



# NECTARINE VARIETIES –

## 50 YEARS OF EXPERIENCES IN THE EAST

*By*

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# WHY GROWERS PLANT NECTARINES



SOME CONSUMERS ARE ALLERGIC TO FUZZ ON CONVENTIONAL PEACH VARIETIES;

PRICES FREQUENTLY ARE HIGHER FOR QUALITY NECTARINES IN COMPARISON TO PEACHES;

SOME GROWERS FEEL THEY NEED NECTARINE VARIETIES TO ATTRACT BUYERS FOR THEIR PEACHES;

GROWERS AND RETAILERS FEEL THEY CAN GET MORE SHELF SPACE IN THE SUPERMARKET FOR PEACHES BY HAVING NECTARINES.

# PROBLEMS WITH GROWING NECTARINES

More expensive to grow and pack because you have a higher percentage of commercial grade, rejects, and unmarketable fruit;

Because of the lack of fuzz and the smooth skin fruit seem to be more sensitive to environmental factors, physical blemishes, pesticides and fertilizers, and pests like bacterial spot, and insects like thrips and Japanese beetles.



# COST STUDY COMPARING PEACHES TO NECTARINES BY CALIFORNIA COOPERATIVE EXTENSION IN 2009

	<b>Peaches – Fresh Market</b>	<b>Nectarines – Fresh Market</b>
Total Cultural costs	• \$3,483.00	• \$3,919.00
Total Harvest Costs	• \$8,301.00	• \$8,652.00
Total Operating Costs	• \$11,965.00	• \$12,778.00
Total Cost Including Overhead (Cash and Non Cash Overhead)	• \$13,746.00	• \$14,499.00
Gross Returns Per Acre for 1200 boxes	• \$12,000.00	• \$14,400.00



## PROBLEMS MARKETING AND CONSUMER ACCEPTANCE

Some buyers just don't like nectarines – bias;  
A perception that a nectarine is not a fuzzless peach but a different fruit type thus you can't do many of the things you can do with a peach;  
You get more commercial grade fruit which there is a very limited market;

There are not enough good varieties available to Eastern growers to have a complete season of varieties to parallel peaches; This has a profound effect on the handling and marketing of nectarines.

# COMMERCIAL NECTARINE VARIETIES I HAVE TESTED

Arctic Belle

- Arcticglo
- Arctic Gold
- Arctic Jay
- Arctic Sweet
- Arctic Pride
- Arctic Queen
- Arctic Show
- **Burchell A300**
- **Burchell D2.093**
- **Burchell A38.039 –**
- **Burchell B16.091**
- **Cavalier**
- **Cherokee**
- **Crimson Gold**
- **Crimson Snow**
- **Crystal Red**
- **Crystal Rose**
- **Stark Delicious**
- **Diamond Ray**
- **Durbin**
- **Earliblaze**
- **Earlibird**
- **Early SunGrande**
- **EarliScarlet**
- Easternglo
- Stark Earliflame

- Stark Encore
- Fairlawn
- Firebright
- Flameglo
- Flamekist
- Flaming Gold
- Flaming Red
- FlavorTop
- Fantasia
- Sutark Gulfpride
- Grand Sun
- Harblaze
- Hardired
- Harflame
- Harko
- Heavenly White
- Stark Honeyglo
- Honeykist
- Independence
- Jolly Red Giant
- Juneglo
- June Princess
- KarlaRose
- Lafayette

- Lexington
- Late Gold
- Lateglo
- LeGrande
- LateLeGrande
- Mayfire
- Mayglo
- MayGrand
- Mericrest
- MidGlo
- MoonGrand
- Morton
- Nectared 1-9
- Nustar
- Pochontas
- Redbud
- RedCheif
- Redgold
- RedJune
- Red Delight
- Red Diamond
- Rose Princess
- Royal Giant
- RubyGrand
- Scarlet Red
- Scarlet Sun
- September Red

- Snowflame
- Snowqueen
- Sparkling Red
- Sparkling June
- Stark Ovation
- Summer Beaut
- Summer Fire
- SummerGrand
- Supreme Red
- Sunglo
- Sun Grande
- Stark Sweet Melody
- SunGrande
- tastyfree
- Tastygold
- Tiger
- Topaze
- USDA BY 78N993 –**
- Zeegrand
- Zeeglo



Does not include non commercial varieties from private and public breeders and nurseries



# STANDARD NECTARINE VARIETIES

**Arcticglo**  
**Arctic Sweet**  
**Emeraude**  
**Arctic Jay**  
**Arctic Gold**  
**Arctic Belle**  
**Arctic Pride**



**Mayfire**  
**Easternglo**  
**Honeykist**  
**Harblaze**  
**Harflame**  
**SummerBeaut**  
**Sunglo**  
**Flavortop**  
**Redgold**  
**Fantasia**





## ARCTIC STAR

Ripens 14-18 days before Redhaven;

Developed by Zaiger Genetics, Modesto, California;

White-fleshed, firm melting clingstone;

Large size exceptional for this season

Generally clean skin but rut can occasionally be blemished and crack;

Very good, sweet sub acid flavor;

Moderately productive and medium susceptibility to bacterial spot.







