TRIVIA

1. Locusts live as ordinary grasshoppers when there is abundance of food supply.
2. El Niño phenomenon triggers locust phase change from solitary to destructive phase (transitory to migratory).
3. Locusts fly obliquely with the wind and can travel many kilometers per day
4. Locusts have more protein content than most fish and other meat products
5. Locusts can fly even while mating
6. A gravid female can lay up to 5-7 egg pods in one generation with maximum total of 500 eggs.
7. Regular swarm of locust can destroy one hectare of cornfield overnight!
8. Hopper bands vary in size from a few square meters to several square kilometers!

For more information and inquiries, please contact:

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October 2010

Technical Editing and Design Assistance

ASEAN IPM Knowledge Network
KASAKALIKASAN, the Philippine National IPM Program

MANAGEMENT OF LOCUST

ORIENTAL MIGRATORY LOCUST
(Locusta migratoria manilensis Meyen)

Department of Agriculture
BUREAU OF PLANT INDUSTRY
CROP PROTECTION DIVISION

SIGNS AND SYMPTOMS

1. Presence of marching nymphs and swarming adults
2. Damage on leaf blades of plants/weeds in the area
3. Fecal droppings
4. Presence of hovering birds over the area
5. Oviposition borings in the area
6. Bagasse-like smell in the area.

POPULATION REGULATION

A. MONITORING

The best time to monitor for locusts is after a long drought/dry spell in historical breeding areas.

1. Egg field
   a. *look for oviposition holes in the ground (pencil-sized holes near the plant roots)*
   b. *mark area with a flag or any identifiable marker*
   c. *get egg pod samples and keep for observation which will indicate the time of hatching*
2. Nymphs (1-5 instars)
   a. *look for presence of damaged leaves and mowed-like damage of weeds in the area*
   b. *presence of marching nymphs (brick red in color)*
3. Adults
   a. *look for congregating/swarming locusts (khaki color)*
   b. *look for mating locusts on plant/weed stalks and on ground*
   c. *look for silvery color of leaves*
   d. *mark area with red flag (eggfield)*

B. MANAGEMENT

Best time to control locusts is during the transitory phase change. The rationale is to prevent locusts from becoming migratory in behavior.

The following strategies are applicable to nymphs and adults. Egg fields are observed for new hatchings.

1. Biological
   a. *predators- birds, toads, skinks, man etc.*
   b. *parasites/parasitoids- nematodes, flies, mites*
   c. *entomopathogens- metarhizium*
2. Physical
   a. *trenching*
   b. *catching*
   c. *hand-picking*
3. Chemical method
   a. *baiting for nymphs*
   b. *spraying for adults (contact insecticide)*
4. Legal
   All able bodied citizens from 16 to 60 years will participate in locust campaign of infested areas

C. OUTBREAKS

1. Community action
   a. *allow locust catchers to go into infested areas first before conducting spraying*
   b. *number of locust (sack) in exchange for kilos of rice*
   c. *best locust recipe*
   d. *massive baiting/spraying*

D. LEGISLATIVE MANAGEMENT

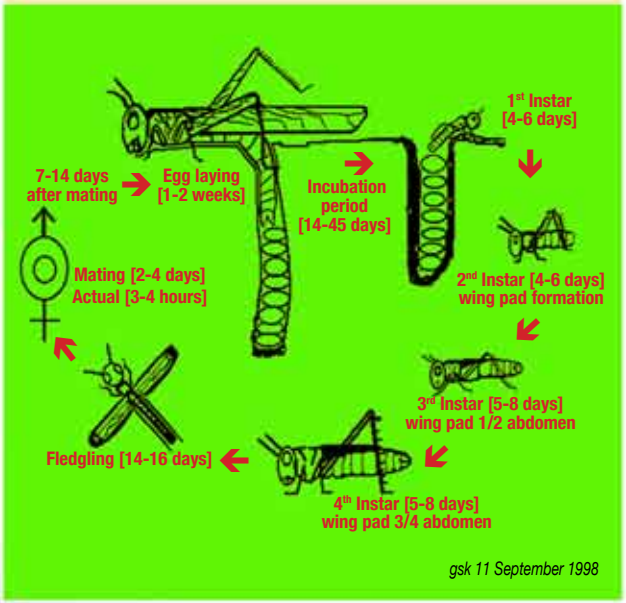
Implementation of government laws in the management of pests.

Locust Act (R.A. 2472)

All able-bodied male inhabitants of the infested municipality between the ages of 16-60 inclusive shall be compelled to render 2 working days a week at 9 hours a day to killing of locusts. Failure to do so, imprisonment and a fine would be exerted upon person committing the offense.

LIFE CYCLE OF ORIENTAL MIGRATORY LOCUST

(Locusta migratoria manilensis Meyen)



BAIT COMPOSITION:

1. **Pesticide**- 200 to 250 grams (Sevin85 S)
2. **Dispersing agent** – fresh water @ 20 liters or Sea water @ 20 liters
3. **Carrier** – rice hull @ 3-4 sacks (@50 kgs/sack) Any suitable carrier may also be used eg. Peanut shells, coffee pulp, bagasse, etc
4. **Attractant** – salt @ 1 kg.
   Mixing procedure. Mix pesticides with water after salt had been dissolved. Wet carrier with mixture using water sprinkler. Mix thoroughly with spade (never use bare hands).
   When thoroughly mixed, place inside sacks. Apply immediately, don't store. One sack of mixed bait could be used for 1 hectare of hopper infestation.