



Field Crops, Forages and Soils Updates for NNY

6 July 2017

- Potato leafhopper in some North Country alfalfa fields are severe. PLH have been a headache for south and western NY for several weeks and have now made their way north. This week and last, PLH have been causing severely stressed alfalfa fields here in NNY. Leafhopper damage can be most severe when a crop is under moisture or fertility stress – we have both in NNY this year. We’ve been recommending a weekly scouting program, using a standard 15” sweep net. Adult PLH are 1/8” long, bright green and very active. Developing nymphs are smaller and green. Severity of the PLH infestation depends on the alfalfa height. Short, young regrowth has a lower threshold than taller and older alfalfa. Thresholds to indicate economic response to intervention are listed in the table below.



Alfalfa Height	No. Leafhoppers per sweep
<3”	0.2
3-7”	0.5
8-10”	1.0
11-14”	2.0
15+”	2.0



Adult (top) and nymph stage Potato Leafhoppers.

Fields with PLH above thresholds listed should be controlled to prevent further damage. If the field will be mowed within several days, spray is not warranted. Early harvest is an alternative to spraying, but monitor the regrowth to prevent damage to tender young tissues by surviving PLH. Insecticides are the best option for fields more than 10 days from harvest. Options are summarized in the table below. Always read and adhere to label information.

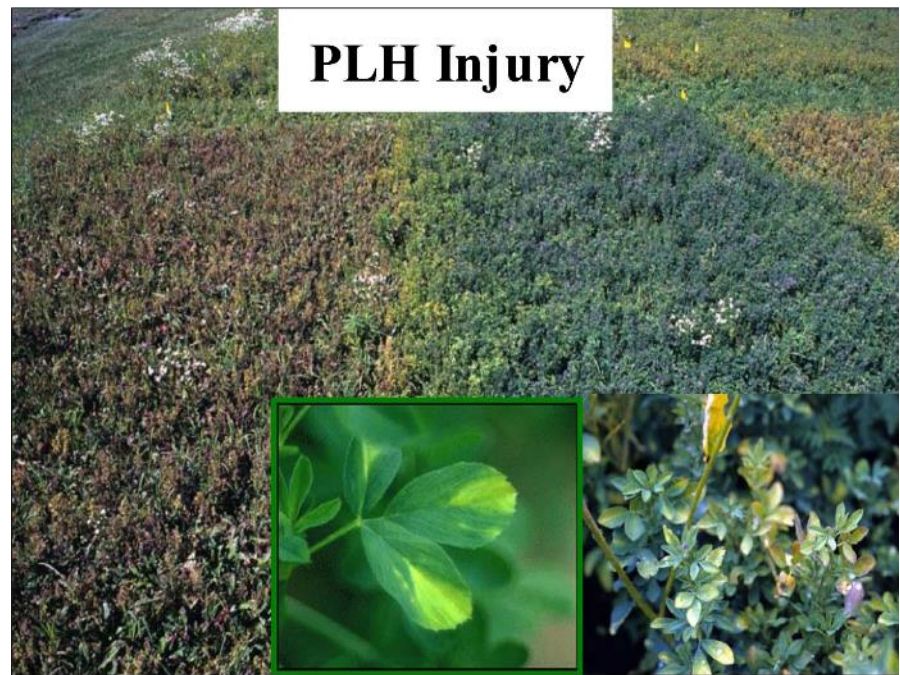
	Insecticide	Rate per acre	Timing and Restrictions*
<i>Clear Alfalfa Seedings</i>	cyfluthrin (Baythroid XL)	0.0065 - 0.0125 lb AI or 0.8 - 1.6 fl oz product	Wait 7 days for harvest or grazing.
	chlorpyrifox (Lorsban 4E)	0.5 lb AI or 16 fl oz product	Wait 14 days before harvest.
	dimethoate	0.25 - 0.5 lb AI	Wait 10 days before harvest. Do not apply to alfalfa in bloom.
	lambda-cyhalothrin (Warrior II)	0.015 - 0.025 lb AI or 0.96 - 1.60 fl oz product	Wait 1 day before forage harvest, 7 days before hay harvest.
	permethrin (Ambush, Pounce)	0.1 - 0.2 lb AI	For > 0.1 lb/acre, wait 14 days before harvest or feeding. For < 0.1 lb/acre, crop may be harvested immediately.
<i>Mixed Seedings</i>	cyfluthrin (Baythroid XL)	0.013 - 0.015 lb AI or 1.6 - 1.9 fl oz product	Wait 7 days after application to harvest.
	Zeta-cypermethrin (Mustang)	0.014 - 0.025 lb AI or 2.24 - 4.0 fl oz product	Wait 3 days before cutting

From 2017 Cornell Guide for Integrated Field Crop Management, pages 110-111. \*Consult labels for per cutting and per season limits on applications.

Affected fields can look pale and discolored from the road, which indicates damage has already been done.

PLH suck plant sap from leaf tissues, inject their saliva and cause a ‘burn’ on leaf tips. Leaves may also have a yellow or purple color. Plants become stunted as a result of damage to the vascular system. Growth is slowed and nutritional quality is reduced – mainly protein content.

Scout, sweep and when a field over threshold is identified, treat or mow within a few days. Call for help.



For more information about field crop and soil management, contact your local Cornell Cooperative Extension office or NNY Cornell University Cooperative Extension Regional Field Crops and Soils Specialists, Mike Hunter and Kitty O’Neil.

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#### Our Mission

“The North Country Regional Ag Team aims to improve the productivity and viability of agricultural industries, people and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton and Essex Counties by promoting productive, safe, economically and environmentally sustainable management practices and by providing assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry.”

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