JOINT SEMINAR

Department of Biological Sciences and IRRI

NUS National University of Singapore

Thurs, 16 February 2012 | 4pm | DBS Conference Room 1

Hosted by Professor Prakash Kumar

ECOLOGICALLY-BASED RODENT MANAGEMENT IN RICE LANDSCAPES OF SE ASIA - PROGRESS AND THE CHALLENGES AHEAD

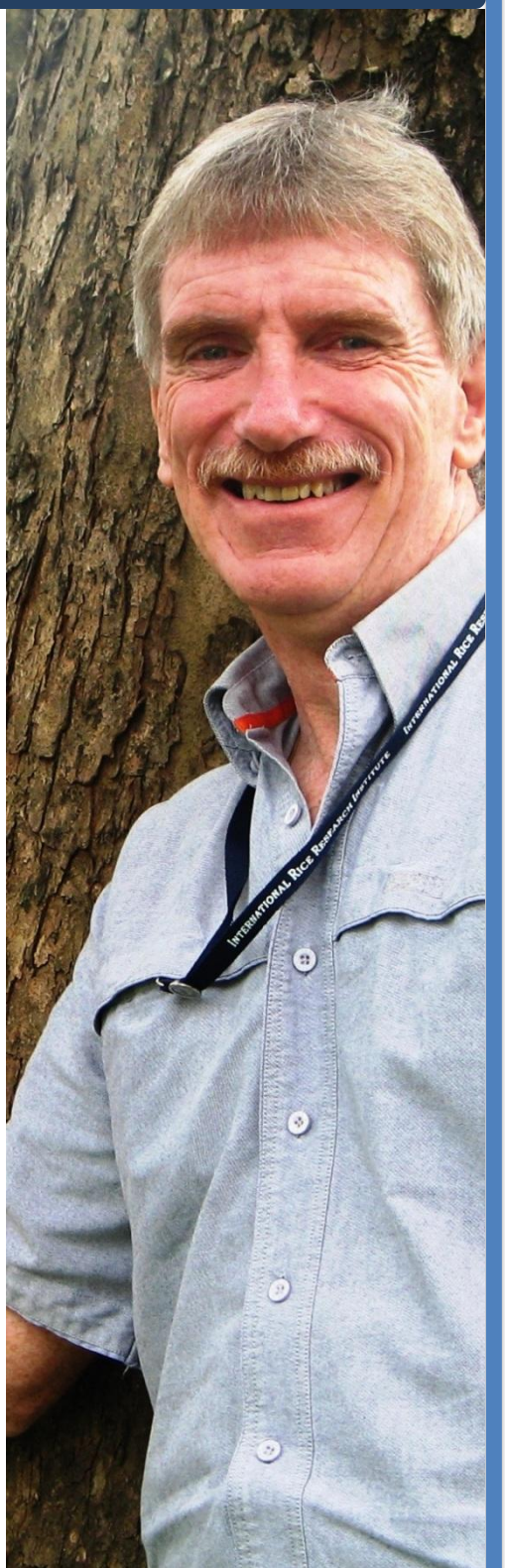
Grant R. Singleton

International Rice Research Institute, Metro Manila, Philippines.

Rodents are a major constraint to Asian rice production, both pre-harvest and post-harvest. In 1960s-1990s the dominant paradigm for rodent control was widespread use of chemical rodenticides. Rodent biologists were forced to rethink this paradigm because of human health and safety issues, lack of efficacy, detrimental effects on non-target species, resistance to anticoagulant rodenticides, and concerns about humaneness. Ecologically-based rodent management (EBRM) was formally described based on adaptive ecological research (Singleton 1997). EBRM builds on the foundation work conducted in the 1940s and 1950s by ecologists such as Elton, Chitty and Davis; research that was marginalized with the advent of cheap and effective rodenticides. I will review progress of EBRM over the past 15 years, and provide thoughts on key ecological and sociological challenges that need to be addressed.

***Brief Biography**:*

Dr Grant Singleton is a Senior Scientist with the International Rice Research Institute in the Philippines. Since 2005 he has been the coordinator of the Irrigated Rice Research Consortium (IRRC); a consortium that currently has activities in ten countries in Asia. Previously he was at CSIRO, Australia, for 23 years. The IRRC focuses on natural resource management of rice production in the agricultural lowlands. Grant is an ecologist and an international leader on ecologically-based rodent management, a concept he developed in the late 1990s and is now adopted in 23 countries in Asia, Australia, Europe, Africa and the Americas. He is associate editor of "Wildlife Research", and "Human Wildlife Interactions". He is a lead author/editor of 7 books including two published in November 2010 – "Rodent outbreaks: Ecology and Impacts" and "Research to impact: Case studies for natural resources management of irrigated rice in Asia".



Artwork by Ann Nee, DBS, NUS