## JADE™

Ripens approximately 14 to 18 days before Redhaven peach and 5 days before Easternglo;

Developed by R. Monteux-Caillet and INRA Mediterranean Fruit Research Station of Avignon ,France;

White-fleshed, melting, firm, semi clingstone, some red in flesh; Good flavor, sweet with normal acidity;

Medium fruit size, few blemishes on skin;

Low susceptibility to bacterial spot; Moderately productive tree.



## NECTAFEST™

Ripens 12-14 days before Redhaven near Easternnglo;

Developed by the USDA-ARS Fruit Breeding program in Kearneysville, West Virginia;

Yellow-fleshed, moderately firm clingstone;

Medium large fruit size; few skin blemishes

Excellent flavor, sweet normal acid melting flesh;

Upright but grower friendly productive tree;

No bacterial spot has been observed.



## AVALON™(NJ101)

Ripens 11 to 14 days before Redhaven;

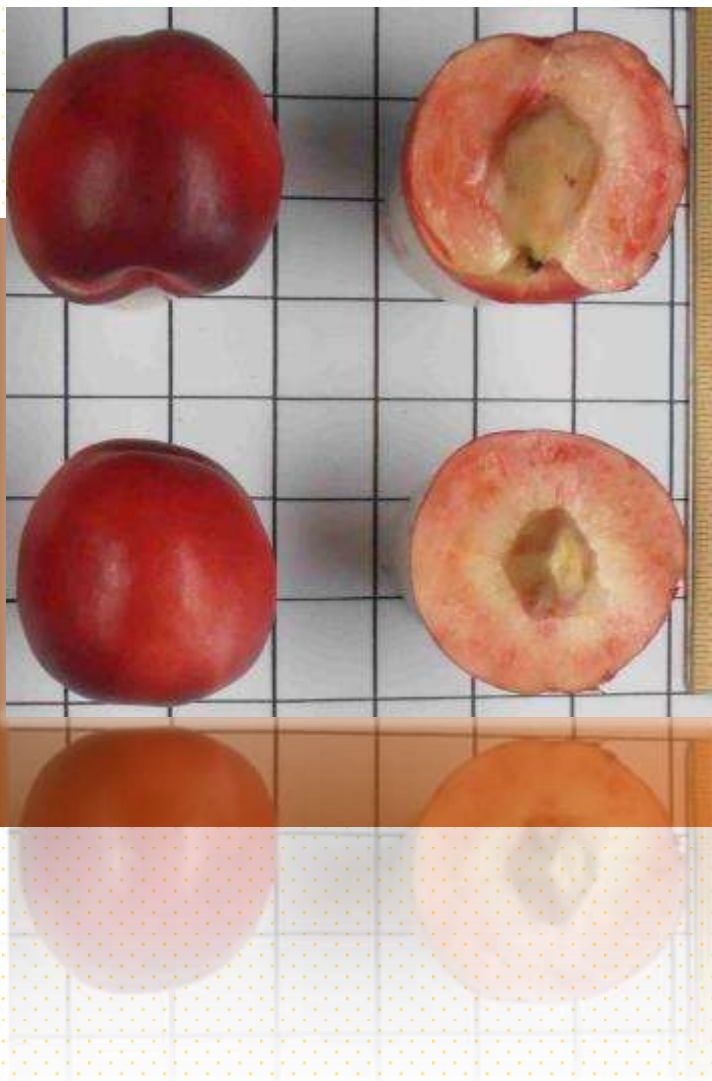
Developed by the Rutgers NJAES Fruit Breeding Program and Adams County Nursery;

Yellow-fleshed semi clingstone; firm, melting flesh;

Medium size, low blemish skin;

Excellent low acid sweet flavor,

Very productive with low susceptibility to bacterial spot;



## SILVERGEM™(NJ N100)

Ripens 10-14 days before Redhaven;

Developed by Rutgers NJAES Fruit Breeding Program and Adams County Nursery;

