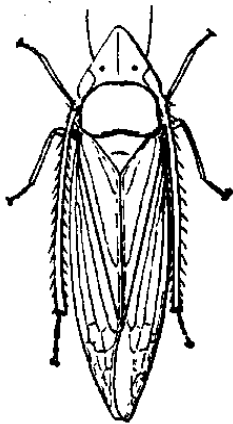


PLANT & PEST ADVISORY

FIELD AND FORAGE CROPS EDITION \$1.50

JUNE 21, 2001



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IPM Report

Donna Foulk, Warren County Program Associate, IPM

- **Potato leafhoppers** have been reported in areas of Pennsylvania, but are not yet at economic thresholds.
- Although **weevils** should be starting to pupate, reports indicate that they continue to be a problem in second cuttings in some areas. Alfalfa regrowth should be checked, and if two or more larvae are found per crown or 50% of the tips show feeding damage, treatment should be considered. If weevils are detected and potato leafhoppers are also present, an insecticide with long residual activity such as Warrior or Bathroid may be used.
- Continue to scout small grains for **armyworm** populations. The recent cool, wet weather favors armyworm development and reduces normal parasite and predator activity. Economic thresholds continue to be found in wheat and barley in Delaware. Threshold for treatment for wheat is two per foot of row and for barley is one per foot of row.

Reports are being received of heavy armyworm feeding on corn in the south and Midwest. Armyworms have been reported in Delaware and have been seen feeding on grasses in hayfields in northeast Pennsylvania. Cornfields at greatest risk are those that were in sod last year and fields containing many grass weeds. Threshold for treatment in corn is when 25% of the corn is infested with larvae that are less than one inch in length.

- Since **black cutworms** migrate into fields over time, continue to watch for larvae, especially in later planted cornfields. Cutworms are rarely a problem in fields once the corn has reached the five-leaf stage. Thresholds for treatment are as follows: seed leaf - 2% of plants cut, two-leaf stage - 3% of plants cut, three-leaf stage - 5% of plants cut, four-leaf stage - 7% of plants cut. If the larvae are larger than 1-1/2", the larvae have done most of their damage and will pupate soon.
- Breakthrough **weeds** are present in most fields, especially in those that were planted using a pre-emergence herbicide prior to the three weeks of dry weather experienced in late April and early May. In general, most herbicides applied at planting need a minimum of 1" of rainfall with seven to ten days for effective weed control. Less mobile herbicides, such as Prowl and Atrazine, and deeper germinating weeds such as **nutsedge, velvetleaf and ragweed** will require even more rainfall. □

Potato Leafhopper Populations Rising

Daniel Kluchinski, Mercer County Agricultural Agent

Are your alfalfa fields exhibiting yellowing and stunting? The cause could be feeding damage of **potato leafhopper**. Potato leafhopper (PLH) is now in alfalfa fields in many geographical areas of the state and region. This insect is pale to bright green in color, about 1/8 inch long and slightly wedged shaped as an adult, or slightly smaller and wingless as the nymph. Both stages of the insect cause injury by sucking juice from the plant. The saliva produced by the insect is injected into the plant, leading to injury that appears as a V-shaped wedge at the leaf tips or yellowing of foliage. With severe feeding, plants can also become stunted in height.

It is important to monitor what is occurring in your fields to determine if the insect populations are near or approaching threshold numbers. Above this threshold, economic losses are great enough that spraying to control the insect or harvesting the crop early, if feasible, is recommended. Unfortunately, once the visible damage is seen, the losses in forage quality have already occurred. The only way to be aware of PLH populations is to scout your fields!

Scouting must be done weekly with a sweep net. Twenty sweeps are taken in five locations in the field. The number of PLH found in the net are counted and divided by 100 (100 total sweeps taken) to determine the number of PLH per sweep. Then the threshold

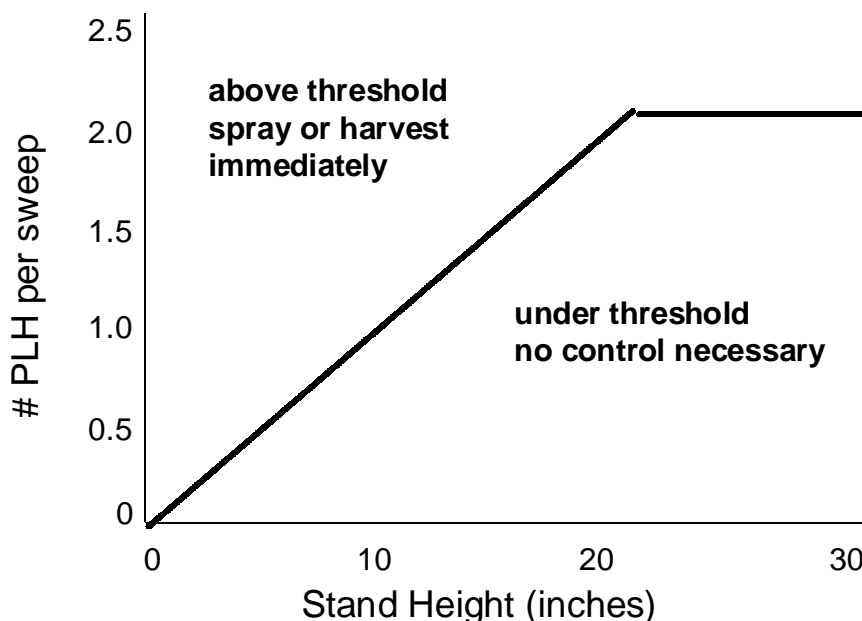
graph is used to determine if this population level at the current plant height is over threshold or not. The threshold determines if some action is required to avoid or stop injury to the crop, or if PLH populations are still low enough that no action is needed.

