### Biology
- The rice whorl maggot is semi-aquatic and common in irrigated fields and feeds on central whorl leaf.
- The adult fly lays elongate, white eggs glued on leaves, which hatch into transparent to light cream legless young larvae in 10–12 days.
- The pest prefers ponds, streams and lakes or places with abundant calm water and lush vegetation.

### Geographical distribution
- Rice leaf folders have been reported in all rice growing areas.

### Damage on rice crop
- Makes holes that are white or transparent patches on the leaves.
- They feed on leaf margins causing large scarred areas making leaf a ragged appearance.
- Slightly damaged leaves have pinholes, transparent patches and break easily.
- Damaged plants are stunted, have few tillers and renders infested plants less competitive with weeds.
- The plants have few tillers, hence lower yields.

### Management Strategies

#### 1. Cultural control
- Drain water at intervals of 3-4 days during the first 30 days after transplanting to reduce egg laying. The adult flies are more attracted in standing water.
- Level the field and start the crop in 7-10 cm of water. Increase water depth slowly after the leaves begin to grow upright.
- Reduce the potential for damage by rice whorl maggots by encouraging the rice to emerge quickly and grow erect.
- Inspect neighboring fields planted 1 week ahead for manifestation of damaged leaves and dead heart.
- Encourage growth of Azolla and *Salvinia molesta* to prevent infestation.

#### 2. Biological control
- Encourage predators- wasps parasitize the eggs and the maggots; dolicopodid flies prey on the eggs; ephydrid flies and spiders feed on the adults.
- Use soft chemicals or bio-pesticides e.g. Neem based products (Achook 8.1l/ha, Nemason 10l/ha, Nimbecidine 600ml/20l of water).