

PLANT & PEST ADVISORY

FIELD CROPS/LIVESTOCK EDITION \$1.50

SEPTEMBER 17, 1998



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Production Flexibility Contract Payments

Agriculture Secretary Dan Glickman last week urged farmers to contact their local USDA Service Center to select how they want to receive their 1999 Agriculture Marketing Transition Act (AMTA) payments.

Under a plan passed by Congress and signed by President Clinton, farmers eligible to receive AMTA payments (also called Production Flexibility Contract (PFC) payments) can choose to receive the payment all at once or in two equal payments during Fiscal Year 1999, which begins October 1, 1998 and ends September 30, 1999. The initial payments should be distributed by October 22, 1998.

"These are payments farmers were entitled to receive even before this bill became law," Glickman said. "Advancing the payment date will provide limited financial assistance in a time of stress on our farmers. We need to move forward on many fronts to ensure family farmers and ranchers have a strong, secure future on the land."

"The Emergency Farm Financial Relief Act will help ease the current cash-flow problems for many farmers who are in dire economic straits," Glickman said. "But the money does not address the underlying causes of today's hardship — weak Asian export markets, strong world crop production, and a U.S. farm policy that cannot cope with a string of natural disasters."

So far this summer, USDA has made emergency loans available to farmers in declared disaster areas including the entire states of Florida, South Carolina, and Texas; most of Oklahoma and Louisiana; and portions of Arkansas, Georgia, Kansas, and North Carolina. Emergency grazing of certain land in the Conservation Reserve Program has been allowed to help livestock in Texas, Oklahoma, and New Mexico.

USDA is making full use of export credit guarantee programs to support U.S. exports. For fiscal year 1998, USDA announced nearly \$5.8 billion in GSM-102 credit guarantees, compared with \$3.9 billion last year. Through the end of August, in addition to other products, U.S. exporters had sold 169 million bushels of wheat, 189 million bushels of corn, 85 million bushels of soybeans, and more than 8 million bales of cotton under GSM-102.

In addition, USDA is working with USAID to implement the Food Aid Initiative announced by President Clinton in July. Under this

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At-Planting Nitrogen for Wheat: To Apply or Not to Apply?

Daniel Kluchinski, Mercer County Agricultural Agent

Over the past several years, research has been conducted in New Jersey on the use of intensive nitrogen (N) management techniques for wheat. The methods used for evaluation and determination of N need are based on research in Virginia and other eastern states, and information about N uptake and utilization by wheat. These tools have been shown to aid the farmer in determining optimum N application rates that will ensure good crop growth and yield, optimize costs, and to reduce potential environmental impact.

Nitrogen in the soil at-planting is critical to supply the developing seedling and to trigger tillering. Tillers, the side shoots that form on the plant as it grows, are important. High tiller numbers produce more grain heads and lead to higher potential yield. Many growers do not apply N at-planting, but rather wait until late winter at the crop green-up stage. Although N fertilization at this time is important, it is more to provide food for growth of the tillers, not tiller formation. At-planting N therefore is essentially to promote tiller formation after planting and prior to freezing weather.

There may be adequate N in the soil if the previous crop was a legume, if manure had been recently applied, if N carryover during a drought occurred, or if the soil organic matter levels are high. However, in order to determine at-planting N need, a soil sample should be taken prior to planting. Fields should be sampled separately if they have different soil types or management history. Follow standard soil testing procedures. Sample randomly throughout the field to a depth of 6 inches. Combine the samples into one bucket, mix the soil together, and then pull out approximately one cup of soil for analysis. The samples should be analyzed for nitrate-N ($\text{NO}_3\text{-N}$).

Because microbial activity can rapidly change the concentration of $\text{NO}_3\text{-N}$ in soil samples, dry the samples immediately. Soil samples should be dried using the following methods:

- air-dried by spreading a thin layer of soil on a sheet of plastic;
- oven dried by placing the sample on a cookie sheet and heating in a 200 to 250°F oven until dry; or,
- microwave oven dried. Allow 5 to 8 minutes per cup of spread-out soil.

Once dried, the samples can be sent to a commercial laboratory for analysis. The following soil test laboratories can test soil $\text{NO}_3\text{-N}$ and provide rapid turn

around times. *This list is no way meant to be an endorsement of soil laboratories listed.*

University of Delaware
Dept. of Plant and Soil Science
Newark, DE 19717-1392
Phone: 302-831-1392

Penn State University
Ag Analytical Services Lab
University Park, PA 16802
Phone: 814-863-0841

Based on the soil $\text{NO}_3\text{-N}$ level, the following fertilizer rates are recommended:

- If soil nitrate is less than 30 ppm (parts per million), apply 15 - 30 lb N/A
- If soil nitrate is greater than 30 ppm, apply no N at-planting

It is expected that soils with less than 10 ppm would cause N-deficiency in emerging seedlings, while 30 ppm or greater would indicate no at-planting N was necessary. Our research has determined that 25 lb N/A applied at-planting generally increased tillering over no N application on soils where the nitrate-N levels were below 30 ppm. On these soils, higher N rates did increase the number of tillers that were formed, but this did not significantly increase yield.