For example, our alfalfa is six inches tall. Our scouting determines there are 100 potato leafhoppers in 100 sweeps; this would be an average of one PLH per sweep. Using the graph, we see that with one PLH per sweep at six inches of height it is over threshold. Because the crop is too short to harvest, we should apply an insecticide to prevent further damage. If the crop had been 20 inches high, and found only an average of one PLH per sweep, there would be no need to take any action. This amount of PLH at this stage in the plant growth will not cause economic losses. However, the fields should be scouted on a weekly basis to monitor changes in PLH populations.

Remember that early detection is important. Fields should be checked each week. If the PLH population is reaching threshold when the plants are close to maturity, cut rather than spray. Watch the regrowth for PLH populations. Populations may drop, so a stubble spray is not always necessary. In addition, variation occurs between fields. A threshold population of PLH in one field does not mean that all of your fields are at threshold.

For information on how to scout, purchase or build a sweep net, or use the threshold chart, contact your county Extension agent. Additional information is included in the Rutgers *Field Crop Production Recommendations* and insecticide recommendations in the *2001 Pest Management Recommendations for Field Crops*. □

Threshold for Potato Leafhopper in Alfalfa



Program to Assist Limited Resource Farmers with Natural Resource Concerns

Agricultural Management Assistance (AMA) is a new voluntary program for agricultural producers that provides incentives to address natural resources concerns such as water conservation and quality, soil erosion, and transition and diversification issues. Natural Resources Conservation Service (NRCS) conservationists work with producers to develop a conservation plan and design conservation practices to help implement that plan.

AMA provides an opportunity for producers to apply for assistance who do not normally participate in government programs. This USDA program is targeted toward limited resource farmers, and in New Jersey AMA is available only to agricultural producers who qualify for farmland assessment.

What Practices Will Receive Cost Sharing Funding?

The conservation provisions of this program authorize cost share payments to producers:

1. To construct or improve water management structures or irrigation structures.
Eligible practice: Rehabilitation of irrigation pond dams.
Cost share is limited to actual construction costs. No NRCS engineering assistance is provided; all engineering will be provided by the landowner at his/her own expense.
2. To plant trees for windbreaks or to improve water quality.
Eligible practices: Riparian Forest Buffer, Wind-break/shelterbelt Establishment
3. To mitigate risk through production diversification or resource conservation practices, including soil erosion control, integrated pest management, or transition to organic farming.

Eligible practices: Contour Buffer Strips, Critical Area Planting, Conversion of HEL lands to permanent cover (Pasture and Hayland Planting), Field Border, Filter Strip, Integrated Crop Management, Nutrient Management, Pest Management, Soil Management System, Stripcropping, and transition to organic farming.

What are the Payment Rates and Terms?

The Federal share is 75 percent of the cost of an eligible practice. Producers may contribute to the cost of a practice through in-kind sources, including personal or donated labor and use of personal equipment.

Funds Available for Conservation Practices

As a result of the Agricultural Risk Protection Act of 2000, the USDA Natural Resources Conservation Service (NRCS) in New Jersey will soon receive cost-share funding for Soil and Water Conservation Assistance (SWCA).

SWCA is a voluntary effort for farmers that provides cost-share and incentive payments to address threats to soil, water, and related natural resources, including grazing land, wetland, and wildlife habitat.

Although similar to the Environmental Quality Incentives Program (EQIP), funds can only be used for conservation projects outside of 2001 EQIP, CRP, and WRP priority areas.

"This gives landowners in non-priority areas an additional opportunity to install conservation measures on both grazing land and cropland not funded under a priority area," said Joe DeVecchio, NRCS State Conservationist.

Under SWCA, contracts range from one to three years, and the total payment per participant shall not exceed \$50,000. The federal cost-share will be 75 percent of eligible practices.

Landowners can sign-up for SWCA until July 13 for Fiscal Year 2001 funding.

