



ARMYWORM

The armyworm is caterpillar which, in seasons of unusual abundance, crawls in large numbers from field to field devouring grasses and grain crops. Wheat, corn, oats, barley, and rye are among its favored food plants. Outbreaks are more common following cold, wet, spring weather, and damage may occur from late April to late June. It occurs throughout most of the United States east of the Rocky Mountains, and it has also been found in New Mexico, Arizona, California, and Canada.

The buff or sand-colored moth has a wing expanse of about 4 cm with a small white dot in the center of each fore wing and somewhat darker margins on the hind wings. (Fig. 1).

The dot is a convenient recognition mark and the basis for the specific name. Adults feed on the nectar of flowers.



Figure 1

The full-grown larva is a nearly hairless, smooth, striped caterpillar, about 5 cm long. Its general color is green to brown, and the stripes, one along each side and a broad one down the back, are dark and often nearly black. The stripe along the back usually has a fine, light-colored, broken line running down its center. The head is pale brown with a green tinge and mottled with dark brown (Fig. 2).



Figure 2

Partly grown caterpillars hibernate in the soil or debris at the surface and complete their growth in the spring. In the latitude of central Ohio pupation

takes place the latter part of April, and about 2 or 3 weeks later adults emerge and lay eggs. The moths are attracted to lights at night, and their relative numbers may serve as an indication of probable larval abundance. The eggs are laid in large masses at night, usually in the folded blades or under the leaf sheaths of grains and grasses. They resemble small white beads, each smaller than the head of a common pin. Many moths seem to congregate and lay their eggs in the same locality. In 8 to 10 days tiny greenish caterpillars hatch from the eggs and begin feeding. This is the first generation of larvae and it usually causes the most damage. After molting several times they become fully grown in about 3 or 4 weeks, then pupate and emerge as adults. There are usually 3 generations of caterpillars each year in the northern states but seldom 2 successive outbreaks in any given locality. Some evidence indicates that all stages may be present during the winter in the extreme South.

One of the important natural enemies of the armyworm is *Winthemia quadripustulata* (Fabr.), commonly called the red-tailed tachina fly (Fig. 3). It oviposits on the caterpillars, and its larvae bore into the body and devour the inside portions. The flies multiply rapidly and often become numerous enough to completely control the armyworm in some localities.



Figure 3 - Tachina fly

The egg parasite, *Telenomus minimus* Ashmead, (Sceleonidae) and the braconid wasps, *Apanteles laeviceps* Ashmead, *A. marginiventris* (Cresson), and *A. militaris* (Walsh), also play an important role in natural control. Other natural enemies are the ground beetles, sphex wasps, birds, toads, skunks, and domestic fowls.

Pesticides are helpful when natural enemies do not keep it in check, especially in no-tillage corn following sod or small grains. Armyworm problems in no-tillage corn planted in sod appear to result from eggs deposited on grass before it is killed with a herbicide, leaving young corn plants as the only food; corn near adjacent sod areas may be severely damaged under such crop management.

References: *USDA Farmers' Bul.* 1850, 1947; *leaflet* 494, 1964; *Cir.* 849, 1950; *Pesticide News* 26:38-44, 1973; *Bul. Ent. Soc. Amer.* 22: 302-304, 1976.