



Newsletter

Fall 2003

FROM DAVE'S DESK

I would like to take this opportunity to introduce a new exciting bermuda, Tifton 10, referred to as T-10. T-10 has a dark blue green color and is a very aggressive lateral spreading bermuda. T-10 also requires less mowing and fertilization than Tifway 419 and TifSport bermudas. It can also be maintained and mowed at 1-1½ inch heights with a rotary mower. The great lateral spread of T-10 gives great damage recovery. This trait coupled with less mowing

makes this grass a great choice for athletic fields, for utility turf areas, for golf courses, and for county and municipal parks. The aggressive nature of T-10 also ensures ground cover for later sprigging dates and where there is a shorter growing season.

And what follows is something that you might want to file under timely and useful information.

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Fertilization

In the words of the Lawn Institute, *"The goal of a good fertility program is to produce a reasonable amount of top growth, but not at the expense of root growth or carbohydrate storage. A good root system is the key factor to a healthy lawn."* The best way to achieve and maintain good soil fertility is to take a soil test on a regular basis, preferably every year.

One of the best fertilizer programs for cool season grasses consists of applying 3 lbs. of nitrogen per 1,000 square feet per year. One half pound of this nitrogen is applied in the spring

for a quick green-up coming out of winter. The remaining 2.5 lbs. of nitrogen should be applied in the fall in three equal applications, September through November, because cool season grasses grow most of their roots in the fall and early winter months. Fertilizers used should contain no more than 40 to 50% of slow-release nitrogen. Phosphorus and potassium, the other essential nutrients for root growth, should be applied at this time too and their application should be based on a soil test analysis.

BE ON the ALERT for FALL ARMYWORMS

On August 15, 2003 the NC State Extension Entomologist, S. Bambara, issued a warning that Fall armyworm caterpillars (FAWs) are potential turf pests at this time of year. Please see <<http://www.ces.ncsu.edu/depts/ent/notes/O&T/lawn/note128/note128.html>>. Marching in large “armies” they can strip a green plant above ground and are able to kill, or severely retard growing grasses. FAWs are likely to be particularly numerous after a cold, wet spring, as we experienced this year. The effectiveness of parasites, which normally reduce the armyworm population, is adversely affected by cool, wet weather and so the armyworms are able to develop, given fewer enemies.

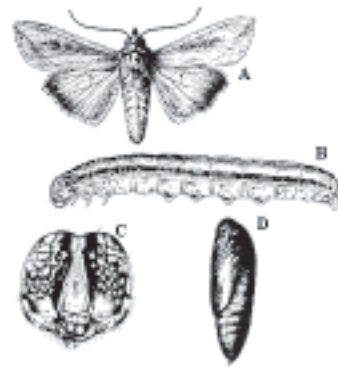
Interestingly enough, 2002 was also a very good year for FAWs too. Mild winters and dry summers allow infestations to begin early and with this environment armyworms are able to produce several generations over the growing season.

An update to this story reported at a meeting of landscapers in Catawba County recently that the FAW has inundated two coastal counties in North Carolina. Since the moths will fly several miles before laying eggs and beginning the cycle all over again, it pays to be ever vigilant for signs of this pest.

Now for a little biology lesson courtesy of NC Cooperative Extension Service!

- The mature worm is green, brown or black with a pale but distinct inverted ‘Y’ marking on its dark head. There is a longitudinal black stripe along each side of its body which is about 35 to 50 mm long, and there are four black dots on the dorsal side of each abdominal segment. It possesses a voracious appetite.
- The moth has distinct markings: the hind wings that are white and front wings are dark gray with splotches of lighter and darker gray. There is a noticeable whitish spot near the extreme tip of the front wing.
- The eggs are light gray, laid in clusters and covered with grayish, fuzzy scales from the body of the female moth.
- The pupa is a reddish brown color at first and darkens to black as it matures. It is about 30 mm long.

- FAWs probably over-winter as pupae in the Gulf States and the egg-laying moths migrate northward as the weather becomes warmer. Arriving in North Carolina in July, new moths continue the life cycle into November. Each female can lay about 1,000 eggs. In 2–10 days small larvae emerge and soon begin to scatter and feed for 2–3 weeks. FAW, unlike the true army worm which is nocturnal, will feed anytime during the day or night, but are most active in the early morning or late in the evening. After feeding for the 2–3 weeks the larvae dig 20 mm into the ground to pupate. In 2 weeks a new population of moths emerges and will usually fly several miles before beginning the process again.



Armyworm. A, Adult. B and C, Larvae and front view of head. D, pupa. *Illustration: NSF Center for Integrated Pest Management.*

Chemically, the Fall armyworm is more difficult to control than the true armyworm. Treatment is more effective if placed on the bare ground that has had a light irrigation prior to treatment. The timing of the treatment is important, given that it is a minimum of a 2-week window to treat the larvae or worms and treatment is more effective when they are small. Once they dig into the soil to pupate, treatment will be ineffective. For specific control information, consult your Extension Agent. Some breeders are experimenting with FAW-resistant varieties of turf and TifSport showed a lower FAW survival rate in one Georgia study.