For more information and to sign-up for SWCA, contact NRCS through your USDA Service Center or conservation district office. NRCS office locations are listed at the following website:

<http://www.nj.nrcs.usda.gov/offices/offices.html>. □

What are the Applicant Qualifications?

Applicants must own or control the land, agree to implement specific eligible conservation practices, and qualify for farmland assessment. Applicants will be evaluated based on the following:

1. Average gross farm sales of \$60,000 or less over the last three years
2. Total household income of 75% or less of median household income for the state (\$50,560)
3. Farm a total of less than 75 acres (either rented or owned cropland or pasture)
4. Received USDA program payments of less than \$10,000 over the past 5 years.

How are Applicants Ranked?

Applicants are ranked by priority designations, as follows:

- Priority 1* - meets all 4 of the above qualifications
- Priority 2* - meets 3 of the above qualifications.
- Priority 3* - meets 2 of the above qualifications.

SEE AMA ON PAGE 4

The State Conservationist, with input from the State Technical Committee, will rank and select applications for funding.

What is the Contract Period for AMA?

5 - 10 years. Practices must be maintained for the life of the practice.

How Does Signup for AMA Work?

Producers can sign up for AMA at any time, but the first signup deadline for ranking applications for FY2001 funding is July 20. Applicants can visit their local USDA Service Center or Soil Conservation District. NRCS staff can be reached by phone as follows:

- ◆ Hackettstown - serving Sussex, Morris and Warren: (908) 852-2576 ext. 3
- ◆ Flemington - serving Hunterdon, Somerset, and Union: (908) 782-4614 ext. 3
- ◆ Freehold - serving Mercer, Middlesex and Monmouth: (732) 462-1079 ext. 3
- ◆ Mount Holly - serving Burlington, Camden, and Ocean: (609) 267-0811 ext. 3
- ◆ Woodstown - serving Gloucester and Salem: (856) 769-1126 ext. 3
- ◆ Vineland - serving Atlantic, Cape May, and Cumberland: (856) 205-1225 ext. 3 ☐

Weekly Weather Summary

Keith Arnesen, Ph.D., Agricultural Meteorologist

Temperatures averaged much above normal. Extremes were 93 degrees at Pemberton and Hammonton on the 14th and 54 degrees at Long Valley on the 12th. Weekly rainfall averaged 2.42 inches north, 2.87 inches central, and 2.64 inches south. The heaviest 24 hour total reported was 4.00 inches at Canoe Brook on the 16th to 17th. Estimated soil moisture, in percent of field capacity, this past week averaged 70 percent north, 63 percent central and 54 percent south. Four inch soil temperatures averaged 70 degrees north, 72 degrees central and 74 degrees south.

Weather Summary for the Week Ending 8 am Monday 6/18/01

WEATHER STATIONS	R A I N F A L L			TEMPERATURE				GDD BASE50		MON %FC
	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	
BELVIDERE BRIDGE	1.59	14.15	.45	90	59	75.	7	737	99	84
CANOE BROOK	4.80	16.80	1.95	87	58	74.	5	797	194	100
CHARLOTTEBURG	1.04	13.81	-1.09	88	56	72.	6	627	170	72
FLEMINGTON*	3.77	17.72	3.57	89	55	74.	5	696	68	100
LONG VALLEY	2.16	13.40	-1.78	82	54	71.	5	596	87	100
NEWTON	1.16	14.90	1.52	87	58	73.	6	724	203	72
FREEHOLD	2.24	14.85	.89	86	59	74.	4	903	192	99
LONG BRANCH	3.08	17.13	3.00	85	63	72.	3	755	107	100
NEW BRUNSWICK	3.88	17.62	3.95	85	58	74.	3	825	71	100
PEMBERTON	2.18	13.06	-.37	93	55	74.	4	874	132	93
TOMS RIVER	2.68	13.93	.04	86	56	74.	5	838	194	100
TRENTON	3.16	17.73	5.06	88	63	76.	4	894	93	100
CAPE MAY COURT HOUSE	2.00	10.80	-1.49	90	61	76.	6	902	185	87
DOWNSTOWN	2.19	12.84	.28	91	59	76.	5	891	69	100
GLASSBORO	4.71	17.64	4.11	92	65	77.	6	978	176	100
HAMMONTON	2.72	12.78	-.39	93	62	77.	6	929	136	100
POMONA	.00	8.80	-3.27	91	55	75.	5	861	138	23
SEABROOK	3.36	16.43	4.53	92	64	77.	6	974	146	97
ATLANTIC CITY MARINA	3.51	9.86	-1.61	88	61	75.	6	871	206	100
SOUTH HARRISON	2.94	16.98	3.53	90	64	77	NA	927	NA	NA

*Some values for Flemington were estimated for the period April-May

WES KLINE — GDD BASE 40 PINEY HOLLOW
 Last Week 190 (Ending 6/11/01)
 This Week 256 (Ending 6/18/01)

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