White to cream fleshed, moderately firm(2.4 inches in diameter average melting semi-clingstone

Medium sized but very good sweet flavor

TTA .55% TSS 11.1% SS/A ratio 20/1

Productive trees with low susceptibility to bacterial spot

# CARENE™

An early-season nectarine ripening 10-14 days before Redhaven just before Easternglo;

Developed by R. Monteux-Caillet and INRA Mediterranean Fruit Research Station of Avignon, France;

Yellow –fleshed, firm melting clingstone;

Flavor very good, sweet, normal acidity;

Medium fruit size, Some skin blemishes

Medium susceptibility to bacterial spot;

moderate productivity





# HONEY BLAZE

Ripens 8-11 day before Redhaven;

Developed by Zaiger Genetics, Modesto, California;

Yellow fleshed, very firm, clingstone;

Large sized, deep full red some skin blemishes

Excellent flavor, very sweet, low acid;

Moderately productive tree, with high susceptibility to bacterial spot;



# ARRINGTON

Ripens approximately 6 to 8 days before Redhaven;

Developed by the University of Arkansas Fruit Breeding Program;

Yellow-fleshed, firm, non-melting fleshed clingstone;

Excellent flavor, sweet, slightly sub acid;

A vigorous, moderately productive tree with low susceptibility to bacterial spot.



## BRADLEY

Ripens a few days before Redhaven;

Developed by the University of Arkansas Fruit Breeding Program;

Yellow-fleshed, firm, nonmelting fleshed clingstone;

Very good flavor, sweet., normal acidity;

Fruit is medium large size, finish has been relatively blemish free;

Tree is moderately productive, with low susceptibility to bacterial spot.





## FLAMIN FURY® PF 11 NECTARINE

Ripens slightly ahead of Redhaven;

Developed by Paul Friday Breeding program,  
Michigan;

Yellow-fleshed moderately firm- fleshed semi  
freestone;

Large uniform size, skin blemishes but  
attractive color;

Very good flavor, sweet with normal acidity;

Regularly productive, moderate susceptibility to  
bacterial spot.



## HONEY ROYALE

Ripens 28-32 days after Redhaven just after Fantasia;

Developed by Zaiger Genetics, Modesto, California;

Yellow- fleshed freestone, very firm melting flesh, Excellent subacid sweet flavor;

Large to Very large fruit size;

High susceptibility to bacterial spot;

Moderately productive low vigor tree.



# ZEPHYR™

Ripens 26-30 days after Redhaven;

Developed by R. Monteux-Caillet and INRA  
Mediterranean Fruit Research Station of  
Avignon, France;

Cream white-fleshed freestone, firm melting;

Large to very large fruit, skin blemished with  
variable color depending on late season  
temperatures;

Excellent flavor, aromatic, sweet with normal  
acidity;

Productive, medium susceptibility to bacterial



## AMBRE™

Ripens 34-38 days after Redhaven. One of few late season nectarines;

Developed by R. Monteux-Caillet and INRA Mediterranean Fruit Research Station of Avignon, France;

Yellow –fleshed freestone; firm, melting;

Large fruit size, skin blemishes;

Very good flavor, sweet, normal acidity;

High susceptibility to bacterial spot, moderate productivity.



# Rutgers NJAES Fruit Breeding Program

Under the direction of Dr Joe Goffreda ,Associate Professor, Director of the Rutgers Fruit and Ornamentals, Research and Extension, Center Cream Ridge, New Jersey

Head evaluator and selector for the past 50 years was Senior Research Technician Anna Voordeckers;

The Rutgers program was started in 1908 and been running continuously for 108 years;

Today has an exclusive marketing arrangement with Adams County Nursery.



# NJH Early Season Yellow fleshed

Ripens July 20-25 with Summer Beaut;

Yellow-fleshed semi freestone with firm melting flesh;

Flavor is very good, seet with normal acidity, TTA = 1.47%, TSS=11.85% S/A = 8/1

Fruit size = 1.6", 160 grams, Skin clean no blemishes

Tree is very productivity with low susceptibility to bacterial spot

Interesting because excellent productivity and low bacterial spot going through patent process