Therefore, this fall consider soil testing to determine $\text{NO}_3\text{-N}$ level, and using that information, determine at-planting fertilization rates. If the previous crop was a legume, if manure had been recently applied, or if the soil organic matter levels are high, this test may not be necessary as soils under these situations would have sufficiently high $\text{NO}_3\text{-N}$ levels. Under these situations, test to be sure, or at least consider applying no N fertilizer at-planting. However, if the previous crop was a high N user, if N carryover after a drought may have occurred, or if your soils are low in organic matter, soil testing may be your best tool to evaluate and determine at-planting N needs. □

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initiative, more than 80 million bushels of U.S. wheat will be donated to needy people overseas. Initial shipments are planned for this month.

Farmers should call or visit their local USDA Service Center to select payment options. Those who do not choose a payment option will receive their full payment near the end of Fiscal Year 1999.

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Submitted by Dan Kluchinski, Mercer County Agricultural Agent □

Field Crops Weekly Pest Summary - 9/17/98

Field Crops Working Group

Alfalfa

Potato Leafhoppers still remain a concern in parts of Burlington and Salem Counties. As of last Friday, recommendations were given for spraying to control leafhoppers.

Spotted alfalfa aphid continues to remain a threat, especially to first year stands. Prolonged dry weather favors this aphid which can build up to threshold levels

of 50 aphids in a single sweep. These aphids are capable of killing young plants and in drought stressed fields should not be ignored.

Spotted aphids are the smallest of the three aphid species that we have attacking alfalfa in New Jersey. In a sweep net the aphids appear as grains of sand in the bottom of the net. Using a 10 power magnifying glass, a checkerboard pattern of spots is visible on the back of the aphids. Check the driest parts of the field for their presence. As long as dry conditions persist the aphid may be a problem.

A moderate leaf rust infection has been found in one Salem County field. ☐

Weekly Weather Summary

Keith Arnesen, Agricultural Meteorologist

Temperatures averaged slightly above normal. Extremes were 95 degrees at Pemberton on the 8th and 42 degrees at Charlotteburg on the 11th. Weekly rainfall averaged 1.20 inches north, 0.67 inches central, and 0.57 inches south. The heaviest 24 hour total was 2.00 inches at Canoe Brook on the 7th to the 8th. Estimated soil moisture, in percent of field capacity, this past week averaged 90 percent north, 75 percent central and 62 percent south. Four inch soil temperatures averaged 61 degrees north, 69 degrees central and 70 degrees south.

| Weather Summary for the Week Ending 8 a.m. Monday 9/14/98 | | | | | | | | | | |
|---|----------|-------|------------------|-------------|----|-----|-----|------------|-----|---------|
| WEATHER STATIONS | RAINFALL | | | TEMPERATURE | | | | GDD BASE50 | | MON %FC |
| | WEEK | TOTAL | DEP | MX | MN | AVG | DEP | TOT | DEP | |
| BELVIDERE BRIDGE | .58 | 32.20 | 5.91 | 88 | 46 | 65. | 1 | 2727 | 310 | 77 |
| CANOE BROOK | 2.10 | 31.10 | 3.51 | 91 | 46 | 66. | 1 | 3116 | 683 | 89 |
| CHARLOTTEBURG | .88 | 33.63 | 5.76 | 83 | 42 | 62. | 0 | 2291 | 357 | 73 |
| LONG VALLEY | 1.28 | 32.46 | 3.85 | 81 | 46 | 63. | 1 | 2454 | 309 | 86 |
| NEWTON | 1.16 | 31.16 | 5.46 | 82 | 44 | 62. | 0 | 2309 | 122 | 88 |
| LONG BRANCH | .73 | 34.63 | 8.56 | 92 | 51 | 68. | 1 | 2814 | 229 | 62 |
| NEW BRUNSWICK | .71 | 29.83 | 3.74 | 93 | 49 | 68. | 2 | 3011 | 231 | 83 |
| PEMBERTON | .48 | 23.35 | -3.06 | 95 | 47 | 70. | 3 | 3235 | 522 | 45 |
| TOMS RIVER | .61 | 36.92 | 10.28 | 94 | 47 | 68. | 0 | 3100 | 511 | 64 |
| TRENTON | .81 | 27.25 | 2.54 | 93 | 47 | 66. | -2 | 2905 | 22 | 67 |
| CAPE MAY COURT HOUSE | .86 | 24.22 | 1.14 | 93 | 52 | 70. | 0 | 3108 | 512 | 54 |
| DOWNSTOWN | .46 | 23.81 | -.48 | 93 | 51 | 69. | 1 | 3195 | 302 | 51 |
| HAMMONTON | .59 | 22.03 | -3.40 | 94 | 49 | 69. | 1 | 3163 | 292 | 63 |
| POMONA | .50 | 25.81 | 2.57 | 93 | 49 | 69. | 2 | 3143 | 464 | 49 |
| SEABROOK | .51 | 26.15 | 2.83 | 92 | 52 | 70. | 2 | 3354 | 445 | 51 |
| ATLANTIC CITY MARINA | .45 | 27.20 | 4.88 | 90 | 55 | 71. | 3 | 3160 | 524 | 47 |
| WOODSTOWN | .48 | 25.49 | 0.50 | 92 | 47 | 65 | NA | 3373 | NA | NA |
| WES KLINE — GDD BASE 40 PINEY HOLLOW | | | | | | | | | | |
| Last Week | | 231 | (Ending 9/7/98) | | | | | | | |
| This Week | | 206 | (Ending 9/14/98) | | | | | | | |

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