

GETTING LARVAE TO PUPATE

1. Prepare the plastic boxes (13.5x11x4) for arvalemergence.
2. Fold the cartolina to make it appear corrugated and place it inside the box. Lacewing larvae are cannibalistic, so this corrugated cartolina prevents the larvae from consuming its siblings.
3. Moisten cotton wad in a cap and place inside the box.
4. Gently lay the gauze diaper cloth with lacewing eggs on top of corrugated cartolina.
5. Feed larvae with fresh sitotroga eggs. It will grow through 3 stages (1st, 2nd and 3rd instars) and when ready to pupate, the larvae will spin a spherical white silken cocoon.
6. Collect cocoons and place them in plastic jar with cotton wad soaked in water for moisture. Cocoons yield adult green lacewings in about 10-14 days

PHOTOS OF GREEN LACEWING ATTACKING PESTS



Larva devouring eggs
of whitefly

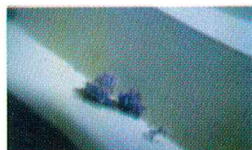


Adult feeding on
whitefly



Adult chasing
whitefly for food

CANNIBALISM



Larva attacking its sibling

For more information and inquiries
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**BUREAU OF PLANT INDUSTRY
CROP PROTECTION DIVISION**

Manila

**Green Lacewing
(Chrysopa spp.)**

Broad-spectrum Biological Control Agent



GREEN LACEWINGS

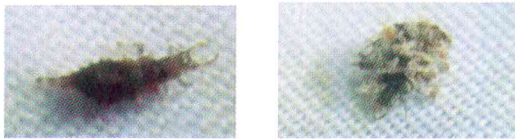
Green lacewings (*Chrysopa spp.*) are general predators found patrolling in plants attacking insects and insect eggs.

APPEARANCE

The light green **adults** have long, thin bodies and resemble **damselflies** holding their wings over their backs when they are not flying,



The **larvae** resemble **miniature alligators** and are active predators. They are often called "**aphid lions**" having known as voracious feeder of aphids. They cover themselves with a debris or with the remains of their prey.



The **eggs** are laid in foliage on tips of hair-like filaments.



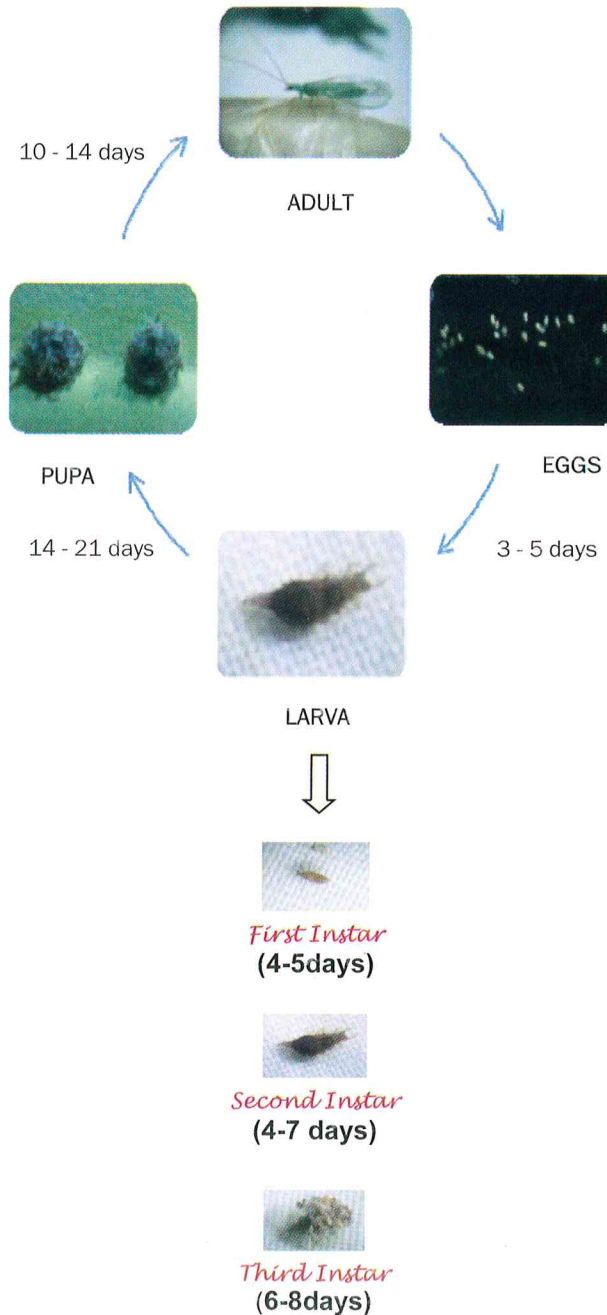
PESTS ATTACKED (Host Range)

Aphids, thrips, mealybugs, whiteflies, armyworms, budworms, bollworms, borers, corn earworms, spidermites, scale insects, psyllids, leafminers, leafhoppers, insect eggs and small caterpillars.

HABITAT

String beans, bush sitao, cabbage, okra, tomatoes, eggplants, peppers, , lettuce, potatoes, corn, cotton, guava,

LIFE CYCLE OF GREEN LACEWING



MATERIALS NEEDED TO PRODUCE GREEN LACEWING

Plastic boxes (10"x7"x3")
Plastic canister or jar (5"x4")
Plastic boxes (13.5x11x4)
Spray bottle
Gauze diaper cloth
Coco cloth (white)
Very fine artist brush (for picking-up larvae)
Small flat artist brush (for smearing diet on walls of rearing boxes)
Cotton wad
Syringe
Cartolina

PROCEDURE FOR REARING GREEN LACEWING

ADULTS

1. Collect adult green lacewings in corn fields.
2. Using a small flat artist brush smear gently the artificial diet on walls of plastic boxes(10"x7"x3").
3. Prepare small plastic caps (tight fitting covering for bottles or cups) put cotton wad moistened with water using a syringe and cover with tissue. Place inside the box to ensure humidity.
4. Store green lacewing adults for egg oviposition.
5. Cover boxes with gauze diaper cloth and fasten with a hollow plastic box cover.
6. Check for eggs on the next day and once you see several dozen eggs, remove adults and transfer them in a new box for further oviposition. **Note:** Adult lacewing can be picked-up by gently pinching their wings with forcep or by using test tube.
7. Label the box the date of oviposition.
8. On the third day eggs will hatch.