Armyworms: They Could Be Invading A Field Near You

DR. DOUGLAS B. JONES



MT. VERNON, ILL.

his native pest of grasses and several vegetable crops is called an armyworm because of the way it spreads like an invading army across a field searching for food. The armyworm's native range extends from the Rocky Mountains eastward across

most of the United States and southern parts of Canada.

Several species of armyworms are present in the Midwest every year; however, only occasionally do their populations reach economic pest status. Usually, their populations are kept in check by a number of natural enemies such as ground beetles, several viruses and fungus species, and more than 12 species of parasitic wasps and flies. Other factors such as weather

conditions, spring moth flights that bring more armyworms into the area and the crop maturity determine whether armyworm populations will only be a nuisance or an economic loss.

Typically, armyworm development is favored by a spring that is cool and wet, while armyworm natural enemies are hindered by the same weather conditions.

Armyworm moths move from the southern states in April and May to northern areas and lay eggs in rows or clusters on the lower leaves of grasses. One to two weeks later, pale green larvae hatch and begin feeding. These larvae are frequently found in the top couple of inches of soil around their food plants during the day. Active at night, they go through six instars before pupating in the soil. One to two weeks later, adults emerge and repeat the life

cycle. There can be two or more generations per year.

Armyworm moths are most active during the evening. Because they prefer to lay their eggs in dense vegetation, infestations generally begin in heavy grass areas such as fence rows and also in reduced tillage fields. When the host plant is consumed, they begin searching for more food by moving to other plants, including small grains and corn. Feeding in corn is usually confined to the leaf margins; however, seedling corn is more susceptible to significant damage.

Armyworms often go unnoticed in fields until injury is severe. Because their larvae feed primarily at night, they can cause significant damage before being detected.

When scouting for armyworms in corn, pick five random locations in the field and closely examine 20 plants at each location. Record the number of larvae found and make estimates of their size and the percentage of damaged plants; remember that they are frequently found under debris and just under the top of the soil. In cereal grains, carefully examine about 3 linear feet of crop row in those five locations.

Reduce your armyworm risk by eliminating grassy weeds from fields and their borders. This will reduce egg-laying and migration into your field by hungry larvae. Keep an eye on field borders in order to spot worms beginning to migrate into your field. If armyworms do make it into fields, control may be justified when more than 1/4 of seedling corn plants are damaged.

Older corn (post pollen shed) may need insec-



ticidal control when armyworms are feeding above ear level. Small grain growers may need to take action when there are more than 6 smaller armyworms per foot of crop row. However, once the larvae are longer than 1 1/4 inch and head cutting is observed (the most damaging stage), treatment may be justified with fewer observed worms.

Dr. Douglas B. Jones Ph.D., is Extension Specialist, Integrated Pest Management, with the University of Illinois at the Mt. Vernon Extension Center.