# ARMYWORMS IN TEXAS LANDSCAPES

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Armyworms can destroy lawns, shrubbery, vegetable gardens and flowers, as well as many agricultural crops. The locations of their attacks vary each year throughout the state. They are most severe in the fall of the year when they defoliate plants rapidly in usually unpredictable sites.

## Description

Common species of armyworms present in Texas include: the fall armyworm, *Spodoptera frugiperda*; the yellowstriped armyworm, *Spodoptera ornithogalli*; the beet armyworm, *Spodoptera exigua*; and the armyworm, *Pseudaletia unipuncta*.

Armyworm is correctly used to mean only the one species, *P. unipuncta*. This also is called the "true armyworm" to distinguish it from other species. The term "armyworms" refers to all of the above species and others which sometimes are abundant and confused with them.

Larvae, or caterpillars, are green or brown with various markings. Color depends on the species, individual variation and food. They range in size from about 1/8 inch or less for the newly hatched to a full-grown larva of about 2 inches. Larval development occurs by molting the outer skin. The pupa, or resting stage, does not resemble a caterpillar, but is brown and hard-shelled. It is found in the soil where it lies almost motionless.

Adult armyworms are moths that often can be found in abundance around outside lights. They vary in coloration and markings depending on the species

involved. Armyworm moths, or "millers," have a 2-inch wingspread.

### **Biology and Habits**

Armyworms have four life stages: egg, larva, pupa and adult. Eggs are very small, are seldom seen and are laid at the base of appropriate host plants. Larvae hatch from the eggs and feed mostly at night. They usually hide in debris on the soil surface in the day-time. When full grown, larvae will enter the soil and form the pupal stage. Adult moths emerge from pupae. Moths mate and lay eggs, thus starting the life cycle over again. Lush plant growth is preferred by the adults for egg laying.

Several generations (A generation is the development from egg to adult stage.) occur each year. Armyworms in the spring and summer occur in more distinct groups than later in the season. Fall populations of larvae often blend together several generations and may appear to be continually occurring.

When feeding, larvae strip foliage and then move to the next available food. High populations appear to march side by side to the new food. Thus, the name armyworms has been applied.

Development rates vary depending on temperature, food and other environmental factors. A complete life cycle can be completed in 6 to 8 weeks but can range from somewhat less than 6 weeks to several months.

#### **Hosts Attacked**

Armyworms attack many different kinds of plants. When food is scarce, they will move to plants that are not normally attacked. Thus, armyworms can be found

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on nearly any plant as they migrate in search of edible foliage. The preferred host plants are corn, small grains and grasses.

Some other plants attacked by armyworms include: sweet potato, beans, turnip, clover, tobacco, spinach, cucumber, potatoes, tomatoes, cowpeas, cabbage and bluegrass.

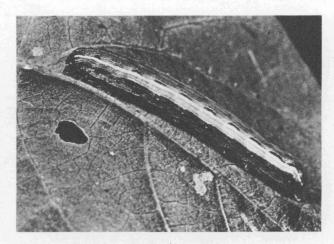
Damage consists of foliage consumption. Least preferred parts of the plants, such as stems and large leaf veins, will not be attacked unless caterpillars are near starvation.

#### Control

Armyworms should be controlled when they occur in large numbers or plant damage is becoming excessive. Preventive treatments normally are not justified because attacks are sporadic. Early detection seems to work best and is achieved by frequent, thorough inspection of plants.

Insecticides recommended for armyworm control are: carbaryl (Sevin®), chlorpyrifos (Dursban®), diazinon (Spectracide®), malathion, methoxychlor, and trichlorfon (Dylox®). Follow all directions, particularly safety precautions, on the insecticide package label. Although any of the insecticides will control

armyworms, not all are labeled for use on all host plants. Be sure to follow the information as it appears on the label. Insecticide label clearances are subject to change and changes may have occurred after this publication was printed. The pesticide USER is always responsible for the effects of pesticide residues on his own plants as well as problems caused by drift from his property to other properties or plants.



Yellowstriped armyworm.

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