah, H. ; Bolfery-Arku, G.; Issah, U.S.; Akomah, A.; Aduening, J.M.
12h00	Discussion	
12h30	Lunch	
Theme:	Other Eupatoriaceae: invasiveness and biological control	
13h30	Factors that may influence the invasive potential of <i>Mikania micrantha</i> Kunth. ex. H.B.K. in Fiji	Macanawai, A.R.; Day, M.D.; Tumaneng-Diete, T.; Adkins, S.W.
13h50	Biological control of <i>Mikania micrantha</i> Kunth (Asteraceae) in Papua New Guinea and Fiji using the rust fungus <i>Puccinia spegazzinii</i> de Toni (<i>Pucciniales: Pucciniaceae</i>)	Day, M.D.; Kawi, A. ; Tunabuna, A.; Fidelis, J.; Swamy, B.; Ratutuni, J.; Saul-Maora, J.; Dewhurst, C.F.; Orapa, W.
14h10	Biological control of <i>Mikania micrantha</i> in India: opportunities and constraints	Sankaran, K.V. ; Ellison, C.A.; Suresh, T.A.
14h30	Biocontrol of <i>Ageratina adenophora</i> (Asteraceae: Eupatoriaceae) in South Africa	Heystek, F. ; Wood, A.R.; Neser, S.; Kistsensamy, Y.
14h50	Biological Control of <i>Campuloclinium macrocephalum</i> in South Africa	McConnachie, A.J.
15h10	Tea	
15h40	Discussion and conclusions	
16h00	Compilation of recommendations and wrap-up (chromolaena and other Eupatoriaceae)	
16h30	End	
		Chairperson: C. Zachariades
		Chairperson: M. Robinson
		Chairperson: R.E.C. McFadyen

Wednesday 3 November: Interleaving day		
08h00-10h30	IPM-CRSP Parthenium Project Partners Business Meeting	Only IPM CRSP Project Partners should attend
11h00	Visit to Nairobi National Park to view invasive alien plants	
18h00	Cocktail evening at IUCN	Geoffrey Howard, IUCN
	Welcome	R. Muniappan
	The Australian experience of the economic returns from biocontrol	Rachel McFadyen

Thursday 4 November: First IOBC International Workshop on Biological Control and Management of <i>Parthenium hysterophorus</i>		
07h45-08h30	Registration	
08h30	Housekeeping/announcements	
08h40	Opening of IOBC Parthenium workshop	R. Muniappan
09h00	Opening of IPM CRSP workshop	Wondi Mersie
09h20	Keynote address	Steve Adkins
09h40	An insidious green wave - Parthenium in Africa	Arne Witt
10h00	Discussion	
10h20	Group photograph	
10h30	Tea	
Theme:	Parthenium weed biology and impacts	Chairperson: W. Mersie
11h00	The reproductive capacity of parthenium weed (<i>Parthenium hysterophorus</i> L.) under different climatic conditions	Nguyen, T.L.T.; Navie, S.C.; Adkins, S.W.
11h20	Effect of soil type and fertilizer application on parthenium (<i>Parthenium hysterophorus</i>) growth and yield under lath house condition	Zewdie, K. ; Mersie, W.; Ali, K.; Alemayhu, S.; Abebe, M.; Dawd, M.
11h40	Growth inhibition in field crops due to allelopathic effects of parthenium weed	Karim, S.M.R. ; Forzwa, R.; Biswas, O.
12h00	Discussion	
12h30	Lunch	
13h30	Discussion on effect of parthenium on plant biodiversity	Adkins, S.W.
Theme:	Distribution of parthenium weed	Chairperson: A. Witt
13h50	Parthenium weed distribution and management in Uganda	Bisikwa, J.
14h10	Distribution of <i>Parthenium hysterophorus</i> in Kenya	Wabuye, E. & Lusweti, A.
14h30	Status of <i>Parthenium hysterophorus</i> in Tanzania	Clark, K. ; Lotter, W.D.; Brill, D.
14h50	Discussion	
15h15	Tea	
15h50	Discussion	
16h30	End of day 1	Chairperson: A. Witt

