

June, 1986

DEAR WISCONSIN CRANBERRY GROWER:

Mid May growing day (GDD) accumulations as reported by the Wisconsin Department of Agriculture Plant Industry Bureau were 2 weeks ahead of normal for southern Wisconsin and 3 weeks ahead for central and northwestern areas. Recent cool weather has slowed GDD accumulation somewhat but cranberry plantings for the moment are growing rapidly By the time this is mailed, first bloom should be noted in southern Wisconsin, barring any abnormal extended cool periods.

Prospects for a long growing season and a good crop are excellent at this point. Dry conditions in some areas however, suggest attention to irrigation for adequate moisture (necessary for nutrient uptake) could pay off later. At least 1 1/2-2 inches of water weekly including normal rainfall and frost protection applications would be beneficial during the rapid growth and fruit set periods.

The WCGA program committee, Ocean Spray staff and myself met recently to review final plans for the upcoming Cranberry Field Day scheduled for Wednesday, August 6. Joint hosts for the day are Ocean Spray Cranberries, Inc., and the John Rezin family, North Tomah Cranberries, Inc.

Ocean Spray's ultramodern Tomah receiving plant offers superb facilities for the meal, meeting and commercial exhibits. The Rezin family's marsh nearby is excellent for the field tour.

Larry Rezin, 1986 WCGA president, Jim Peterson, Ocean spray, Inc. and Dave Olson, Monroe County Extension will be coordinating the program, local arrangements and tours. Final details in the next issue of CranTips.

In the meantime, plan to join us August 6) for the Cranberry Field Day!

Note: <u>Commercial exhibitors</u> for the <u>Cranberry Field Day will be receiving a letter concerning details and space reservations soon from the exhibits committee.</u>

CRANBERRY INSECT PHEROMONE TRAPS -- AN UPDATE

There are currently pheromones for five different cranberry insects in various stages of development. Two of these are commercially available for the 1986 growing season.

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Cranberry girdler pheromone continues to be a very effective means of monitoring population levels of this insect and is an aid in timing diazinon granule applications. Traps should be in place from early June to mid August.

Sparganothis fruitworm pheromone was field evaluated by us last year and seems to be a very good monitoring tool. At our prompting, Trece, Inc. is producing and marketing this pheromone for use by the cranberry industry this year. There are two generations of <u>Sparganothis</u> per year. Traps should be in place for the first generation by the third week of May and maintained through the end of August.

For both cranberry girdler and <u>Sparganothis</u>, we recommend a minimum of three traps per marsh. The traps will usually last 2-3 weeks before they become too weathered to be useable, and the baits should be changed every 4 weeks. We have fould that the Pheracon II (or similar "delta" type of trap) is adequate for determining peaks of moth flight periods. However, the larger and more expensive Pherocon IC (or "wing" type of trap) gives somewhat more accurate quantitative information. Regardless of trap type, we recommend that you check traps twice weekly and keep accurate, permanent records. Comparison of trap catches from year to year will indicate changes is population levels and will also be a measure of the effectiveness of your control program.

The status of three additional cranberry insect pheromones is summarized below.

Yellowheaded fireworm pheromone was developed by Dr. Meyer Schwarz, Research Chemist with the USDA in Beltsville, Maryland. We field evaluated this pheromone on six marshes throughout the growing season last year. We caught no yellowheaded fireworm moths at any of our traps. Similar results were found in Massachusetts. At this time we are uncertain of the status of the insect and its pheromone in Wisconsin. The pheromone is not commercially available.

Blackheaded fireworm phereomone has been chemically identified. We are hopeful that we will be receiving material for experimental evaluation this season. We are also ordering some for our IPM program participants. If the pheromone proves to be an effective monitoring tool, we will recommend its commercial production for 1987.

Cranberry fruitworm pheromone is still in the development stage.

Commercial suppliers of pheromones for cranberry girdler and Sparganothis fruitworm are:

WildHawk, Inc. P.O. Box 127 Warrens, WI 54666 Trece, Inc. 635 S. Sanborn Rd., Suite 17 Salinas, CA 93901 Great Lakes IPM 10220 Church Rd., NE Vestaburg, MI 48891

- Dan Mahr

THOUGHTS ON POLLINATION

Cranberries require pollination by bees or other beneficial insects to achieve adequate fruit set and maximum fruiting potential. As blossoming time approaches, a few comments on bee care and handling are well worth considering:

