

Generic BioControl Agent Life Cycle

In nature there are always variations and exceptions
SCNWCB March 2001

ADULT

Most BioControl agents are insects. The life cycle description can be started with the adult insect. The adult may be a beetle, fly, moth, or midge. Regardless of their form, insects mate and most lay eggs.

EGG

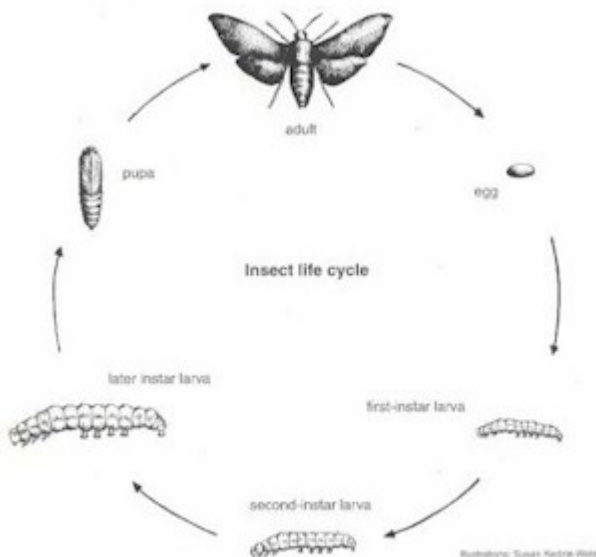
Eggs come in many shapes, sizes, and colors. They might be deposited on or in the ground, the roots, the stems, the leaves, or the flowers. When the eggs hatch the new insect is called a larva. The plural of larva is larvae.

LARVA

The larva seldom looks like the adult it will become. Some common larval forms are the maggot, grub worm, inchworm, and caterpillar. As the larva grows it must shed its old skin from time to time. This is called molting. From hatching to the first molt the larva is said to be in its 1st instar stage. After molting the first time the larva enters its second instar stage, and so on. The feeding activity of the larvae often inflicts more damage on the noxious weed than the adult form. Different insects have different numbers of instars, but eventually the larva is fully grown and ready to pupate.

PUPA

The pupa is the life stage between larva and adult. In this stage the insect does not feed, and can be considered motionless. This metamorphic change is often profound. Unless the larva is in a stem or root tunnel it will usually construct some kind of shelter to pupate in. This "cocoon" might be made from soil particles, silk, chewed seeds, chewed plant material, ground litter, or combinations. Inside the "cocoon/shelter/chamber/capsule/case" the pupa is gradually transformed into an adult.



ADULT



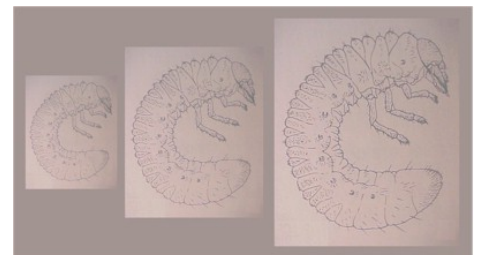
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EGG



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LARVA



PUPA



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