PESTICIDES ARE POISONS
TAKE PRECAUTIONS

PRECAUTIONS

- Avoid direct contact with skin, eyes and clothing when mixing or applying.
- Do not inhale insecticides, or spray mist.
- Do not eat, drink or smoke during work.
- Wear protective clothing , overall, hat, impermeable gloves and boots.
- While handling the concentrate, wear a rubber apron (optional).
- After work, shower and wash clothing.

Notes

GUYANA RICE DEVELOPMENT BOARD
116-117 Cowan Street, Kingston, Georgetown.
Tel: 592-225-8717 Fax: 592-225-6486
Email: info@grdb.gy Website: www.grdb.gy

GUYANA RICE DEVLOPMENT BOARD

BURMA RICE RESEARCH STATION

PADDY BUG ALERT

CONTROLLING THE PADDY BUG, AN IPM APPROACH

BACKGROUND

The paddy bug, *Oebalus poecilus* also known as 'Ghundi or Stink bug' is the most important pest of rice in Guyana. Adult bugs are shield-shaped, light brown and possess yellow spots on the forewings. The female bug lays 10-200 green barrel-shaped eggs on the upper surface of the leaves and these hatched in 3 to 5 days. There are five nymphal stages (moults) and adults develop in 2-3 weeks.

Both the adults and nymphs feed on the grain at the milk and dough stages of the crop. Bugs are known to feed on alternative hosts, such as birdseed grass and jharanga, and then migrate onto the rice during the grain filling stages.

DAMAGE CAUSED

When the grains are attacked during the milky stage, their contents are sucked out resulting in empty glumes or wind paddy. When attacked during the dough stage they become discolored. Consequently, there are reduced yields, quality and black grains in parboiled rice. It also increases breakage on milling.

CONTORL

No single approach can keep the crop free from bugs; hence the current recommendation for controlling the paddy bug is to use an Integrated Pest Management (IPM) Approach. IPM is the use of sustainable techniques/methods in a compatible manner for the control of the pests.

Paddy Bugs will never be completely eliminated but populations in the fields can be maintained at levels not to cause economic damage.

CULTURAL CONTROL

The severity of paddy bug infestation increases in areas where cultivation is staggered.

- Neighboring farmers should plant at the same time.
- Surrounding meres, dams and canals should be clean.
- Fields should be rouged of volunteer rice and red rice.

Grass weeds provide an alternative food source for bugs.

MONITORING

The incidence of the paddy bug can be assessed by sweep netting, during the early morning or late afternoon (before 07:00 hrs and after 16:30 hrs). **Monitor fields from 65 days after sowing until 10 days before harvesting and as often as possible.**

BIOLOGICAL CONTROL

Paddy bugs are attacked by a wide range of predators, parasitoid and pathogens. Important natural enemies include dragonflies, parasitic wasps, flies and fungal diseases such as *Metarhizium anisophiae*.

Friends of the Farmers

Preserve them by spraying only the recommended rates of insecticides.

CHEMICAL CONTROL

Spraying is recommended only when the number of bugs in a field reaches or exceeds one bug per two sweeps using a sweep net. Spraying should be done early in the morning or evenings (before 07:00 hrs and after 16:30 hrs) especially during flowering - *spraying when the flower is open may result in an increase in the percentage of 'wind grains'.*

Recommended insecticides are:

Contact Insecticides:
Fastac @ 148ml/ha (60ml/ac)
Ninja @ 350 ml/ha (140 ml/ac)
Flip @ 86-124 g/ha (35-50 g/ac)
Systemic Insecticides:
Pronto @ 37 g/ha (15 g/ac)
Admire @ 100 ml/ha (40 ml/ac)
Admister @ 49 ml/ha (20 ml/ac)

Farmers using insecticides not listed, such as Bestac, Pestac, Turpedo, Karate or other should contact the Extension Officer in their area for advice on the rate of application or call the Rice Research Station in Burma.

Best Results are obtained when the above rates of chemical are mixed in 66.7 liters of water per hectare (6 gals / acre) using a motor blower.