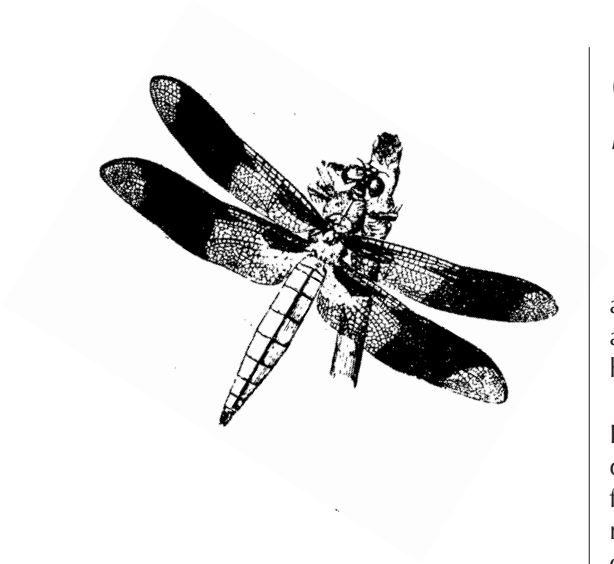
RUTGERS COOPERATIVE EXTENSION AT THE NEW JERSEY AGRICULTURAL EXPERIMENT STATION

PLANT & PEST ADVISORY

CRANBERRY EDITION $1.50 JULY 2, 1998



INSIDE

Highlights of the 1st Annual Cranberry Growers Twilight Meeting

Raymond J. Samulis, Burlington County Agricultural Agent

Since this was the first meeting of this kind in recent years, the projected attendance was a real wild card. We expected 15 growers and were very pleased when over 46 growers attended, representing most growing operations large and small. Sam and Neva Moore's farm was a perfect setting, which coupled with their hospitality, made the program a success.

The Program started off with Grant Stiles from the New Jersey Department of Agriculture, who explained what factors to look for in quality hives. He stressed the strength of the colony as well as freedom from mite infestations. Grant offered his assistance to any grower who needed help in evaluating hives. Hives should have a laying queen, one and one-half or two story boxes, four to six frames of brood, and enough adults to cover six to eight frames.

Dr. Peter Oudemans made a presentation on fruit rot control and fungicide timing for cranberries. He stressed applying fungicides at the proper stage of development, and encouraged early spraying for diseases such as blossom blight. Most other fungi species infect cranberries sometime after bloom. Peter concluded that in a four application program, the second spray was least effective.

Meteorologist Dr. Keith Arnesen, spoke on the value and use of weather data. He also gave the group valuable internet sites where quality data can be found. A lively discussion pursued dealing with calculations estimating the cranberry scald forecasts. Growers were alerted to favorable scald conditions, such as dew points below 55 degrees at midday, high temperatures over 80 degrees, clear skies, field capacity less than 50%, and no rainfall for the previous 48 hours.

The group proceeded on a tour of the bogs led by Sam and Neva, where they saw excellent bloom. The tour also saw first hand the severity of deer damage, despite control measures that include high fencing.

After a short refreshment break, Dr. Brad Majek spoke to the group on the various herbicide injury symptoms and modes of action. There seem to be situations where herbicides are being blamed for other non-related problems. He also stated that the Stringer label was not yet available.

Dr. Sridhar Polavarapu gave an excellent presentation on identify-

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Insect Update

Sridhar Polavarapu, Ph.D., Entomology and IPM

✔ **Post-pollination insecticide applications:** The first post-pollination insecticide spray is the most crucial insecticide application in cranberry pest management and should be applied as soon as honeybees are removed. This application will provide effective control of **Spotted fireworm**, **Sparganothis fruitworm** and **Blackheaded fireworm**. Insecticide options include Diazinon, Guthion, Lorsban, and Orthene.

Orthene 75S and Orthene 75 WSP have a new Section 24-C label that allows you to use these products during the post-pollination season. As per this label, the Pre-harvest Interval (PHI) is set at 75 days and only a single application of **Orthene 75S or Orthene 75 WSP** is allowed in the post-pollination period. Because this product is registered under Special Local Needs usage (Section 24-C), you must have a copy of the Supplemental Label with you at the time of mixing and application of the product. You are also required to submit all records of application to the Pesticide Control Program, NJDEP, by the end of the calendar year. If you need a copy of the label, please call Rutgers Blueberry and Cranberry Research Center at (609) 726-1590 or contact Dan Schiffhauer, Ocean Spray Cranberries Inc.

✔ **Spotted fireworm:** The first generation adult flight is virtually over now. The peak hatch of egg-masses around the Chatsworth area occurred between 6/28 and 7/2. Approximately 75% of egg masses have hatched at this time. Pheromone trap catches have peaked during the week of 6/22-/28 in the Chatsworth area. Newly hatched larvae are beginning to web uprights. Insecticides are most effective if applied before the larvae are tightly enclosed in the webbed uprights and fruit.

✔ **Sparganothis fruitworm:** Pheromone traps continue to catch male moths in significant numbers suggesting that moth flight is still underway. We predict trap catches to peak this week.

Sparganothis fruitworm lays eggs on cranberry foliage and weeds in masses of 30-50. Eggs hatch in 9-12 days. Newly hatched larvae are yellowish-green with black heads. The head capsule turns yellow as the larva molts into a second instar. Sparganothis larvae often scores many of the berries it comes in contact with, thus increasing the number of damaged berries. The first post-pollination spray, applied 2 weeks after the peak moth catch in pheromone traps, has generally provided effective control of early larval stages.

