Garden Pests and Problems: Insect Life Cycles and Metamorphosis

Insects go through many different changes, or metamorphosis, as they grow into adults. The word “metamorphosis” is made up of two words: “meta” which means change, and “morph” which means to change form. Some insects go through complete metamorphosis, and others go through gradual metamorphosis.

Complete Metamorphosis

A butterfly goes through complete metamorphosis or, a complete life cycle. A butterfly first hatches from an egg as a caterpillar. This is called the larval stage. It is these caterpillars, or larval stages, which harm plants when they eat plant leaves and stems. Once the caterpillar has eaten enough food and the temperature is right, it wraps itself in a cocoon. At this stage, the insect is called a pupa. When the caterpillar comes out of the pupa, it is a butterfly in the adult stage. The butterfly will then lay eggs and the whole cycle is repeated.

In this picture label each stage of the butterfly's life cycle with the correct name. Use the underlined words from the paragraph above.

The butterfly is not the only insect that goes through complete metamorphosis. Other insects also change from a larval stage into adult insects. Soil grubs turn into beetles, maggots turn into flies, and some types of caterpillars change into moths rather than butterflies.
Gradual Metamorphosis

Gradual metamorphosis is another insect life cycle. In gradual metamorphosis, the insect hatches out of the egg and looks like a tiny adult. These young insects are called nymphs. Nymphs go through several stages of growth where they shed their outer covering. This process is called molting. After a number of molts the nymph becomes an adult.

These insects can harm plants at all stages of their life cycle. For example, adult beetles eat plant leaves and their nymphs eat plant roots or burrow into tree trunks. List other examples of insects that have this life cycle.

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