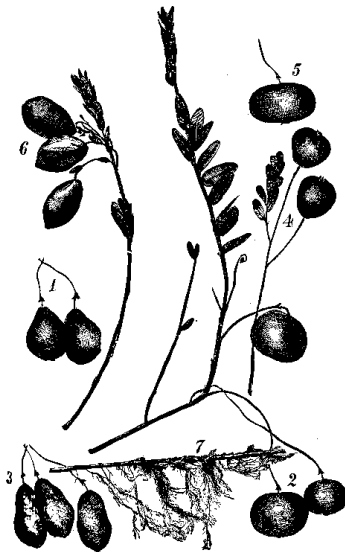


PLANT & PEST ADVISORY

CRANBERRY EDITION \$1.50

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Rutgers Partnership with Ocean Spray for Nutrient Management and Crop Physiology Research

Jack Rabin, Assistant Director, NJAES

In October, 1999 a new scientist will join our existing three Rutgers faculty and USDA scientists at the Research Center in Chatsworth. During the harvest Saratha Kumudini, Ph.D. will arrive from the University of Guelph, Ontario, Canada where she is completing her Ph.D. in Crop Physiology.

Saratha is expected to identify the most significant environmental factors influencing cranberry crop yield and quality. From her research, we expect improved integrated crop management production recommendations in areas like fertility and plant/soil/water relations. Saratha will collaborate with faculty, growers, and the cranberry industry. We also expect her to conduct and publish research leading to advances in cranberry science.

Why initiate this work, now, in the midst of depressed prices and record yields for New Jersey growers?

One important contribution to New Jersey's increasingly competitive yields the last few years can be traced directly to fertility field studies in New Jersey. These studies were conducted by Dr. Joan Davenport, cooperating with Dr. Nick Vorsa and growers, while she was employed by Ocean Spray. The Rutgers and Ocean Spray impetus to jointly fund this research and position emerged from better yields growers were seeing from improved fertility and agronomic practices.

Keeping yield and quality high, and costs low, remains a priority for the long-term competitive success and future of New Jersey's cranberry industry. As a warm producing region, New Jersey faces unique problems and must continually advance its efforts to compete producing highest quality and yields. Also, since few acreage expansions are likely to be approved, it is important to get the most from each producing acre.

Ocean Spray surveyed its growers in various producing regions to identify priority problems. New Jersey growers gave priority to cranberry nutrient management, and environmental and stress physiology of cranberry crop production. Growers in other regions had different priorities. Ocean Spray could not afford to fund a research and extension program in nutrient management solely for New Jersey growers.

See Research on page 2

Note on Goose Hunting

The New Jersey Division of Fish, Game & Wildlife announced that during the September goose hunting season, the limit is 5 per day. Hunters will not be required to purchase the special \$2.00 permit, but must call 1-800-WETLANDS to receive a "HIP" number. State and Federal Waterfowl Stamps are still required. □

Editor's Note: This is the last issue of the Cranberry edition of the Plant & Pest Advisory for the '99 season. Thank you for subscribing. □

Research from page 1

Alone, neither could Rutgers. Through a partnership together, we could.

Each of our three Rutgers faculty at the Center from Nick Vorsa, Ph.D. in breeding and culture, to Peter Oudemans, Ph.D. in Pathology, and Sridhar Polavarapu, Ph.D. in IPM Entomology stays close to overall cranberry crop management. However, their first job is within their discipline, and each also has blueberry crop responsibilities. Rutgers has not had a dedicated agronomist or crop physiologist 'to care for the crop' since the retirement of Phil Marucci. The program needs collaboration from a scientist focused on the crop and the environmental factors affecting its performance.

In addition to salary, the New Jersey Agricultural Experiment Station at Rutgers is supporting the position for five years with a full-time senior field researcher to assist Saratha. Rutgers Cooperative Extension is providing field and laboratory equipment like computers, data loggers, weather stations, plant dryer, and plant tissue grinder. Additionally, the Cranberry Research Council has approved a \$10,000 startup gift for specialized field research tools like a leaf area meter to measure cranberry crop growth differences.

Please welcome Saratha to Chatsworth. Come introduce yourself (and your production problem ideas!) during harvest at the grower supported New Building Dedication at the Center on October 15. □

Weekly Weather Summary

Keith Arnesen, Ph.D., Agricultural Meteorologist

Temperatures averaged much above normal. Extremes were 101 degrees at several locations on the 1st and 56 degrees at Charlotteburg on the 2nd. Weekly rainfall averaged 0.37 inches north, 0.00 inches central, and 0.05 inches south. The heaviest 24 hour total was 0.82 inches at Long Valley on the 28th to the 29th. Estimated soil moisture, in percent of field capacity, this past week averaged 58 percent north, 44 percent central and 30 percent south. Four inch soil temperatures averaged 79 degrees north, 76 degrees central and 80 degrees south.

Weather Summary for the Week Ending 8 am Monday 8/ 2/99

WEATHER STATIONS	RAINFALL			TEMPERATURE				GDD BASE50		MON
	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	%FC
BELVIDERE BRIDGE	.70	11.58	-8.30	98	63	81.	8	1901	300	55
CANOE BROOK	.07	12.16	-8.81	99	63	82.	8	2134	539	52
CHARLOTTEBURG	.27	13.34	-7.79	97	56	77.	5	1605	371	47
FLEMINGTON	.00	9.42	-10.89	101	63	82.	8	1973	332	54
LONG VALLEY	.82	11.36	-10.40	93	63	78.	6	1693	281	59
FREEHOLD	.00	11.66	-8.03	98	68	84.	9	1964	205	60
LONG BRANCH	.00	13.05	-6.54	97	68	80.	5	1912	231	30
NEW BRUNSWICK	.01	12.64	-7.04	100	66	83.	8	2073	226	60
PEMBERTON	.00	13.08	-6.68	101	64	83.	8	2144	345	17
TOMS RIVER	.00	6.80	-13.42	98	66	80.	6	1900	214	21
TRENTON	.00	13.09	-5.74	99	64	81.	5	1895	-28	24
CAPE MAY COURT HOUSE	.02	10.35	-7.06	94	71	82.	6	2032	236	21
DOWNSTOWN	.28	15.29	-3.11	96	69	82.	6	2071	136	36
HAMMONTON	.00	13.29	-6.15	98	68	83.	7	2075	167	16
POMONA	.00	13.68	-3.86	98	67	83.	8	2024	244	26
SEABROOK	.00	15.95	-1.84	96	70	83.	7	2202	260	25
ATLANTIC CITY MARINA	.00	10.50	-6.30	96	65	82.	7	2055	363	17
WOODSTOWN	.00	15.33	-4.25	101	63	82.	NA	2198	NA	NA
WES KLINE — GDD BASE 40 PINEY HOLLOW										
Last Week 279 (Ending 7/26/99) This Week 296 (Ending 8/02/99)										

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