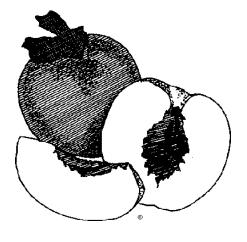
PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

August 27, 1996



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Fuzzless Peach Variety Update

Jerome L. Frecon, Gloucester County Agricultural Agent

here have been few "shining stars" surface as a result of nectarine evaluations to date in southern New Jersey. Growers have spent more money growing recommended varieties because of frost problems in the spring, wet weather, and poor drying conditions throughout the growing season. As mentioned in an earlier newsletter, some growers had difficulty with skin finish and cracking even on the best varieties. This was not true on every farm because of differences in the micro climate and orchard management. Nectarines, like fuzzy peaches, exhibit great differences between varieties. 1996 was a excellent year to separate the best from the worst varieties.

- ✓ Arctic Glo was the prettiest nectarine evaluated this year. Ripening with June Glo, this white fleshed variety has exceptional color, firmness, and good size because of ample soil moisture. The flesh actually had quite a bit of red, but the skin had exceptional finish.
- ✓ Eastern Glo was also outstanding in every way in 1996. Size was the best ever, however, I think part of the problem with sizing Eastern Glo is that we pick it too early. It hangs on the tree so well that many fruit of this yellow-fleshed variety were harvested well into Redhaven season.

One grower did have a problem with skin finish described by Dr. Belding in a previous newsletter. **June Glo** is grown by some growers in **Eastern Glo** season, but the variety just doesn't handle as well and is significantly more susceptible to brown rot.

- ✓ Summer Beaut is still the best variety in Redhaven season. However, after many years of evaluating this variety, I am now finally convinced this variety is partially self unfruitful. Nectarines are always tested in blocks with many varieties that provide ample cross pollination. Where solid blocks of Summer Beaut are planted, fruit set is sometimes poor. This year with the very quick bloom, Summer Beaut again had poor fruit set, many aborted fruit, and small mummies. This can be averted by making sure Summer Beaut gets adequate cross pollination.
- ✓ Sunglo, Flavortop, Redgold and Fantasia are still the best following Summer Beaut. We did have some skin finish problems and cracking on all these varieties, but far less than many of the others tested. Fantasia is still the best all around variety we grow, however, Eastern Glo is close. Fantasia probably has consistently better size.

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Some growers have grown **Royal Giant** which is very unacceptable in southern New Jersey. I have made three plantings of this variety and have yet to see a harvest without severe brown rot, cracking, and bacterial spot. It also is not a "giant" and is clingstone. I like the variety **Sparkling Red**, ripening between Fantasia and Royal Giant. Unfortunately, before we can recommend it we must learn how to get better fruit size if that is possible.

All of these varieties, except Arctic Glo, have yellow flesh and all are susceptible to bacterial spot. I'm not going to talk about a lot of older varieties we've tested, because most are inferior to the varieties mentioned.

What are some new things that have some promise? We have very few shining stars. **Mid Glo**, a yellow fleshed variety in Redgold season, has very good color and size, but is clingstone. It stood out because it had few skin blemishes and no cracks. **NJ-92-156**, another yellow-fleshed clingstone variety in Redgold season, is not quite as large as Midglo but has bacterial spot resistance. **Harblaze**, ripening with Eastern Glo, is a beautiful nectarine but not as firm. It, however, is resistant to bacterial spot. **Rose Princess**, a white fleshed variety ripening with Arctic Glo, is very pretty with good but somewhat variable size. It also had a few more split pits than Arctic Glo.

I always said one of the main advantages of local testing is to weed out the undesirable varieties that have been named and offered for sale. The following, relatively new varieties, have not done well in 1996 with either too much cracking, other skin blemishes, bacterial spot, or brown rot. They are: Karlarose, Snowqueen, Crimson Snow, Earliscarlet, Durbin, Encore, Zee Grand, Supreme Red, Flaming Red, Summergrand, Arctic Rose, Arctic Queen, and Red Diamond. Varieties like Earlibird and Tastyfre are good varieties but too small. Many other varieties are under test but either have not been named or not fruited yet.

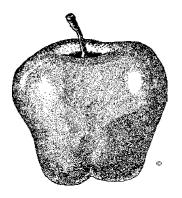
Today $\frac{1}{2}$ bushel boxes of nectarines are selling on the farm for \$13 - \$14 for 2 $\frac{1}{2}$ inch fruit and \$9 - \$10 for 2 $\frac{1}{4}$ to 2 $\frac{1}{2}$ inch fruit. This averages out to .54 cents per pound for 2 $\frac{1}{2}$ inch fruit and .38 cents per pound.

A New Tool for Mites on Apple

Peter W. Shearer, Ph.D., Tree Fruit Entomology

The US EPA has recently granted a Section 18 Emergency Exemption label for the use of Pyramite (pyridaben) to control European red mite and twospotted spidermite on apple in certain New Jersey counties. The Section 18 label use of this material is limited to Burlington, Hunterdon, Morris, Somerset, Warren, Burlington, Mercer, Middlesex, Monmouth, Atlantic, Camden, Cumberland, and Gloucester counties.

