

TIMELY INFORMATION

Agriculture & Natural Resources

How to Use a Sweep Net to Find Fall Armyworms in Pastures and Hayfields

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All too often fall armyworms are discovered after they have already caused serious damage to grass pastures and hayfields. These caterpillar pests feed on the foliage and tender stems of various plants, including most forage grasses. The biology and control of this pest are discussed in the publication "Management of Fall Armyworms in Pastures and Hayfields," ANR-1019, www.aces.edu/pubs/docs/A/ANR-1019/

This timely information sheet discusses the use of an insect net to find the fall armyworms while they are small, when they are easier to kill and before they have done too much damage.

Insect sweep nets can be obtained from mail order farm or forestry supply catalogs. They usually cost about \$30-60. In addition you may be able to borrow one from your local county office of the Alabama Cooperative Extension System, www.aces.edu. An extension agent specializing in Animal Science and Forages can also lend you a sweep net (www.aces.edu/directory/selectLocation.php?program=2).

There are various ways to swing the insect net back and forth. For grass pastures, I think a two handed grip, swinging (sweeping) from side to side, works best. Grip the net handle as you would grip a baseball bat, but hold the net downward and facing in the direction of the sweep. You may need to adjust the distance between your hands so the net feels comfortable to use (see images below). Swing the net through the grass, from right to left, with the bottom of the rim as close to the ground as you can, while still having the top of the rim above the top of the grass. Take a wide sweep, reaching as far as you can from side to side. Take a step forward, turn the net so the opening faces the other way, and sweep from left to right. Continue walking forward, turning and then swinging the net.

Count the number of sweeps as you go. Take about 25 sweeps with the sweep net, then hold the net closed until you can dump it out on a flat surface. A kitty litter pan works well for this, as does a towel spread on the hood of a vehicle. Lots of insects will probably fly out, but that is ok, you are looking for and counting the caterpillars. There are various caterpillars that can be found in pastures, but if you have an armyworm outbreak, most of the caterpillars will be armyworms.

How many caterpillars is too many? Once you have found that the field has armyworms, you will need to figure out how many armyworms are present in a typical square foot sample. Inspect the foliage and the leaf litter at the base of the grass. If you find more than 3 caterpillars per square foot, it is probably time to spray. Check several spots in the field to determine to average population of fall armyworms. If you do not find armyworms in the first set of 25 sweeps, repeat the sweep sampling at least two more times per field. See the publication "Management of Fall Armyworms in Pastures and Hayfields," ANR-1019, www.aces.edu/pubs/docs/A/ANR-1019/ and the forage chapter of the Alabama Pest Management Handbook, ANR-500A, <http://www.aces.edu/pubs/docs/A/ANR-0500-A/>.

Examples of People Using Sweep Nets:



image source:
<http://www.ag.ndsu.nodak.edu/invasiveweeds/lspurgebio.htm>



image source:
<http://extension.oregonstate.edu/catalog/html/em/em8906-e/>