

FORAGER



Agronomics with livestock in mind!

IN THE FIELD – Potato Leafhopper



Warm winds from the south have brought Potato Leafhoppers into some areas. While wide spread damage has not been noted, populations are rising and regrowth after second cutting will be affected in most areas.

Leafhopper adults are small (1/8 inch long), greenish-yellow insects with wings (see the picture) nymphs also cause-feeding damage. They are smaller and lack wings. Although small they are the most destructive pest to alfalfa in many states. They feed by insert their mouth into the plant and sucking out plant juices. Feeding often results in the blockage of tiny tubes that distribute nutrients throughout the plant. This feeding and related blockages result in “hopper burn,” a triangle shaped yellowing of the leaves, and stunting of the plants.



Leafhoppers are responsible for reducing yields and quality (lowers protein). Lasting affects from the stress caused by leafhoppers includes reduced stand longevity, and increased root rot and failures.

Management of hoppers is dependent on sweeping fields to obtain a count of hoppers. Spraying and cutting management are the two most commonly used control practices. The decision of how to manage leafhopper should be based on the height of the crop, spray costs, and the severity of damage. There are a number of tables available on the economic thresholds for hoppers, because the number of hoppers changes with control costs. The table below, taken from the Certified Alfalfa Seed Council, gives a good indication of typical levels.

Table 1: Economic Thresholds for Potato Leafhoppers.

Stem Height (inches)	Average Number of Leafhoppers per Net Sweep
Under 3	0.2
6	0.5
8 – 10	1.0
12 – 14	2.0

M. Curtis Wilson, Purdue University

Consider the following when deciding to spray or harvest early.

- It is important to obtain a representative sample of the field by sampling 5 locations in one of the accepted patterns.

- It takes about 3 weeks for leafhopper eggs to become adults, resulting in rapid population increase
- When cutting fields leafhoppers will move to nearby fields (especially in strip cropping) and increase pressure on those fields
- When harvesting for management cut all the alfalfa in the field, even in field corners that cannot be harvested since hoppers will concentrate there, laying eggs, increasing numbers that then feed on regrowth.
- In taller fields (12 inches) it is often wiser to harvest early; on shorter fields it is often more beneficial to spray.
- Harvest restrictions for leafhopper insecticides range from 7 to 28 days know what it is before spraying
- “Burned” and stunted fields will not recover, and should be harvested and regrowth sprayed if populations persist.

SPOILAGE LOSSES IN ROUND BALES

Every year I am amazed by the time and effort spent to bale beautiful, green, dry hay, which is left outside until January when it is fed. I wish I counted how many times I have been told that the bales are not impacted, or that, “you only lose a little.” Here is a table demonstrating how much is lost with a “little” outer edge spoilage. The table below shows how much dry matter is lost when varying depths of hay are spoiled.

Table 2. Dry matter loss associated with spoilage on the surface of large round bales.

DM Loss	5' diameter bale	5'6" diameter bale
	Inches from bale surface towards bale center	
10%	1.5	1.7
20%	3.2	3.5
30%	5.0	5.4
50%	9.0	9.7

Marvin H. Hall, Forage Management, Crop and Soil Sciences

The outside edge of the bale contains a significant amount of dry matter. A few inches of spoilage can drastically reduce the amount and quality of available feed. Encourage farmers to think about this when planning how to store the next cutting.

Take advantage of favorable weather later this summer and fall to get new seedings established! Check out our fall seeding brochures!