

Alfalfa Case

The Goats Will Have No Other

A Direct Market Dairy Goat Enterprise - A longtime customer asked in Pennsylvania about leaf hoppers. He was having serious problems with them in his alfalfa fields. The leaves were turning yellow. He was afraid he would lose the crop. He purchased Plant Amendment (PA) on a Friday he applied 7 ounces per acre of PA. On the following Monday he called me and said, "NO LEAF HOPPERS!". He was amazed. His 8-acre field produced 8.34 bales per acre. He applied PA 7 days after each cutting a total of 4 cuttings. He also told me he had no vet bills, and his goats love hay. When he borrowed some feed from a neighbor, he found they will not eat any other hay. His 100 goats are producing more butter fat now, 4.3%, and higher protein now, 3.50%, and his milk production statistics show a 20% increase in Alfalfa yields, 30% increase in soybean yields, and 30% increased field corn.



Hay Sales Income -

All hay greater than the goat's needs adds directly to the bottom line. Typical first cut Pittsburgh, Pennsylvania round bales stored outside sell for \$20 per bale, or if you are buying more than 6 they are \$18 per bale. Bales stored in barn are \$30. Square bales sell for \$2.00 per bale in field or \$3.00 per bale stored in barn.



Hopper Facts - A leafhopper is the common name for any species from the family Cicadellidae. These minute insects, colloquially known as hoppers, are plant feeders that suck plant sap from grass, shrubs, or trees. Penn State Extension people reported hoppers arrive in their State during June. Extension experts report up to \$15 million in crop loss during past seasons. When pesticide is not an option, early cutting is an option, the idea being growth until the next cutting may not be infested.



Hopper Damages

Both the adults and nymphs feed on alfalfa. They insert their mouthparts into the plant tissue to extract the juices. This feeding process distorts and blocks the tiny tubes that distribute nutrients within the plant, which causes yellow triangles on the leaves ("hopper burn") and stunted plants (insert a picture of their damage). The alfalfa may also turn a reddish or purplish color. Stunted plants do not recover until the stems have been harvested, after the leafhoppers are eliminated. The buds will then begin to grow. Although potato leafhoppers can be found from late May until frost, the bulk of damage is done from mid-June to mid-August during the second, third, and fourth cuttings. Normally, the adults stop reproducing and populations drop off sharply after mid-August.

Hopper Migration Thunderstorm Assist



Hoppers winter on the Gulf Coast. The late Spring thunderstorm South the North track can transport the pest to Pennsylvania within five days. Down drafts in front of these storms drop adult leafhoppers onto fields. During the spring migration north, about 70 percent of the adults are gravid females. They deposit their eggs in alfalfa stems and leaf veins as soon as they reach a field. In warm weather, the insects will mature in about three weeks and large populations of leafhoppers can build up in a short time. Adults are continually active and will fly above the plants when disturbed.

References - Penn State Extension: <https://extension.psu.edu/potato-leafhopper-on-alfalfa> For field test updates and product information, contact us at email: info@greensafenow.com phone: 239-465-1890 Gary Reid, Owner