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FALL ARMYWORM ON PEANUT

Spodoptera frugiperda (J. E. Smith)

Description: Fall armyworm (FAW) larvae (up to 1 ½" long) are highly variable in color from green to dark brown, almost black. A broad lighter colored band runs

Fall armyworm larva, note inverted "Y" on head.
(M. Shepard)

the length of the body on each side. The head is darker colored than that of the corn earworm and the FAW typically has an inverted white "Y" shape on the front of the head. The FAW moth has a wingspan of about 1 ½" but rests with the wings angled back rather than spread out. Moths are dark with a lighter colored spot near the tip of the front wings. Eggs are laid in a cluster and are covered with moth scales which give the cluster a fuzzy appearance.

Biology: The FAW overwinters in the Gulf Coast states and must migrate into S. C. each year. Moths first invade peanut fields during August and each female moth deposits a total of about 1,000 eggs in several separate clusters. FAW goes through six larval stages on peanut before pupating in the soil. A generation is completed in about four weeks. FAW feeding behavior is very similar to corn earworm on peanut. Small larvae feed primarily on terminal leaflets and blooms, while the last two larval stages feed on pegs as well as foliage.

Fall armyworm feeding on peg. (J. Chapin)

Management: Reduced tillage systems may result in fewer FAW because more beneficial insects are present. Avoiding unnecessary use of granular chlorpyrifos (Lorsban) in July also preserves beneficials. FAW has become resistant to many insecticides and is often difficult to control. Since FAW feeding usually occurs shortly after corn earworm infestations and these pests have similar feeding behavior, it is important to consider the combined effect on the crop. Corn earworm is easy to control whereas FAW control is typically more erratic and costly. One management strategy is make sure that corn earworm doesn't slow canopy growth so that the crop can better tolerate FAW feeding. Canopy growth conditions must be considered in making a treatment decision for FAW.

Plants stressed by drought or herbicides are more susceptible to yield loss. A fully developed canopy which has completely lapped the row middles can tolerate 8 larvae per row ft. A stressed canopy which is not intercepting all of the light should be treated at 4 larvae per row ft.

Scout weekly after July 20th using a 3' shake cloth with wooden dowel handles. After moving one row out of the way, place the cloth under the peanut laterals, then bend the laterals from the other side of the plant over the cloth. Check the soil surface for larvae on the side of the row opposite the cloth. Then beat the plant vigorously 20 times onto the cloth, pull the laterals back and count all larvae on the cloth. Look carefully for small worms that may not move immediately. Remove the cloth and check the soil surface beneath it. Add up the total larvae per three row foot and record it. Take another count several rows away and sample at least two representative areas of a field. Since FAW eggs are layed in clusters, you may get many very small worms on one shake. Disregard a single egg cluster since this would bias your sample, but if these small worm clusters are found consistently along with larger FAW larvae, the field will probably require treatment.

See the most recent issue of the Ag. Chemical Handbook for control recommendations.

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