

Prevention of Brown Planthopper by Conserving Natural Enemies

Recognize the problem

In the past 10 years, the Brown planthopper (BPH) was considered one of the minor pests in rice but more recently it has become one of the most serious. This is due to the misuse of pesticides during early-season spraying of rice in the field.

Background

Nowadays, farmers use a lot of pesticides to control leaf-eating insects during early-season spraying. Natural enemies of BPH such as lady beetles, spiders and wasps are also affected by these pesticides. As a result, farmers are faced with BPH problems that can cause yield losses of 30-100%. Furthermore, BPH is also a vector of ragged stunt virus and grassy stunt virus diseases in rice. BPH is difficult to control effectively because it is spread easily by wind and has a short developmental period. If a wide variety of natural enemies are available in rice fields, these natural enemies can control 80% of BPH and reduce the resulting hopper burn.

Management

- Don't use any insecticide within 40DAS/DAT (for leaf folder in rice). If you use pesticides in the early season, it is like bombing your own army yourself. There is no need to worry about yield loss early on because the plant can compensate in time. And your plants become tolerant of other pest problems.
- Grow plants that are attractive for natural enemies on the boundary. These include white & yellow flowering plants which act as shelter for natural enemies. Food and shelter are essential things for every living thing. If you have a field rich in natural enemies, they will help to control the BPH.

DAS: days after sowing

DAT: days after transplanting

Anagrus flaveolus, egg parasitoid of BPH. (Photo by S.V. Fowler.)



Long jawed spider (Tetragnatha sp.), predator of BPH. (Photo by S.V. Fowler.)



Scientific name(s) > *Nilaparvata lugens*

The recommendations in this factsheet are relevant to: Myanmar [Burma]



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