- 1. In plantings with five or more acres, bees are essential to supplement other wild insects as pollinators. This is particularly critical in seasons with cool, cloudy conditions during bloom.
- 2. Honey bee colonies should be protected from prevailing winds, if possible. Hive entrances should not be shaded and should face the east or south to encourage maximum flight early in the day.
- 3. Strong bee colonies are essential to achieve maximum benefits in pollination. Group colonies of 3 to 5 hives each in the most favorable locations. Hives should be placed on pallets, old tires, bricks or cinder blocks to keep bottom boards dry. Cut grass or weeds in front of the hive to prevent blocking the entrance.
- 4. Dandelions and other flowering weeds compete with fruit blossoms for bee activity. Best time to control dandelions is in <u>fall</u>, with 2,4-D herbicide. In spring mowing weeds will help to reduce competing bloom.
- 5. Bees will use the closest fresh water. Be sure insecticides are not allowed to accumulate in wheel ruts and puddles in and around the marsh.
- 6. Move bees into the planting as blossomings begins. Bees will begin working competing vegetation and continue doing so if placed in the marsh too early.
- 7. Be especially careful of insecticide applications during periods of bee activity in fruit plantings. Read insecticide labels carefully and apply essential insecticides only in very early morning, late evening or nighttime when bees are not foraging. Remember that Sevin(carbaryl) is highly toxic to bees and should never be used in bloom.

AERIAL APPLICATION OF DIFOLATION FOR FRUIT ROT CONTROL

We have been seeking a formal registration for aerial application of Difolatan (captafol) to cranberry beds in Wisconsin. We anticipated obtaining a special local needs" or 24(c) registration that would have been effective for 5 years. However, I have just been notified by the Wisconsin department of Agriculture, Trade, and Consumer Protection that Chevron Chemical Company has successfully amended the Difolatan 80 sprills label under Section 2(ee) of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) to accommodate aerial application to cranberry plantings. The label reads as follows:

<u>CRANBERRIES:</u> Fruit Rot: 3-3/4 to 6-1/4 lbs. in 100-300 gallons spray per acre by ground equipment, depending upon size of plants, or a minimum of 5 gallons by air. Apply at bloom and repeat at 10 to 14 day intervals for a total of 3 applications each year. Do not apply within 50 days of harvest. Do not tank mix with any other pesticide or fertilizer.

All applicable directions, restrictions and precautions on the EPA registered label are to be followed. This 2 (ee) registration presently has no expiration date.

What all this means to Wisconsin cranberry growers is that Difolatan can be legally applied by air, to cranberry beds for fruit rot control, this year and in the years to come. If further questions arise please feel free to contact me (608-262-6241)

- Steve Jeffers

WHEN IT RAINS, IT POURS . . . !

The rains that ended Africa's long drought have also brought an unwanted but predictable side effect: " fertile breeding ground for an upsurge of grasshoppers that are now threatening countries of the western Sahel region.

The pest is the Senegalese grasshopper, the eggs of which are now hatching at very high densities which may reach 125 per square meter in some areas. The young hoppers will attack seedlings of millet and sorghum. Depending on conditions, they will produce a new generation that could reach plague proportions.

The current threat is similar to the 1974 outbreak, the worst ever registered. An estimated 20-30% of crops were lost across the region, destroying millions of tons of food grains. In 1974, bountiful rains broke a three-year drought and famine, but also provided the ground moisture for the grasshopper.

The first signs of a new plague appeared in Mali last year, when 300,000 hectares of crops in the region north of Bamako were attacked. Catastrophic losses were avoided by a control campaign supported by FAO, UNDP and USAID and other donors.

From: FAO at Work United Nations April, 1986

1986 CRANBERRY IPM

The 1986 UW-Cranberry IPM program is now underway. Information collected through scouting is an important part of the IPM program. In the previous issue, the possibility of a toll-free 800 number was mentioned. Due to inadequate funding for a toll-free number, data will be published in the Wisconsin cooperative Pest Survey Bulletin. The bulletin is available free of charge, and is up-dated weekly. It is mailed out every Friday.

To subscribe to the Pest Survey bulletin call (608)-267-7171 or write to:

Attention: Evelyn Tetzalaff
Wisconsin Cooperative Pest Survey Bulletin
Agriculture Resource Management Division
Plant Industry Bureau
801 West Badger Road, P.O. Box 8911
Madison, WI 53708

The information will also be available through local Cooperative Extension offices via WISPLAN (computer system). Subscribers to WISPLAN can receive the Bulletin late Thursday afternoon. After receiving the prompt Ready enter the command RUN (112,10)PSB followed by a carriage return.

> - Roseann Kachadoorian IPM Coordinator

NEW PUBLICATIONS

Protecting Honey Bees In Wisconsin from Pesticides and Other Toxic Chemicals, by J. L. Wedberg and E. H. Erickson, UWEX Bulletin A3086 was recently revised and updated. Copies are available from county Extension offices statewide or from Agricultural Bulletins, Room 245, 30 N. Murray St., Madison, WI 53715 (Tel: 608-262-3346). Price: \$.35.

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