

## **Recognize the problem**

Rice hispa is a very serious insect pest of rice, particularly in the Terai region of Nepal. The adult is a small bluish black beetle, measuring 5 mm in length and is recognized by numerous short spines on the body and forewings. Adults scrape the areas between the veins giving a characteristic appearance of white parallel streaks along the leaf.

Eggs are found inside the leaf tissue towards the tip of the leaf. On hatching, the young grubs feed between the upper and lower layers of the leaf, tunnelling downwards. The grubs are legless, creamy white and are not easily seen because they are concealed inside the leaf tissues. They are flattened and pale yellow in colour. They pupate inside the leaf mines that they create. During severe attack, the leaves become white and then die.

## **Background**

The larvae can be detected by holding the damaged leaf up to the light or by passing your fingers along the tunnel.

The damage starts in nurseries and spreads to the rice fields.

## **Management**

- Practise closer spacing while transplanting the rice. Higher numbers of leaves per unit area in closer spacing creates a suitable environment to tolerate infestation of rice hispa
- Collect and destroy floating beetles after flooding in the rice nursery beds
- Remove grasses in and around paddy fields or in fallow fields to prevent population build-up of rice hispa in the following crop
- Adopt proper spacing, irrigation and fertilizer application practices. Avoid application of high nitrogen containing fertilizers.
- Clip infested leaf tips along with eggs and grubs before transplanting. Leaf clipping controls 75-90% of grubs.
- Collect adult beetles using a sweeping net in the morning hours
- Spray neem based pesticide e.g. altineem @ 3ml per litre of water or crude neem seed oil. Application of growth regulators like methoprene and diflubenzuron produces deformity on larvae and pupae
- If application of chemical insecticides is required, spray malathion 50% EC @ 2ml per litre water when 1 adult or 1-2 damaged leaves per hill are seen