

Fall Armyworm in Pastures and Hayfields 2021

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We have had some reports of fall armyworm egg masses and damage in pastures and hayfields. Keep a close watch on your pastures and 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 and fall growth in your pastures and hayfields.



One of the most effective insecticides, especially on worms larger than $\frac{3}{4}$ 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 $\frac{3}{4}$ 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 a University of Kentucky publication ENT-17, Insecticide Recommendations for Alfalfa, Clover, and Pastures - 2020.

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.

Table 1. Fall Armyworm Control for Alfalfa and Pastures

Insecticides	MOA Group	Graze/harvest – days Interval (PHI)
<i>carbaryl</i> - Sevin XLR, Sevin 4F, etc.	1A	7 for alfalfa (May temporarily bleach tender foliage) 14 days for pasture and grasses for hay
<i>malathion</i> – Malathion 5EC	1B	For grasshoppers, 0 days
<i>b-cyfluthrin</i> - Baythroid XL* (1 st and 2 nd instars only)	3A	1 day forage 7 days for hay (alfalfa) 0 day forage, 7 days for hay (pasture grass)
<i>g-cyhalothrin</i> – Proaxis EC	3A	1 day forage 7 days for hay (alfalfa)
<i>l-cyhalothrin</i> – Warrior II	3A	1 day forage 7 days for hay (alfalfa) 0 day forage, 7 days for hay (pasture grass)
<i>a-cypermethrin</i> – Fastac EC	3A	3 days for cutting or grazing (alfalfa)
<i>z-cypermethrin</i> – Mustang Maxx	3A	3 days for cutting or grazing (alfalfa) 0 days for cutting or grazing (grass forage and hay)
<i>methomyl</i> - Lannate	1A	7 days for grazing or hay (alfalfa)
<i>methoxyfenozide</i> – Intrepid 2 F	18	0 day forage, 3 days for hay (alfalfa) 0 day forage, 7 days for hay (Grass forage, fodder, and hay)
<i>permethrin</i> – Ambush, Permethin 3.2 AG	3A	0 or 14 days depending on rate used (alfalfa only)
<i>pyrethrins</i> - PyGanic	3A	0 day forage/harvest
Bt products - Agree WG, Biobit HP, DipelDF, Javelin	11	0 days

*Products in Bold are Restricted Use Pesticides.