

## PREVENTIVE MEASURES

- Smudging early in the morning and in the afternoon during early fruit development stage to repel the insect.
- Pruning of trees to allow light penetration on the canopy to discourage the adult insect from staying.
- Monitor weather condition; high relative humidity and intermittent rain favors the development of the insect. In such case, set-up traps to check adult population on the field. Traps could be made out of a gallon capacity plastic container cut into half painted black with transparent P.E. plastic receptacle that is oiled inside. Magnifying glass or stereo microscope is needed to properly identify the insect.



## CONTROL MEASURES

- If adult population is high on monitored traps and/or initial damage is observed on fruits or leaves, spray insecticides.
- Spraying of insecticides could be done early in the morning or in the afternoon. Mix insecticide with sticker especially if intermittent rain is experienced in the area.
- Spray also surrounding areas and vegetation to destroy population.
- Carbaryl or Lambdacyhalothrin is found effective to reduce infestation.

## CECID FLY (*Procantarinia* spp.)



DEPARTMENT OF AGRICULTURE  
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**National Mango Research  
and Development Center**

**DOST-PCAARRD-GIA Fund**

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## What is Cecid fly?

- Cecid fly (*Procantarinia* spp.) belongs to the family *Cecidomyiidae*.
- Also called as Mango midge, Leaf gall midge, Gall fly and Mango leaf gall
- Considered as major pest of mango which infests the young leaves and fruits.
- Species attacking the leaves is different from those infesting the fruits (Medina, 2013).
- During high infestations, damage on fruits reaches up to 70 percent.

## Biology of the Pest

### Adult

- The adult fly looks like a mosquito but smaller in size with yellow-orange body and black head.
- The male adult fly measures about 1.61 mm while the average female is 1.32 mm.
- The adult life span is about 1 to 2 days.

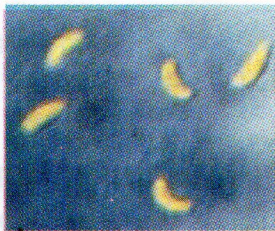


### Egg

- Eggs are laid on fruit or leaf surface and hatch in 1 to 2 days.

### Larva

- The newly hatch larvae bore on the fruit skin or on young leaves forming galls and feeds inside.
- The larvae stay on the fruit or leaves for 4 to 5 days and pop out to pupate.

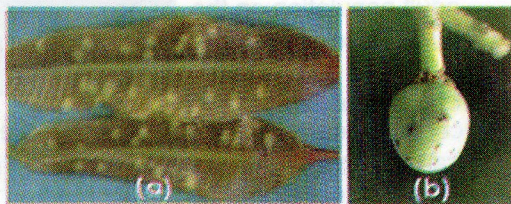


### Pupa

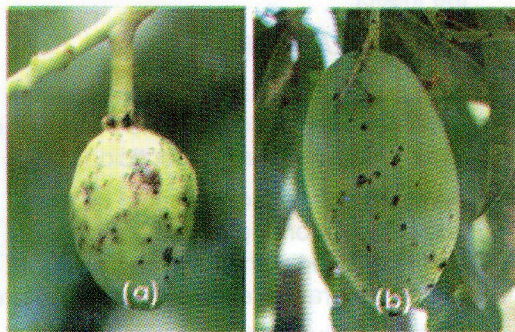
- Pupation of insect occurs in the soil and it emerges after 2 to 3 days.

## Nature of Damage

- The insect infests young leaf and fruits from 32 to 70 days after flower induction (DAFI).
- The insect damage is usually associated with galling of young leaves. Fruits attacked produced circular, brown scab-like spots randomly distributed on the fruit surface.
- The damage is commonly called "buti," "nora-nora," "armalite," "kurikong," and "saksak walis" by growers. Infested fruits retain the scabby lesions up to harvest affecting their quality.



Damaged on; a) young leaves and b) fruit (32 DAFI).



Damaged on fruits, a) 40 and b) 70 DAFI.

## PREVENTIVE MEASURES

- Damaged fruit should be collected and disposed properly to destroy the life cycle of the insect.
- Early bagging of fruits (40 to 45 DAFI).
- Underbrushing and clearing of surroundings to destroy the habitat of the pests.