

Gone!

Fall armyworms can sneak up on your pasture and seemingly eat it overnight. Now is the time to start looking for them.

by *Sharla Ishmael*

The first time a rancher may notice [fall armyworms] may be when the whole field is gone,” says Kathy Flanders, an entomologist with the Alabama Cooperative Extension System. “They usually don’t get noticed in time. They lay eggs in masses. Then a patch turns brown in the field as the caterpillars eat the tender, green foliage and leave behind brown, tough stems.

“They eat most of the food in the last stage of their lives, which lasts only about four days. They are somewhat synchronized in development, so they come and go in groups,” she explains.

While fall armyworm infestations are not an every-year headache for most producers, chances are good that somewhere in the South, somebody is going to have to spray this year. In 2009-2010, for example, Alabama experienced a statewide epidemic with widespread damage, says Flanders.

How they get here

To understand how they can be so devastating so quickly, you have to take a look at how the insect arrives and develops. Except for the furthest reaches of South Texas and Florida, the fall armyworm moth hitches a ride on the winds from the Caribbean, Mexico, Central America and South America. It is a subtropical insect that dies out after the first frost in most places.

The moth is gray with a 1.5-inch (in.) wingspan and patterns of dark and light areas on the wings. The moths are active at twilight, feeding on nectar, and live for only a couple of weeks. In that time, they lay eggs in masses, preferring light-colored areas and the undersides of fences and tree limbs. The eggs hatch in two or three days as tiny caterpillars that can be green, brown or black. As they get larger, caterpillars have four black spots in a square shape toward the back end and an inverted “Y” striping on the face.

There are other species of armyworms,

including the “true” armyworm that can cause problems in the spring, but it’s the fall armyworm that most southern producers have to worry about.

In this larval stage, the fall armyworm will grow bigger over the course of about 14 days and will reach up to 1.5 in. long as a fully grown caterpillar. As it grows and molts, the caterpillar eats more, but it is during the last three or four days that it dramatically increases the amount of forage intake — 80% of the total consumed during its life stage. This is when you wake up to big brown circles in the hayfield that weren’t there the day before. It’s also when it may be too late to spray.

“If caterpillars are not fully grown, they are more susceptible to insecticides,” explains Flanders. “Some producers may decide to harvest (hayfields or crops) early if they find armyworms. If your state has a trapping network and the moth counts start to climb, you might want to start looking in your pastures.”

Flanders also says most of the damage to pastures, hayfields and crops is likely to occur from August through October. The damage will likely come in waves, about a month apart, because 28 days is about the lifespan of one generation. After fall armyworms eat their fill, they tunnel into the soil and transform into the pupae. A new round of

moths will emerge in seven to 14 days and start the cycle all over again.

Warning signs

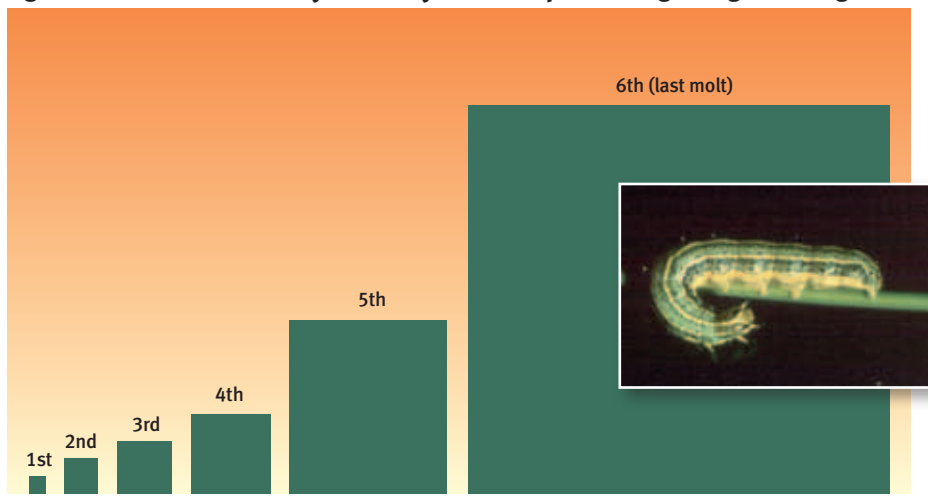
“In a hot, dry year, they can be a really serious problem,” Flanders says. “It’s a double whammy during a drought, because producers may be short on forage anyway; then the fall armyworms come in and eat what’s left.”

While the caterpillars prefer lush, green Bermuda grass, ryegrass and other forages valued by cattle producers, they will move to atypical food sources when necessary, though you may notice repeat problems in the same areas. Flanders says the reason hot, dry summers can be worse for fall armyworms is that their natural enemies — wasps, flies, birds, rodents, diseases — simply can’t keep up with their numbers.

According to a Texas Extension publication, ranchers tend to have more problems with fall armyworms following above-average rains in August and September. Also, irrigated fields are a prime target for the insects. So how do you detect these pests before they become grass-eating monsters? It’s actually pretty simple.

“When the caterpillars are small, they aren’t very noticeable,” Flanders explains, “because they hatch from eggs that are about the size of a pinhead. We’re trying to get

Fig.1: Amounts of feed eaten by a fall armyworm caterpillar during each growth stage.



Source: Alabama Cooperative Extension System





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Alabama producers to use sweep nets (think of a heavy-duty butterfly net) that can be purchased from farm suppliers. If you catch them early, you have time to treat. At several locations in each field, sweep the net through the foliage about 25-30 times, taking a step between each time.

“In a bad year, you'll have a lot of little caterpillars in your net. If you find caterpillars in the net, then start checking to see how many caterpillars are present per square foot. The economic threshold is different for various parts of the country, but in the Southeast we say that if you have more than three per square foot, it's time to spray.

“Caterpillars are more active between dusk and dawn, so you don't want to sweep

during the middle of the day,” she says. You can watch a video on how to use a sweep net at www.youtube.com/acescounties#p/c/F4F527B0997C60D7.

Here are three other quick tips:

► Watch for congregations of egrets and other insect-eating birds in certain parts of a field. If they seem overly interested in one area, you might want to check for caterpillars.

► If you've driven the pickup through the pasture when there is dew, check your tires, because the caterpillars will stick to them.

► Weedy areas, especially at the margins of your pastures and hayfields, can attract these insects, so you might consider getting a handle on those patches.

If you have enough fall armyworms to

treat, and it's at a time in the life cycle when they can be easily killed, there are a number of labeled insecticides for pastures and hayfields. However, pay strict attention to the label. They may come with grazing or harvesting withdrawal times. And, due to the ever-changing regulations associated with chemicals, always check with someone who is up-to-date on the latest information; don't just reach for what you have left from last time.

Even if the first round of caterpillars does some damage before you realize they are there, don't forget about the life cycle. Check again every 10 days to two weeks and you may be able to prevent further problems before it's all ... gone.



► This is a fully developed fall armyworm larva. Note set of four dots on the end of the abdomen.



► Fall armyworm caterpillars have eaten the tender green portions of the grass, leaving jagged leaf edges and tough leaf bases.