Specialists Cite Benefits From Soil Insecticides

Crop specialists are advising many corn growers to consider using a soil insecticide at planting this spring to protect their crop from rootworms and other soil insect pests. One relatively new. but very serious pest for Pennsylvania producers, and those in neighboring states, is the western corn rootworm. According to Dr. Dennis Calvin, extension pest specialist and assistant professor of entomology at Penn State, the western corn rootworm has been steadily advancing eastward over the last several years and can now be found in many fields throughout Pennsylvania.

"In 1987 the western corn rootworm frontal line was through the central part of the state, and this year the pest pushed another onethird of the way eastward," Calvin said. "The projection is that by 1989 the frontal line will advance to the southeastern portion of Pennsylvania, the state's largest corn growing region. Several fields in Lancaster County already have a high infestation of the western corn rootworm.

Calvin added that the western rootworm can cause severe damage to crops when populations are high, particularly if dry conditions occur after root pruning takes place. "The western corn rootworm is considered twice as damaging as the northern rootworm for several reasons," he stated. "Because the western corn rootworm generally emerges earlier in the spring they are able to feed on younger plants that have a less developed root system. They are more prolific than the northern species, and they also feed more vigorously, enabling them to clip more roots in a shorter period of time."

Soil Insecticide **Treatments**

Dr. Joe McGahen, long-time leader of the Penn State corn club and former corn extension agrc nomist at Penn State, noted that protecting fields from western corn rootworm is critical. "Corn growers should seriously consider using a soil insecticide to control pests," he said. "Producers can expect to see a significant yield response from using a soil insecticide at planting. This is especially true where rootworm is a key pest, particularly the western corn rootworm. Fields that have the highest potential for yield response from a soil insecticide are second or more years in corn and those in the frontal area where adult beetles were present the previous year. Over the last several years we've seen a yield response of more than 7 percent in corn club fields where insect pressure is prevalent.'

When scouting for adult northern corn rootworm beetles during the summer months, Calvin says that an average of three to four beetles per plant warrants treatment with a rootworm insecticide the following year. The threshold level for the western corn rootworm is an average of one and onhalf beetles per plant.

Don Hartzler, manager of the Union Mill Soil Service in Mifflin County, Pa., notes that growers also should consider use of a soil insecticide for treatment of other insect pests besides rootworms. "An insecticide treatment provides extra protection against several pests including seed corn maggot, wireworms, symphylans and flea beetles," he noted. "We also recommend that growers use an insecticide if they've had problems with cutworms in the past."

Don Baldwin, technical service

and development specialist for The Dow Chemical Company notes that when planting with a granular soil insecticide, such as LORSBAN* 15G, a T-band application is preferred to control rootworms and other soil insects.

"For control of rootworms as well as other soil insect pests, we encourage growers to apply the insecticide in a T-band," he said. T-banding involves applying the insecticide ahead of the press wheel and over the furrow before it's closed. A T-band has proven to be the most effective method to apply Lorsban 15G insecticide as well as other granular insecticides in both conventional and conservation tillage situations.

"Some of the granules will fall into the open furrow and some on either side of the furrow. This enables growers to get both above-ground and below-ground pests," he continued.

According to Mike Priola, of Helena Chemical in Sussex County, Del., many of the top corn producers in his region rely on soil insecticides to achieve higher profits. "Out top growers from western Maryland to the Delmarva Peninsula have regularly increased yields by including a soil insecticide in their overall crop management program," he commented. "For example, members of the Talbott County, Md., corn club have consistently achieved an eight to 10 bushel per acre increase by using a soil insecticide. At an average cost of only \$10 to \$12 per acre for the product, producers get a very good return on their money considering the increased yields.

Priola notes there are four key soil insect pests that threaten corn in his region. "Wireworm and seed corn maggot are the two predominant species here," he said. "We've also had cutworm outbreaks on the eastern shore of Maryland and in our higher organic soils in the southeast section of Delaware. Lorsban 15G applied in a T-band at planting has given us excellent cutworm, seed corn

maggot and wireworm control on the eastern shore. Grubs continue to be a problem primarily because of the continuous no-till practices in corn followed here. Applying a soil insecticide enables growers to efficiently reduce pest populations while increasing yields."

Bradford County Dairy Judging

The Bradford County 4-H dairy cattle judging team placed second out of 20 teams at the Penn State University Spring Dairy Cattle Judging Contest recently held at State College. Out of 90 participants, Terri Packard placed eighth overall and Jim Jenkins, tenth. Other participants who contributed to the team's strong showing included Mike Hulslander, Amy Packard and Jeremy Braund.

These youth deserve much credit since in order to become a

good dairy judge youth need to learn two special skills: decide how to best place the class and learn to speak clearly when they present oral reasons in defense of their placings. Dairy judging helps teach youth how to make a decision, since each participant had to place eight classes with four cows per class. As part of the contest each youth presented two sets of oral reasons. When youth present oral reasons they increase their speaking ability and gain confidence in themselves.

