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RESEARCH NEWS

FARMER PARTICIPATORY TRAINING APPROACH TO INTEGRATED PEST AND VECTOR MANAGEMENT

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The Department of Agriculture has implemented the Integrated Pest Management (IPM) program in all rice growing areas in the country for about two decades. During the last phase of the program, IPM activities are amidst community IPM, which involved discovery - based field oriented learning approach, popularly known as Farmers Field School (FFS). This adult learning methodology proved to be very effective in improving the capacity of farmers to manage rice pests through natural enemies while minimizing the heavy use of pesticides.

Rice eco-system supports not only rice pests and their natural enemies, but also other insects that have a strong bearing on health of the farming community. In this respect, insect vector borne diseases are of particular significance. Irrigation canals, ditches and rice fields provide ideal breeding sites for mosquito species responsible for transmission of vector borne diseases like *malaria filariasis* and Japanese encephalitis. Most of the attempts made so far to control these vectors have been largely focused on the domestic and peri-domestic environments but hardly the rice eco-system. It is interesting to note the close synergies between IPM and integrated vector management (IVM). Alternate wet –dry irrigation of rice reduces incidence of rice pest and emergence of adult mosquitoes. Filter feeding organisms which include mosquito larvae and the decomposers that harbor the aquatic component of the rice eco-system provide ample source of food to maintain an abundant population of natural enemies of rice pests. Thus promotion of IPM in rice eco-system indirectly promotes IVM activities as well. However, the synergies between IPM and IVM have been hardly explored under local rice eco-systems.

Therefore, a pilot project was commenced in collaboration with Anti-Malaria Campaign and Mahaweli Authority about two years ago in selected areas with the following objectives:

1. To test how farmers can learn about ecology and management of mosquitoes in wet land rice eco-system during the Farmer Field School in IPM.
2. To test how the outcomes of the FFS can help farmers to organize their communities for an improved management of mosquito populations.

Within two years period (2002 - 2004) farmer training was completed in test site (Kiriibbanwewa). Entomological surveys in both test and control sites (Habaruwewa) were conducted by Regional Malaria Officer.