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RESEARCH & EXTENSION
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Stalk-eyed fly (*Diopsis thoracica*)

Biology

- It prefers an aquatic habitat.
- The flies have a distinct black thorax and reddish brown abdomen.
- Female flies lays eggs singly on the upper surface of young leaves on mid rib.
- On older plants, eggs are placed in the leaf sheath.
- Peak oviposition occurs about 30 days after transplanting, while oviposition in the leaf sheath occurs about 10 days later.
- Eggs are boat-shaped, striated with a characteristic anterior projection, attached to the leaf with a glue like substance.
- Each female lays 30 eggs over a 20-day period which hatch after 2-4 days into maggots that infest the crop causing dead hearts.

Geographical Distribution

- The stalk-eyed fly occurs in all rice growing areas.



Fig 1. Adult Stalk eyed fly (Rahab Magoti)



Fig 2. Symptoms on growing tips (Rahab Magoti)



Fig 3. Maggots of stalk eyed fly (Rahab Magoti)



Fig 4. Dead heart on rice plant (Rahab Magoti)

Damage on rice crop

- Damage occurs from seedling to maximum tillering. The maggots bore through the leaf sheath to the stem.
- Growth is stunted and plants eventually die.
- The presence of drying central shoot called 'dead heart' in young plant or drying of the panicle called 'white head' in older plants.

Management Strategies

1. Cultural control

- Field sanitation, clipping the tip of seedlings prior to transplantation to eliminate egg masses.
- Use pheromone lures to trap adults flies.

2. Biological control

- Inspect regularly for presence of insect pest.
- Destroy and discard infested plants to prevent spread.
- Timely control weeds that may act as reservoirs for the pest
- Encourage conservation of natural enemies of the pest.

3. Chemical control

- In nursery , spray with systemic insecticides before transplanting when the economic threshold of 10% dead hearts of rice seedling is observed.
- Dip roots of seedlings root treatment for 12 or 14 hours before transplanting in recommended insecticide (PCPB, 2015).. Vegetative stage at 15 DAT; At panicle initiation, presence of 1 moth or 1 egg mass/m².

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