
Rodent Management – Session 1

Adoption pathways of ecologically-based rodent management in Myanmar

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Rodents are one of the top three pests in both lowland and upland agro-ecosystem in Myanmar. A total of 25 rodent outbreak events were recorded from 2007 to 2017. Ecologically-based rodent management (EBRM) in lowland rice system has been introduced in Myanmar since 2005, yet it has not been adopted at a large scale. Developing and implementing EBRM in different agriculture systems is a complex issue that is affected by multiple factors. Household surveys and focus group discussions (FGD) were conducted in areas where chronic rodent problems occurred annually and where recent rodent outbreaks have occurred to identify the key challenges of farmers for EBRM adoption. In recent years, rodents have caused mean annual losses of 8.50 +1.31% in monsoon rice (n =76), 6.65 +1.3043 % (n=61) in summer rice, 13.32 +2.19% in green gram (n=14), 20.35 +4.11% in black gram (n=24) and 18 +7.80 % (n=17) in perennial crops including rubber, oil palm and betel nut. Mean losses caused during rodent outbreaks in upland rice was 76.67 +8.82%. Ninety percent of farmers only implemented control when rodents damaged plants and there were many rodent burrows visible. No proactive management actions were reported from either the household or FGDs. A subset of farmers used rodenticides (36%), and/or trapping (25%), whereas the rest did no control (killing of animals is not acceptable in their religion). In rodent outbreak areas, farmers control rodents by using rodenticides and kill-trapping. Neither approach discriminates between pest and non-pest rodent species. Farmers said control methods used are not efficient but are feasible and applicable. Our survey findings suggested that developing and implementing EBRM should be done through a farmer community participatory approach. Including policy makers early in development of EBRM is crucial for its promotion as a national policy.

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6th International Conference of Rodent
Biology and Management
and
16th Rodens et Spatium

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