Pests of Rice

Based on the extent and severity of the damage, following insects are considered as major pests of rice in Sri Lanka

1. **Thrips**

A pest of young rice seedlings. **Adult and nymphs** suck the cell sap from leaf tissues. Damaged leaves roll inwards along the margins, feeding cause leaf drying and leads to a poor crop growth.

The damage

- The damage is severe under water stress conditions.
- Late planted crops are more prone for damage.

Resistant Rice varieties for thrips;

- Short-age traditional rice varieties such as;
  - Dahanala
  - Kaluheenati
  - Kalubalawee
- Varieties having a higher trichome density on the leaf surface, such varieties are found to be resistant for Thrips.

Thrips management

- Submerge infested crops intermittently for 1-2 days.
- Drag a wet cloth on the seedlings.
- If the control of pest if difficult, then apply recommended insecticides.
- If plants are grown in endemic areas, a recommended seed-dressing formulation could be used.
- Seasonal cultivation.

2. **Brown Plant Hopper**

Heavy infestations produce symptoms of hopper burn. Leaves dry and turn brown after insect feeding, and patches of burned plants are often lodged. It is a vector of grassy stunt and ragged stunt virus diseases.

sensitive to attack

The rice plant is most sensitive to attack at late vegetative and reproductive stages.

The economic threshold

At booting stage is 2 per hill and at heading 5 per hill.

Since spiders are considered major predator of BPH, the economic threshold levels are adjusted according to the number of spiders present.

Resistant varieties

A number of varieties with moderate level of resistance to BPH have been developed

Bg 379-2, Bg 300, Bg 403, Bg 304, Bg 357, Bg 358, Bg 360

Ptb 33, a variety with a high level of resistance to BPH, is extensively used in the breeding program.

Effective control methods

- Cultivate resistant varieties.
- Draining the paddy field to reduce moisture help prevent BPH multiplication.
- Indiscriminate use of insecticides during vegetative stage known to cause BPH outbreaks. Use insecticides only when and where needed during vegetative stage especially for the control of leaf eating caterpillars.
- Monitor crop regularly for signs of early BPH infestations.
- Select a safer insecticide if required.
- Safer and effective insecticides are available for use during epidemics.

3. Yellow Stem Borer

The caterpillars bore into the rice stem and hollow out the stem completely. Attacked young plant shows dead heart and older plants show white heads.Often plants break where the stem is hollowed out causing lodging.

Serious out breaks of YSB are very rare.

Resistant varieties

Resistant varieties are not available

Effective control methods

Use of proper land preparation techniques to destroy plant debries

Use of proper weed management methods

4. Rice leaf folder

The caterpillars infest the leaves and feed on the mesophyll. They fasten the edges of a leaf together and live inside the rolled leaf. Feeding reduces productive leaf area that affects plant growth.

Favorable conditions

- Cloudy and humid weather
- Shady conditions
- High N-fertilizer application

Effective control methods

- Establish crop at recommended plant spacing
- Use recommended dose of N-fertilizer
- Monitor crop regularly. ELT
- ETL 25% of leaves showing > 50% damage
- Use safer IGR for control