CHEMICAL MANAGEMENT

- Rice caseworm larvae are highly sensitive to insecticides.
- If infestation is severe, spray Cypermethrin (1 ml per 1 litre of water) or Chlorpyrifos (4 ml per 1 litre of water).

REFERENCES

- IRRI Rice Knowledge Bank, International Rice Research Institute, Philippines
- http://pestsofbhutan.nppc.gov.bt
- http://farmextensionmanager.com
- http://agropedia.iitk.ac.in

NON-CHEMICAL MANAGEMENT

- Draining the field for at least three days will kill most of the larvae because they are highly dependent on water for oxygen.
- Larval cases floating on the water can be collected and destroyed.
- Snails are useful predators of eggs of the rice caseworm. The larvae are fed upon by the hydrophilid and dytiscid water beetles. Spiders, dragonflies, and birds eat the adults.
PEST IMPORTANCE
The rice case worm is an important defoliating pest of rice. The pest feeds on rice during the seedling and tillering stages of the crop. The damage causes skeletonized leaf tissues that usually appear ladder-like. A rice field with standing water increases the pest’s abundance. The rice plants can recover from the damage if there are no other defoliators.

PEST DESCRIPTION
Adults are small (about 1.5 cm in length) and delicate. They are snowy white, and the white wings are marked with a few light brown to black specks. Individual egg is circular, flattened, and measures 0.5 mm in diameter. First instar larva is pale cream with light yellow head. It is 1.2 mm long. The pupa is cream in color and about 5.5 mm long.

LIFE CYCLE
The life cycle is completed in about 32 days under optimal conditions. This suggests that multiple generations a year are likely in Bhutan. The first instar is free-living. Subsequent larval instars construct and inhabit leaf cases. Larvae hide in their case then float on the water surface during the day. They crawl, still in their case, onto rice plants to feed. Adults are nocturnal.

DAMAGE SYMPTOMS
- The larva scrapes the green tissue of the leaf with only the white epidermis remaining. The white epidermis appears ladder-like because of the young pale green larvae feeding on the surface of tender leaves.
- Older larvae are enclosed within the case and feed by scraping leaf tissues or biting through leaf sheaths.
- The presence of leaf cases attached onto leaf sheaths and floating in the water with the larvae enclosed.
- Leaves cut at right angles as with a pair of scissors
- Water is trapped inside the case to maintain humidity and the larvae protrude their head from the upper part of the tubular cases.
- The cases float in water to spread the attack to other plants of the same and other fields.

Infested tillers