

Integrated Rodent Management in rice field

Recognize the problem

Rice field rats are becoming an important pest due to the damage they cause to rice plants and because they act as a vector for Leptospirosis disease. More than 63% of Leptospirosis cases are rice farmers.

In rural rice fields, rat damage can reach up to 30% loss.

Background

Due to the very high breeding rate of rats, natural biological control is not very successful. Total dependency on pesticides in controlling field rats is also not very successful.

Management

Integrated rodent management consists of 3 main areas, namely prevention, habitat management and direct killing of rats.

- Prevention involves disturbing the entrance of rats in to the field. Methods of prevention can be physical barriers like polythene or the use of applications that have repellent action, such as Gliricidia leaves, wild pineapple stem pieces, or the spreading of goat manure where rat damage is seen.
- Habitat management includes the destruction of rat burrows and breeding places in the field, such as straw heaps, and cleaning of the surroundings. This works best when the farmers and their neighbours all take action.
- Direct killing of rats can be done by applying rodenticide and using traps or cages. Rodenticides can be purchased in wax blocks for use in rice fields.
 - Start baiting soon after transplanting and continue up to grain maturity
 - Place the bait inside a piece of bamboo about 1 foot long
 - Place baiting stations along the bunds 40/ ha

Rat attacking plants in rice field.
(Photo by IRRI)



When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > *Rattus sp*

The recommendations in this factsheet are relevant to: Sri Lanka



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