Fall Armyworm in Pasture and Hayfields 2021

We have had numerous reports of fall armyworm egg masses in pastures and hayfields in KY in mid-August and now significant damage is occurring from the caterpillars across the state. Therefore, keep a close watch on your pastures/hayfields for these armyworms over the next few weeks. If you have 2-3 caterpillars per square foot or more, then you should consider spraying. In other words, these numbers will likely mean you will have considerable damage to late summer/fall growth in your pastures and hayfields.

One of the most effective insecticides, especially on worms larger than ¾ inch, is Besiege from Syngenta. This insecticide has dual modes of action and is systemic resulting in a higher chemical cost per acre ($25 per acre). A considerably less expensive option ($5 per acre) that can be effective on smaller armyworms (less than ¾ inches) are pyrethroids. When using pyrethroids for larger larvae, higher labeled rates are recommended. Besiege has a 0-day or 1-day (alfalfa) grazing restriction and a 7-day harvest restriction for alfalfas and grass hay. At bottom is the full list from UK publication ENT-17.

Note: fall armyworms are easiest to kill when small and pyrethroid (pyrethrin) insecticides are effective at this stage and considerably less expensive. Larger larvae are more difficult to control with pyrethroids.

An alternative to insecticide application for hay crops near harvest stage, is to mow the crop IMMEDIATELY. Unfortunately, waiting 2 or 3 days for good curing conditions is not an option since armyworm defoliation is so rapid. Once cut, the conditions in the mowed forage become less conducive for the armyworm. However, live armyworms are being found at baling under windrows. This indicates that regrowth should be closely monitored and insecticides applied once economic thresholds have been reached.

Please see recent articles in the Kentucky Pest News from our entomologists in Lexington (Ric Bessin and Jonathan Larson) and in Princeton (Raul T. Villanueva and Zenaida Viloria) for more information on fall armyworm:

- Scouting and control-Ric Bessin and Jonathan Larson
- Trap counts, egg masses and potential for persistence -Raul Villanueva and Zenaida Viloria

Fall Armyworm Control for Alfalfa and Pastures

Insecticides	MOA Group	Graze/harvest – days Interval (PHI)
carbaryl - Sevin XLR, Sevin 4F, etc.	1A	7 for alfalfa (May temporarily bleach tender foliage) 14 days for pasture and grasses for hay
malathion – Malathion 5EC	1B	For grasshoppers, 0 days
b-cyfluthrin - **Baythroid XL** **(**1st and 2nd instars only)	3A	1 day forage 7 days for hay (alfalfa) 0 day forage, 7 days for hay (pasture grass)
g-cyhalothrin – **Proaxis EC**	3A	1 day forage 7 days for hay (alfalfa)

l-cyhalothrin – **Warrior II**	3A	1 day forage 7 days for hay (alfalfa) 0 day forage, 7 days for hay (pasture grass)
a-cypermethrin – **Fastac EC**	3A	3 days for cutting or grazing (alfalfa)
z-cypermethrin – **Mustang Maxx**	3A	3 days for cutting or grazing (alfalfa) 0 days for cutting or grazing (grass forage and hay)
methomyl **- Lannate**	1A	7 days for grazing or hay (alfalfa)
methoxyfenozide – Intrepid 2 F	18	0 day forage, 3 days for hay (alfalfa) 0 day forage, 7 days for hay (Grass forage, fodder and hay)
permethrin – **Ambush, Permethin 3.2 AG**	3A	0 or 14 days depending on rate used (alfalfa only)
pyrethrins - PyGanic	3A	0 day forage/harvest
Bt products - Agree WG, Biobit HP, DipelDF, Javelin	11	0 days

- Products in Bold are Restricted Use Pesticides.