## NJ K early season white

Ripens July 22-27 in southern New Jersey

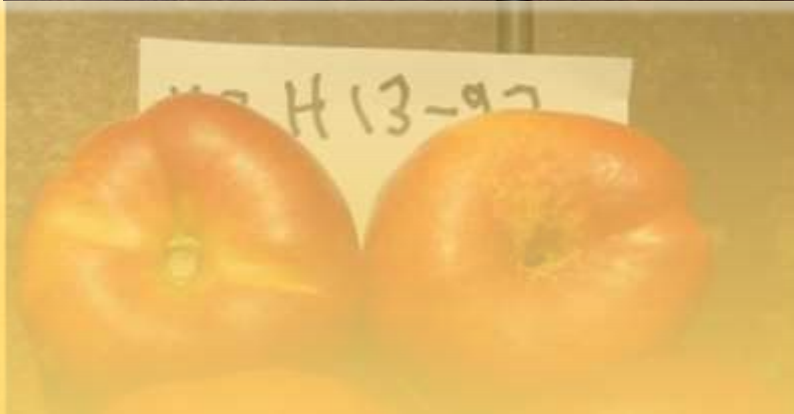
Cream-fleshed semi-freestone; firm melting flesh;

Fruit size is large 2.8 " 207 grams; skin is attractive, lots of pinkish red color, low skin blemishes;

Flavor is very good, sweet somewhat aromatic with normal acidity: TTA = 1.46%. TSS = 11.1% S/A = 7.6/1:

Trees are moderately vigorous, productive. Low susceptibility to bacterial spot.

Variety is going through the patent process.



## NJ H very early flat nectarine

Ripens June 28-July 2 in southern NJ;  
Yellow-fleshed clingstone flat nectarine;  
Firm melting flesh; Low acid sweet flavor;  
Good overall quality;  
Mostly 2 ½ inch in diameter; small scar but some  
some cracking;

Trees are small but vigorous, only have seen  
three years; No bacterial spot observed

May be introduced because it is the first flat  
nectarine with very good flavor.





## NJ H early nectarine

Ripens July 19-24 with Summer Beaut;

Yellow- fleshed semi-freestone firm melting flesh;

Flavor good, sweet, normal acidity, TTA= 1.14%, TSS=11.24%, S/A = 10/1;

Fruit size, medium large =2.7" or 172 grams; skin relatively blemish free

Medium susceptibility to bacterial spot;  
Productive.



## **NJ K very early white**

Ripens July 1 to July 4 in southern New Jersey;

Cream-fleshed semi-clingstone with moderately firm, melting flesh;

Medium size, very attractive and has been relatively blemish free;

Very good aromatic sweet normal acidity, flavor;

**Seen some bacterial spot in 3 years of evaluation;**

**Interesting because of its flavor, attractiveness and season of ripening**



## NJ H early season yellow

Ripens July 15-20 in southern New Jersey

Yellow-fleshed semi-freestone melting firm flesh;

Very good flavor; sweet. low acid,

Medium large; skin relatively blemish free;

Some bacterial spot and 2copper injury in one test site;

Very productive on young trees.



## NJ H early season white

Ripens July 18- July 21 in southern New Jersey;

White fleshed semi-freestone nectarine;

Firm cream melting firm flesh.

Large size, very attractive, low blemishes;

Flavor is good sweet mildly aromatic sub but not low acidity;

Never observed bacterial spot in 3 years;

Interesting because of size and attractiveness

## NJ H early midseason white

Ripens August 2- August 8, Hangs on tree well;

Cream fleshed, firm melting freestone;

Medium large size, clean no blemishes,  
attractive skin;

Flavor very good, sweet low acid;

Vigorous tree, no bacterial spot observed;

Interesting because it ripens with Arctic Jay  
which cracks, blemishes and get lots of  
bacterial spot



# NJ H early midseason yellow

Ripens August 3-7 in southern NJ with Sunglo;

Yellow-fleshed freestone, very firm, melting flesh;

Large size 2.9 inches, 224 grams; Attractive, few blemishes not quite as red as Sunglo;

Flavor, very good, sweet low acid flesh. TTA = .43%,  
TSS = 15.40%, S/A = 36 to 1;

Vigorous tree, productive, some bacterial spot and copper injury on young trees;

Interesting because of size, flavor and productivity in Sunglo season



## Acknowledgments:

Dr. Dan Ward Rutgers NJAES Extension Pomologist;

Dr .Hemant Gohil Rutgers NJAES Area Fruit Agent –  
GC;

New Jersey Peach Council Directors:

Circle M. Farms – Santo Maccherone;

Summit City Farms – Lew DeEugenio;

Sunny Slope Orchards – Ron Thomas;

Fralinger Farms – Bob Fralinger

Larchmont Farms – Charles Haines

Adams County Nursery – Phil Baugher, Jen Baugher, Tom Callahan, and Patti Keller;

