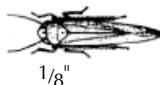


Identification and Damage

Adults are bright lime green and can hop or fly.



Nymphs are yellow-green, walk rapidly about—but cannot fly.

Adults overwinter in the south then travel to New York on spring storms.

Females lay their eggs in alfalfa stems, leaf petioles and leaf veins.



1/16"–1/8"

Each generation lives approximately 28 days. There may be several generations per season.

- The warmer the season, the faster populations develop.

- The last generation of adults migrates back to southern overwintering sites in the fall.

Damage:

Both adults and nymphs can cause damage.

Look for “V”-shaped yellow patches on tips of leaves and—possibly—stunted plants.

Losses occur from reduction of percent crude protein. Excessive feeding may also reduce dry matter yield and weaken the plants’ ability to overwinter.

New seedlings have greater risk of injury than established stands, which affects both short and long term productivity.

Don’t wait to sample till you see damage—by then, yield loss can’t be recovered.

Sampling

Sample alfalfa fields from mid May until early September.

Repeat sampling every seven days.

Use a 15"-diameter sweep net and the sequential sampling plan below.

Randomly select and take sampling sets from different areas of the field.

Each time the net passes in front of you is one sweep. A “sweep set” is 10 sweeps.*

sweep set*	plants less than 3" tall		plants 3 to 7 " tall		plants 8 to 10" tall		plants over 10" tall	
	N	M	N	M	N	M	N	M
1								
2								
3	2	9	9	20	19	41	44	75
4	4	11	14	25	29	50	64	95
5	5	13	18	30	39	60	84	135
6	7	15	13	35	49	70	104	155
7	9	16	28	40	59	80	124	175
8	11	18	33	45	69	90	144	195
9	13	20	38	49	79	100	164	200
10	19	20	49	50	99			

N= No management needed at this time

M= Management needed as soon as possible

Analysis

Smaller, younger, or shorter plants (less leaf surface area) are at greater risk for injury.

Early harvest can be effective in controlling economic populations.

Action thresholds for new seedlings may be reduced under conditions of severe stress such as drought.

Chemical control is sometimes necessary when economic populations occur early in the cutting cycle. Consult the current issue of the Cornell Guide for Integrated Field Crop Management for possible insecticide options and management considerations.

If field is at threshold and rain is expected in 24-36 hours, delay management action and resample after the storm. PLH populations may have been reduced.

Management alternatives

Early harvest of alfalfa can be effective in controlling economic populations. When harvesting, remember to clean harvest whole fields.

Chemical control may be necessary when economic populations occur early in the cutting cycle.

Consider using leafhopper-resistant alfalfa in future plantings.

Implementation

Treat only fields with a canopy adequate for spray reception.

Clean harvest whole fields to eliminate harborage sites that serve as leafhopper nurseries by allowing populations to move from taller alfalfa to more vulnerable regrowth.

Document all management actions taken.

Reevaluation

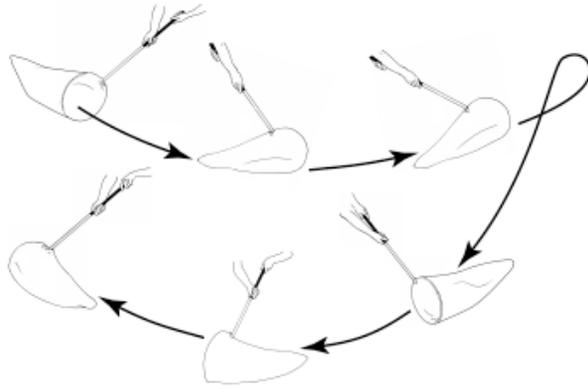
Check alfalfa regrowth after harvest to determine leafhopper population status.

For pesticide recommendations please consult the current issue of *Cornell Guide for Integrated Field Crop Management*.

Always remember to read and follow the pesticide label.

For more help contact your local Cornell Cooperative Extension educator.

How to sweep the net:



Remember, each time the net passes in front of you is one sweep. A "sweep set" is 10 sweeps.

Cornell Cooperative Extension provides equal program and employment opportunities.

New York State Integrated Pest Management (IPM) Program

We encourage people to adopt a sustainable approach to managing pests, combining methods that minimize economic, health, and environmental risks.

The IPM strategy integrates the use of several pest-suppression technologies, including

- Biological control: beneficial organisms, such as insect predators
- Cultural techniques: practices such as crop rotation, sanitation
- Mechanical and physical methods: screens, traps, cultivation, and temperature modification
- Chemical control: judicious use of pesticides and other chemicals
- Genetic control: traditional selective breeding and new biotechnology practices that produce pest-resistant varieties
- Regulatory control: state and federal regulations that prevent the spread of pest organisms.

The New York State IPM Program funds projects to improve IPM strategies and offers educational programs and resources.

Many organizations and individuals assist in this effort. The New York State Department of Agriculture and Markets, New York State Department of Environmental Conservation, Cornell University, and Cornell Cooperative Extension jointly fund the NYS IPM Program.



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Potato leafhopper on alfalfa



Management Guide