✔ **Cranberry girdler:** Growers should begin looking for Cranberry girdler damage in the next 3-4 weeks. Girdler larvae remain in the leaf litter and feed on the runners, weakening them and causing a yield reduction. When the feeding causes complete girdling of the vine or its severance, the vines are killed. Damage due to girdler larvae usually occurs in patches.

Cranberry girdler overwinters as a larva enclosed in a cocoon woven of silk and trash on the bog floor. After the water is drawn, larva pupates and emerges as a moth around the first of June. Moth emergence continues to early August with peak egg-laying occurring in early to mid-July. The adult moth is about 1/2 inch long with a snoutlike projection on its head, and silvery-white front wings with light brown outer edges. Eggs are laid on the trash. The larvae are dirty-white with brown heads and feed on stems and runners in August and September. There is only one brood produced each year.

Girdler control can be achieved with Diazinon 14G. This insecticide has a section 24-C label for Cranberry girdler control in the state of New Jersey. Diazinon 14G must be applied from the ground directly on vines at a rate of 21 lbs/acre and watered in with at least 1/4 inch of water. There may not be any discharge of water from the bog for 7 days after application. The pre-harvest interval is 7 days. Please read and follow all directions on the Supplemental label. If you need the Section 24-C Supplemental label, call me at the Research Center. ❑

Insecticides are most effective if applied before the larvae are tightly enclosed in the webbed uprights and fruit.

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ing bog insects. Live samples were distributed that included fireworms, fruit worms, and various grub species. Suggestions were given to aid growers in making timely insecticide applications to control these pests.

I concluded the program with a discussion of the Worker Protection Standards. Compliance with the Notification Bulletin Board was stressed and demonstrated with the required maps, posters and poison control center information.

The outstanding attendance and favorable comments indicate the need for programs like this. Couple that with the excellent speakers, hospitality, farm tour and pesticide credits, and the continuation of the program appears definite. ❑

Deer Fencing Installation Seminars

August 4, 1998
4 PM - 8 PM
Rutgers University, Snyder Research Farm
140 Locust Grove Road
Pittstown, NJ 08867

August 5, 1998
4 PM - 8 PM
Rutgers University, Agricultural Research and Development Center
121 Northville Road
Bridgeton, NJ 08302

The New Jersey Department of Agriculture and the New Jersey Division of Fish, Game and Wildlife in a cooperative program will be awarding over 700,000 feet of deer fencing to New Jersey farmers.

The Snyder Research Farm will be hosting the above noted seminars to educate farmers and other interested parties in the proper installation procedures. Representatives from the fence manufacturer and distributor, as well as commercial installers will be on hand to demonstrate fence installation.

Call the Snyder Research Farm at 908-730-9419, ext. 11, to register for either seminar.

Weekly Weather Summary

Keith Arnesen, Agricultural Meteorologist

Temperatures averaged much above normal. Extremes were 96 degrees at Pemberton on the 27th, and 53 degrees at Charlotteburg on the 28th. Weekly rainfall averaged 0.15 inches north, 0.41 inches central, and 0.29 inches south. The heaviest 24 hour total was 0.63 inches at Newton on the 26th to 27th. Estimated soil moisture, in percent of field capacity, this past week averaged 69 percent north, 58 percent central and 39 percent south. Four inch soil temperatures averaged 72 degrees north, 70 degrees central and 75 degrees south.

Weather Summary for the Week Ending 8 a.m. Monday 6/29/98

	RAINFALL			TEMPERATURE				GDD BASE50		MON
WEATHER STATIONS	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	%FC
BELVIDERE BRIDGE	.42	24.47	9.35	89	63	74.	4	1057	207	61
CANOE BROOK	.09	23.84	7.60	95	59	76.	6	1239	421	56
CHARLOTTEBURG	.02	25.99	9.55	90	53	72.	5	913	274	61
LONG VALLEY	.16	24.23	7.62	86	62	72.	4	919	218	62
NEWTON	.04	20.20	5.38	88	57	72.	3	922	204	65
FREEHOLD	.35	24.85	9.62	93	59	75.	3	1065	124	69
LONG BRANCH	.20	27.15	11.87	93	62	74.	3	1017	146	32
NEW BRUNSWICK	.13	24.82	9.96	94	60	75.	1	1161	161	70
PEMBERTON	.79	18.01	3.27	96	60	76.	4	1266	291	50
TOMS RIVER	.75	31.77	16.63	95	60	75.	3	1220	353	47
TRENTON	.23	23.12	9.27	93	60	74.	1	1118	69	40
CAPE MAY COURT HOUSE	.14	18.07	4.62	94	63	76.	4	1197	249	25
DOWNSTOWN	.39	17.78	4.07	93	63	76.	3	1307	239	36
GLASSBORO	.60	17.66	2.81	94	64	76.	3	1331	284	47
HAMMONTON	.25	17.60	3.15	94	62	76.	3	1258	218	26
POMONA	.17	22.11	9.03	94	62	76.	4	1237	284	30
SEABROOK	.48	20.57	7.40	93	64	77.	4	1380	305	55
ATLANTIC CITY MARINA	.00	22.92	10.40	87	65	75.	4	1158	273	19
WOODSTOWN	.72	17.65	3.85	95	63	78.	NA	1422	NA	NA

WES KLINE — GDD BASE 40 PINEY HOLLOW

Last Week 251 (Ending 6/22/98)

This Week 253 (Ending 6/29/98)

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