Pyramite is a relatively new miticide being distributed by BASF. Research conducted in New Jersey and elsewhere has demonstrated that Pyramite is very active against plant feeding mites at different temperatures and spray volumes and controls mites for extended periods of time. Pyramite has a novel mode of action by inhibiting a part of the mitochondrial transport chain. Currently, this product is not cross-resistant to other miticides.



There are several key points for usage that are detailed on the Section 18 label and, of course, usage must be consistent with the label. These include, but are not limited to:

- ◆ Apply by ground air blast sprayers at a rate of 4.4

 6.6 ounces of product/acre for European red mite and 6.6 13.2 ounces of product/acre for twospotted spidermite.
- ◆ Do not use less than 100 gallons of water/acre.
- This product can be applied as a complete or alternate-middle spray.
- ◆ A preharvest interval of 25 days is required.

A complete copy of the Section 18 label for the use of Pyramite on apple in New Jersey can be obtained from the Rutgers FaxInfoLine. Call (908) 922-6767 and order document No. 3017.□

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Weather Summary for the Week Ending 8am Monday 8/26/96

Keith Arnesen, Agricultural Meteorologist

Temperatures averaged above normal. Extremes were 93 degrees at Freehold on the 24th and 55 degrees at Newton on the 26th. Weekly rainfall averaged 0.47 inches north, 0.57 inches central, and 0.28 inches south. The heaviest 24 hour total was 1.00 inches at Long Branch on the 23rd to 24th. Estimated soil moisture, in percent of field capacity, this past week averaged 71 percent north, 70 percent central and 60 percent south. Four inch soil temperatures averaged 71 degrees north, 70 degrees central and 73 degrees south.

The following table contains meteorological information since the start of the growing season March first. The table is updated each Monday and the following is an explanation for each column.

Week=total rainfall for the previous 7 days ending Monday morning Total=total rainfall since March 1st

Dep=departure from normal of rainfall since March 1st. A negative sign indicates below normal and no sign indicates above normal.

Mx=highest temperature for that 7 day period

Mn=lowest temperature for that 7 day period

Avg=average temperature for that 7 day period

Dep=departure from normal of the average temperature for that 7 day period

Total=total number of growing degree units since march 1st

Dep=departure from normal of growing degree units

%fc=percent of field capacity (soil moisture)

Fruit IPM

Dean Polk, IPM Agent - Fruit

Insect Trap Captures

Week Ending 8/23

<u>Tree Fruit - Southern Counties</u>				
RBLR	29.07			
STLM	612.40			
TABM-A	19.25			
CM	0.83			
AM	0.00			
OFM	9.78			
TABM-P11.95				
LPTB	43.63			
PTB	4.13			

Tree Fruit - Northern Counties RBLR 5.8 STLM 659.3

TABM-A 0.54
CM 1.7
AM 0.1
OFM 3.8
TABM-P0.8
LPTB 5.1
PTB 1.6

PTB

WEATHER SUMMARY FOR THE WEEK ENDING 8 AM MONDAY 8/26/96

	R A	I N F A	L L		TEMP	ERATU	RE	GDD	BASE50	MON
WEATHER STATIONS	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	%FC
BELVIDERE BRIDGE	.22	25.38	1.76	89	57	73.	5	2004	-97	62
CANOE BROOK	.56	27.32	2.55	93	60	76.	7	2362	248	73
CHARLOTTEBURG	.20	31.47	6.46	89	56	72.	6	2028	353	57
FLEMINGTON	.30	30.71	6.84	90	57	73.	3	2186	17	66
LONG VALLEY	.42	27.16	1.36	85	57	71.	4	1981	107	66
NEWTON	1.14	28.57	5.47	89	55	71.	4	1986	67	90
FREEHOLD	.88	24.63	1.36	93	59	76.	5	2218	-91	82
LONG BRANCH	1.00	23.14	41	88	63	73.	2	2210	-21	77
NEW BRUNSWICK	.12	30.33	6.86	91	62	74.	2	2307	-96	68
PEMBERTON	.47	31.95	8.10	92	60	75.	4	2582	227	63
TOMS RIVER	.02	26.84	2.76	92	57	74.	3	2237	24	44
TRENTON	.92	35.83	13.54	91	59	74.	2	2314	-194	70
CAPE MAY COURT HOUSE	.33	27.77	6.97	89	62	74.	1	2370	179	55
DOWNSTOWN	.33	24.53	2.53	91	60	75.	3	2489	-24	55
GLASSBORO	.00	29.69	6.74	89	64	75.	3	2578	87	53
HAMMONTON	.45	24.33	1.36	91	59	75.	3	2515	20	65
POMONA	.26	24.86	3.66	89	60	74.	3	2362	35	62
SEABROOK	.40	27.57	6.52	89	60	75.	3	2528	1	55
ATLANTIC CITY MARINA	.17	22.28	1.96	89	59	73.	1	2241	-17	45
WOODSTOWN	.00	26.72	4.01	91	57	75	NA	2636	NA	NA

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