



COLLEGE OF AGRICULTURE AND LIFE SCI  
SCHOOL OF PLANT AND  
ENVIRONMENTAL SCIENCES  
VIRGINIA TECH.

**Michael Goatley**  
Price Hall, Rm 413  
170 Drillfield Drive  
Blacksburg, Virginia 24061  
P: (540) 231-2951  
[goatley@vt.edu](mailto:goatley@vt.edu)  
[@vaturf](https://twitter.com/vaturf)

## **An Update on Fall Armyworm Management for Lawn Care Professionals**

Fall armyworms are a statewide/regional problem on lawns in 2021 and although it is of no consolation, you all are not alone this year. Dr. Tom Kuhar, Professor of Entomology at Virginia Tech, detailed that in his 20+ year career at VT that he has never seen as much pressure from fall armyworms as he has this year. Here are some key points to share with your team and with your clientele for why the problem is so extreme in 2021.

**Why so much pressure this year?** We never quite know what each year has in store for us and our best guess this year is that fall armyworm pressure has been particularly high because of tropical weather systems/hurricane activity. The moths migrate northward every year, typically reaching the mid-Atlantic in early to mid-September (hence their common name of fall armyworm). This year, the moths arrived as early as we might see them. This is also of importance since it likely increases the number of generations of all armyworms we will likely have this year... normally 2-3, but maybe more than 3 this year? The reason they arrived early is likely linked to the number of named storms that have in some form or fashion either directly or indirectly influenced the mid-Atlantic region weather patterns in 2021. The moths are pushed along in the air streams of these major weather makers; in 2021 Danny, Elsa, and Fred have all had impacts in the mid-Atlantic. It might even be that Henri was a contributor to pushing moths further north and in greater populations than normal and Ida? Almost assuredly Ida is bringing moths into the western regions of the mid-Atlantic and exiting in southern New England. This suggests we are NOT done with fall armyworm pressure for 2021 and that the problem with these pests will likely persist and possibly expand.

**What else is in play with their numbers this year?** The populations grow not from just moths arriving from the south, but those that are here are mating and laying eggs after they have arrived. A single moth can lay between 100-200 eggs at a time (usually on the underside of leaves), and lay up to 1500 eggs in their lifetime. During the summer, the life cycle can be completed in as little as 30 days. So, consider the pure scope of numbers of worms that are possible in this situation, and these numbers for a pest that essentially will feed on almost any type of aboveground plant material, while knowing that lawns, corn, and forage crops are usually favored targets. We have recently added an extension publication about managing fall armyworms in lawns to the VCE educational resources website ([www.resources.ext.vt.edu](http://www.resources.ext.vt.edu)).

**What can be done as treatment?** For your situation and the number of clientele you are trying to serve as an LCO, a granular formulation of bifenthrin will provide a fairly inexpensive and effective treatment that addresses the immediate control of the caterpillars, but does nothing for long-term (i.e. residual) control. Chlorantraniliprole (ai

in Acelepryn) is expensive, but is an exceptional caterpillar-control product, offers an extended control period, and also serves as a very effective grubicide. Please note that chlorantraniliprole may take 2-3 days to actually kill larvae, but provides immediate feeding cessation, and thus stops damage right away even though the larvae is not dead. The VCE Pest Management Guide has a complete listing of control options. Another practical management strategy you might encourage of the homeowners is to shut off the outdoor lights around the home to avoid attracting more moths.

**Will the grass recover?** Possibly. If the worms have not damaged the crowns (i.e. the growing points) the turfgrass will likely recover, especially with appropriate seasonal nitrogen fertility. The turfgrass recovery should be fairly evident as cooler temperatures and fall rains (or your irrigation) arrive. If the damage is extreme, regressing (either by seeding or sodding) will be necessary. At this time, there are no varieties of tall fescue that are proven to be 'resistant' to fall armyworm pressure. However, it is always desirable to use the most improved genetics available and those cultivars can be found on the Virginia Turfgrass Variety Recommendation List ([www.resources.ext.vt.edu](http://www.resources.ext.vt.edu)). You can also find publications specifically devoted to lawn establishment and renovation on the website. Please share this information with your clientele and employees regarding this particular pest.

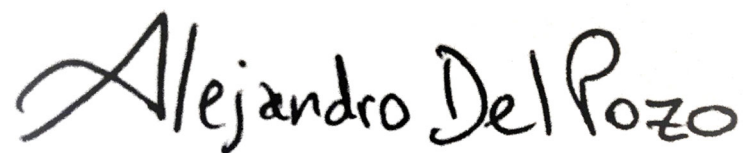
Respectfully,



Michael Goatley, Jr.  
Professor and Extension Turfgrass Specialist  
Virginia Tech



Tom Kuhar  
Professor and Entomologist  
Virginia Tech



Assistant Professor and Entomologist  
Virginia Tech