

IPM CRSP Trip Reports

Country(s) Visited: Mali, Senegal

Dates of Travel: 4-17 March 2011

Traveler's Name and Affiliation: Douglas G. Pfeiffer

Purpose of Trip: To assess field research plots in Mali and Senegal, visit farmer vegetable fields to assess current situation, and plan with new collaborator.

Sites Visited:

Mali: Goundaka, Yawakenda, Boro, Borko (villages near Bandiagara), Sotuba, Baguineda, Bamako.

Senegal: Dakar, Bayakh, Dgender, Thies, Mboro, Potou, Louga

Description of Activities/Observations:

During the March 2011 trip to Mali and Senegal, we visited cabbage IPM research sites. In Sotuba Mali, we visited plot at IER, where Madame Gamby has located cabbage trials. Several control tactics are being evaluated against lepidopteran pests of cabbage: 1) *Bacillus thuringiensis*, 2) deltamethrin, 3) row covers, 4) neem, 5) interplanting tomato with cabbage, all compared with 6) an untreated control. Three different planting dates are also being evaluated. Heads were being harvested and data collected as we visited.

In Senegal, we met a new collaborator with our project, Dieynaba Sy Sall, on the faculty at ISRA. Dr. Sall carried out her graduate work on biological control of diamondback moth, and should be extremely valuable in our cabbage project. Over the next two days we visited cabbage field in the Nyias region of Senegal. Diamondback moth injury and active infestations were found at all sites, at times extremely heavy. Immediate suggestions could be made: use of surfactants to increase efficacy of insecticidal sprays, and a cultural method, destruction of crop residues after heads are harvested. The outer leaves and stalks left behind create reservoirs for reinfestation. In addition to DBM,

cabbage was found to be injured by *Helulla undalis*, *Helicoverpa armigera*, and *Spodoptera* sp. (probably *exempta*).

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

Education of pest identification and biology with farmers is crucial. Inroads against pest population density are possible now with introduction of cultural control and proper spray practices. Biological control offers great potential; diamondback moth injury was often worse in heavily sprayed fields.

List of Contacts Made:

Name	Title/Organization	Contact Info (address, phone, email)
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