Friday 5 November: First IOBC International Workshop on Biological Control and Management of <i>Parthenium hysterophorus</i>		
08h00-08h30	Registration	
08h30	Housekeeping/announcements	
Theme:	Biological control of parthenium weed	
08h40	Current status of parthenium (<i>Parthenium hysterophorus</i>) biological control agents in Australia	Dhileepan, K. & McFadyen, R.C.
09h00	Biology and effectiveness of the introduced biocontrol insect <i>Zygotogramma bicolorata</i> (Coleoptera: Chrysomelidae) on the invasive weed <i>Parthenium hysterophorus</i> L. (Asteraceae) in Jammu (I&K), India	Bhatia, S.; Choudhary, R.; Kour, B.
09h20	Host-specificity and thermal physiology of <i>Zygotogramma bicolorata</i> Pallister (Coleoptera: Chrysomelidae): A potential biological control agent of <i>Parthenium hysterophorus</i> L. (Asteraceae: Heliantheae) in South Africa	McConnachie, A.J.; Strathie, L.W.; King, H.
09h40	Distribution, incidence, severity and effect of rust (<i>Puccinia abrupta</i> var. <i>partheniicola</i>) on <i>Parthenium hysterophorus</i> L. in Western Hararghe Zone	Bekeko, Z.; Hussien, T.; Tessema, T.
10h00	Discussion	
10h30	Tea	
11h00	<i>Listronotus setosipennis</i> Hustache (Coleoptera: Curculionidae) and new candidate agents under evaluation for the biological control of <i>Parthenium hysterophorus</i> L. (Asteraceae: Heliantheae) in South Africa	Strathie, L.W.; McConnachie, A.J.; Shoba, Z.
11h20	Preliminary Oviposition Tests of the Stem Boring Weevil (<i>Listronotus setosipennis</i> L.) on Some Crops and Plants, and Parthenium (<i>Parthenium hysterophorus</i> L.) in Ethiopia	Aseged, W.; Million, A.; Zewdie, K.; Sintu, A.; Kemal, A
11h40	Discussion	
12h30	Lunch	
Theme:	Management of parthenium weed	Chairperson: R. McFadyen
13h30	Effective Management of Weeds Can Improve the Lives of Women in Sub-Saharan Africa	Mersie, W.; McNamee, C.; Abebe, M.
13h50	Parthenium weed (<i>Parthenium hysterophorus</i> L.) research in Australia: New management possibilities.	Adkins, S.W.; O'Donnell, C.; Khan, N.; Nguyen, T.; Khan, I.; Shabbir, A.; Dhileepan, K.; George, D.; Navie, S.
14h10	Competitive displacements of parthenium weed with beneficial native and introduced pasture plants in central Queensland, Australia	Khan, N.; O'Donnell, C.; Adkins, S.
14h30	Management of parthenium weed: new strategies for complementing biological control in Australia	Shabbir, A.; Dhileepan, K.; O'Donnell, C.; Adkins, S.
14h50	Discussion	
15h15	Tea	
15h50	Discussion and conclusions	
16h10	Compilation of recommendations and wrap-up (parthenium section)	
16h30	IPM-CRSP Partners Planning Workshop (continued)	
17h30	End	Chairperson: R. Muniappan

Posters	
The effect of parthenium weed (<i>Parthenium hysterophorus</i> L.) on plant biodiversity in pastures in Queensland, Australia	Nguyen, T.L.T.; Navie, S.C.; Adkins, S.W.
Invasion of <i>Parthenium hysterophorus</i> L. in Nepal: current scenarios and future challenges	Shrestha, B.B.
Management of the weed parthenium (<i>Parthenium hysterophorus</i> L.) in eastern and southern Africa using integrated cultural and biological measures, 2005-2009	Mersie, W.; Strathie, L.; McConnachie, A.; Zewdie, K.; Nigatu, L.; Fitwiy, I.; Adkins, S.; Bisikwa, J.; Abebe, M.; Gebrehwot, L.; Negeri, M.; Chiche, Y.; Gautam, R.D.; Tessema, T.; Fessehate, R.; Assefa, F.; Maurenootoo, J.; Beed, F.; Kashe, K.; McNamee, C.