

**MANAGING POTATO LEAFHOPPER**  
**DR. DENNIS CALVIN**  
**Penn State Entomologist**

While some new alfalfa varieties offer resistance to the potato leafhopper, most varieties do not, so managing leafhoppers remains very important in producing alfalfa in Pennsylvania.

As spring approaches, warm air will begin to move into the northeast and bring with it spring showers. These spring showers that originate in the Gulf of Mexico can also bring the potato leafhopper.

The potato leafhopper is a migratory insect that overwinters in states along the Gulf of Mexico. It cannot survive the cold winter conditions in the northern United States. In the spring, potato leafhoppers wait for the right climatic conditions and then fly into updrafts created by strong storm systems developing in the Gulf of Mexico. The insects are drawn into the storm system and carried hundreds of miles north and eastward. Computer simulations of storm

movement have predicted that potato leafhoppers can move from the Gulf of Mexico to Pennsylvania in as little as five days.

By understanding this behavior of the potato leafhopper, its arrival into Pennsylvania can be anticipated. In the spring, beginning around late April, major storms form the Gulf of Mexico begin to move north and east into Pennsylvania. The frequency and intensity of these storm fronts influence the timing and number of leafhoppers reaching the northeast United States.

In years when few storms arrive early, the arrival of leafhopper is later and the numbers arriving are lower, resulting in reduced pressure from the insect. Under these conditions, only a few second cutting alfalfa field typically need an insecticide application. However, the numbers build up during the second cutting and a greater number of

third cutting field require an insecticide application.

In years when early spring storms originating in the Gulf of Mexico are frequent, potato leafhoppers in general arrive earlier and damage from the insect is greater. Under these conditions, many second and third cutting alfalfa fields require an insecticide application to prevent damage.

As the second cutting of alfalfa reaches about 2 to 4 inches in height, scout the field once a week. If a storm has just moved through the area, there is a good chance that new leafhoppers have moved into the field. Arriving leafhoppers prefer the new regrowth before it takes on the dark-blue green color of maturing alfalfa.

The wavelengths of light reflected from the young alfalfa plants that are yellow-green is very attractive to leafhoppers flying over the field. To a leafhopper, this indicates that the plant is succulent and rich in the nutrients it needs for proper egg development and growth and development.

Older plants have harder stems and leaves and a lower protein content. Besides proving a good diet for the leafhopper, the younger plants are more tender, making it easier for females to penetrate to stem to deposit their eggs in the stem.

**Craig Elected President**

GRANTVILLE (Dauphin Co.) – The board of directors of PFGC elected Paul Craig as president at a board meeting held at the 1998 Pennsylvania Grazing and Forage Conference March 5 at the Holiday Inn.

Craig has been involved in extension work for a number of years, most recently in Dauphin County with responsibilities in agronomy, dairy, and pesticide safety. He serves on the Grazing Conference Committee. Craig has been a long-time member of PFGC and is serving his second three-year term on the council.

Richard C. Hall also was re-elected to the position of executive director of PFGC. He works part time in his retirement for the Milton Hershey School as director of special projects.

Marvin Hall was re-elected as executive vice president. Hall is on the Agronomy extension staff at Penn State. He has been involved with PFGC for a number of years.

**AMERICA'S ALFALFA KEEPS GROWING WITH TOTAL+Z™**  
**THE PERSISTENT MULTILEAF**

There's good reason why Total +Z has such high yield potential over long rotations compared to other varieties. It has bred-in +Z seedling resistance to *Phytophthora* and *Aphanomyces*, high resistance to five alfalfa diseases and excellent winterhardness for top yields in tough conditions. It features very dark green color, high leaf-to-stem ratio and high quality for extra value.

**Fall dormancy rating: 3.4**



Genetic Wonders that Work

**P.L. ROHRER & BRO., INC.**

Smoketown, PA PH. 717-299-2571

Hours: Mon.-Fri. 8 AM to 5 PM  
 Saturday 8 AM to 12 Noon; Closed Sunday

**Hesston Balers**

**Model 545**

The Hesston® 545 "Silage Special" lets you join the growing group of livestock producers who are using high-moisture round bales to conserve feed value while reducing haytime weather wormes.

**Beefed-up drive.**

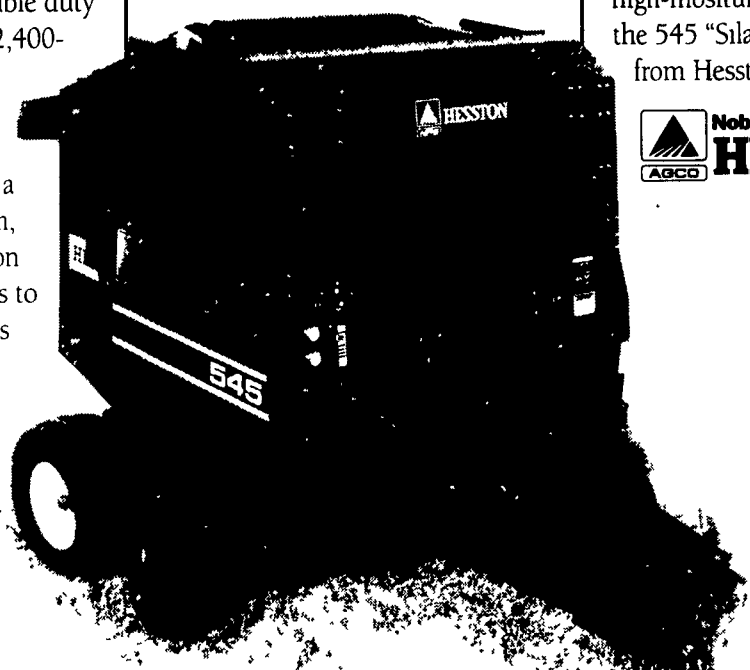
The 545 pulls double duty – it easily produces a 2,400-pound high-moisture silage bale or a 1,250-pound dry bale. That's because it comes with a beefed-up drive system, heavyweight suspension and wide flotation tires to tackle tough, wet crops with ease.

**Silage or hay. Wet or dry.**

**Up to 20 tons/hour.**

The larger starting roll and deep groove drive rolls have been specially designed for the extra residue of high-moisture baling. You can bale wet hay at up to 23 tons an hour, dry at up to 20 tons an hour.

Stop by today and check out the baler that's built for high-moisture work – the 545 "Silage Special" from Hesston.



**STOLTZFUS FARM SERVICE, INC.**

Rts. 10 & 41, Cochranville, Pa  
 215-593-2407

**ZIMMERMAN'S FARM SERVICE**

School Road, Rt. 1, Bethel, Pa.  
 717-933-4114

**D. W. OGG**

Frederick, MD - 301-473-4250  
 Westminster, MD - 410-848-4585

**HERNLEY'S FARM EQUIPMENT, INC.**

2095 S. Market St., Elizabethtown, Pa  
 717-367-8867

**STANLEY'S FARM SERVICE**

RD 1, Box 46, Klingerstown, Pa.  
 717-648-2088

**UMBERGER'S OF FONTANA, INC.**

RD 4, Box 545, Lebanon, Pa.  
 717-867-2613

**C.J. WONSIDLER BROS.**

Finland Rd., Quakertown, PA  
 215-536-1935 / 215-536-7523  
 Rts. 309 & 100, New Tripoli, PA  
 610-767-7611