Rice Black Bugs: invasive species to watch

Its first ‘invasion’ was charted in 1982 in Palawan. Farmers in the area recall collecting tons of rice black bugs (RBB) every night at the height of its invasion.

Time and again, its spread in the Visayas and Mindanao resulted in 15 to 23% yield loss. And its occurrence in Sorsogon in late 2005 alarmed Central Luzon, where rice is primarily grown in contiguous areas along with alternate host crops of RBB such as okra, corn and taro.

Preventing its spread and managing its occurrence are the ways to go to ensure that this invasive species does not affect current rice production. However, management techniques mostly use synthetic pesticides, which may be the only known and affordable option of farmers ‘defense against RBB invasion.

The Philippine Rice Research Institute (PhilRice) of the Department of Agriculture (DA) recently published a book on RBB covering extensive information on its taxonomy, ecology, and management with Dr. Leocadio S. Sebastian, PhilRice Executive Director as one of the editors. Dr. Sebastian teamed up with Drs. Ravindra C. Joshi and Alberto T. Barrion and to bring forth an 800-page book titled, “Rice Black Bugs: Taxonomy, Ecology, and Management of Invasive Species”. The book will be officially launched in January 2008.

Co-published with the Department of Science and Technology (DOST), DOST-Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (DOST-PCARRD) and the DA-Bureau of Agricultural Research (DA-BAR) and the UN Food and Agriculture Organization (FAO), this reference material reinterprets old problems and introduces new ecological techniques for RBB management.

As suggested by Dr. Hans Rudolf Herren, an internationally acclaimed entomologist and recipient of the 1995 World Food Prize, farmers should learn more about ecological and sustainable management options for RBB to prevent crop losses and diminish environmental damage at the same time.

The book includes ecologically-sound management approached to RBB outbreaks, as well as country reports of RBB invasions in other rice-growing countries. The DOST-Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) and the DA-Bureau of Agricultural Research (BAR) likewise supported the printing of the book.

One accessory of the RBB book is an auto-run DVD-ROM containing about 350 published full-text articles on RBB sourced out from experts around the world, dating way back 1864 to 2006. All articles are searchable using both natural language and keywords from a structured vocabulary indexed automatically by freeware Search Engine Builder.

Dr. MS Swaminathan, father of the Green Revolution, recalls the beginnings of the book through a workshop organized to answer the alarms raised by the onset of RBB in the Bicol Region. Researchers from PhilRice convening then with the DA, International Rice Research Institute
(IRRI) and UP Los Baños researchers further inspired them to come up with an exhaustive RBB information material in the form of this book.

In the book's foreword, Swaminathan hopes the RBB book will be widely used by scientists, policy makers, consumers and farmers so that the threat of RBB will soon be part of history.