

**RUTGERS**

THE STATE UNIVERSITY  
OF NEW JERSEY

# **New Peach varieties and post-harvest fruit quality**

**Hemant Gohil\***

Agricultural Agent, Cooperative Extension of Gloucester County

**Dan Ward**

Rutgers/NJAES Extension Specialist – Pomology

*Support from:*

*New Jersey Agricultural Experiment Station, New Jersey Peach Promotion Council and  
New Jersey State Horticulture Society*



# Evelynn™ Peach (NJ357 Cv.)



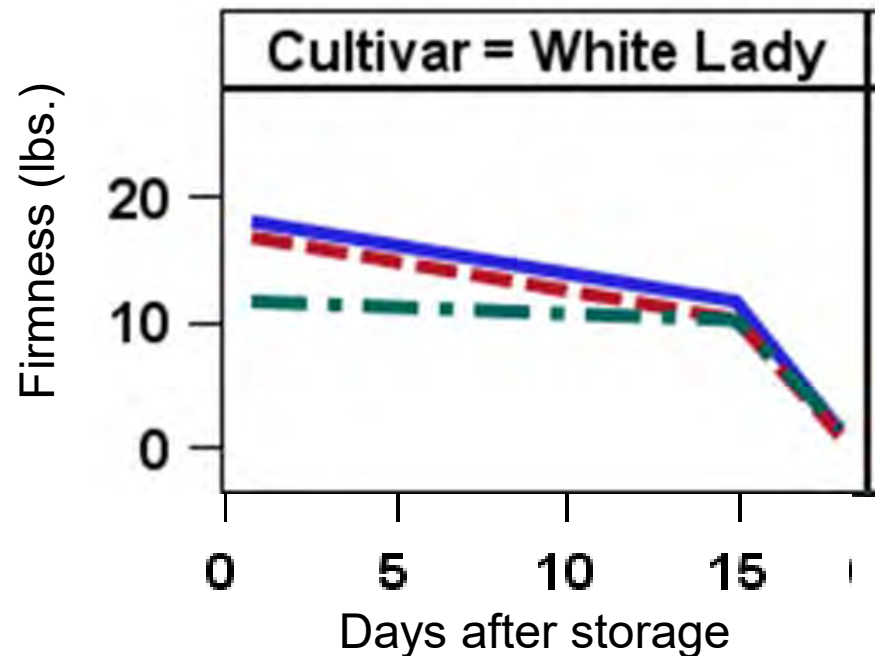
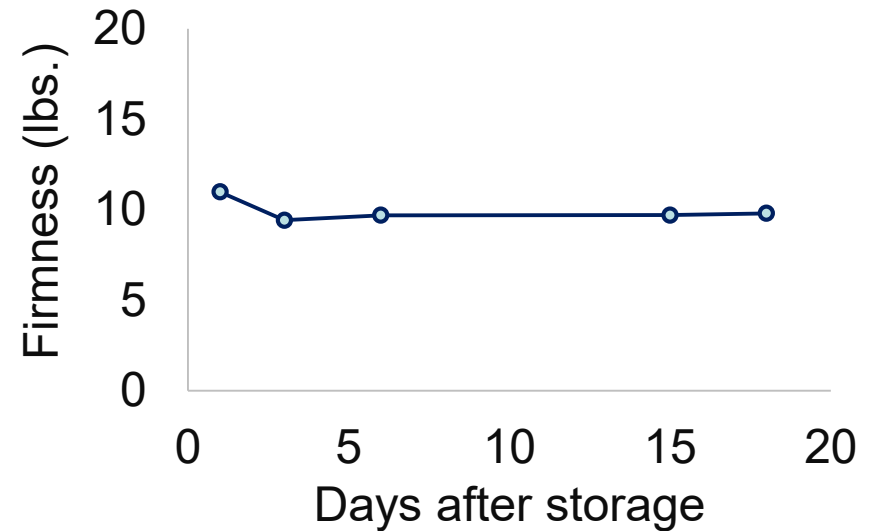
- Yellow fleshed peach with semi free stone and **firm flesh**.
- Very attractive full scarlet coloring.
- Smooth low pubescence.
- Retains firmness on tree.
- Always productive.
- Low susceptibility of bacterial spot.

	Yellow Peach	White Peach
JULY	Rich May	Spring Snow
	Desiree	Sugar May
	PF 5D B	Manon
	Early Star	Scarlet Pearl
	Sentry	Snowbrite
	Garnet Beauty	Arctic Sweet
	Summer Serenade	
	Glen Glo	
	Gala	
	Flamin Fury PF 15A	
AUG	Reliance	White Lady
	<b>Evelynn</b>	Snow Beauty
	<u>Red haven</u>	Klondike
	PF 9A-007	Caroline Belle
	Blazing Star	Sugar Giant
	Flamin Fury PF 13	Opale
	John Boy	Benedict
	Starfire	Blushing Star
	John Boy II	August Rose
	Earnie's Choice	Lady Nancy
	PF 17	
	Crimson Rocket	
	Glohaven	
	Bounty	

# Evelynn™ Peach

firmness	10.35 lbs.
diameter	<b>2.87 in.</b>
mass	7.3 oz. (205 g)
total titratable acidity	0.76 g/l
total soluble solids	10.23 °Brix

\*3 year average



## **Experimental procedure:**

- Samples of commercially mature fruit from Fralinger, Circle M, Larchmont and Summit city, farms.
- Harvested sample was immediately divided into groups of 20 fruits each.
- Transferred to the conventional cold storage (32°F, 95% RH).
- Held in cold Storage for up to 20 days.

## Selena™ Peach (NJ358 Cv.)



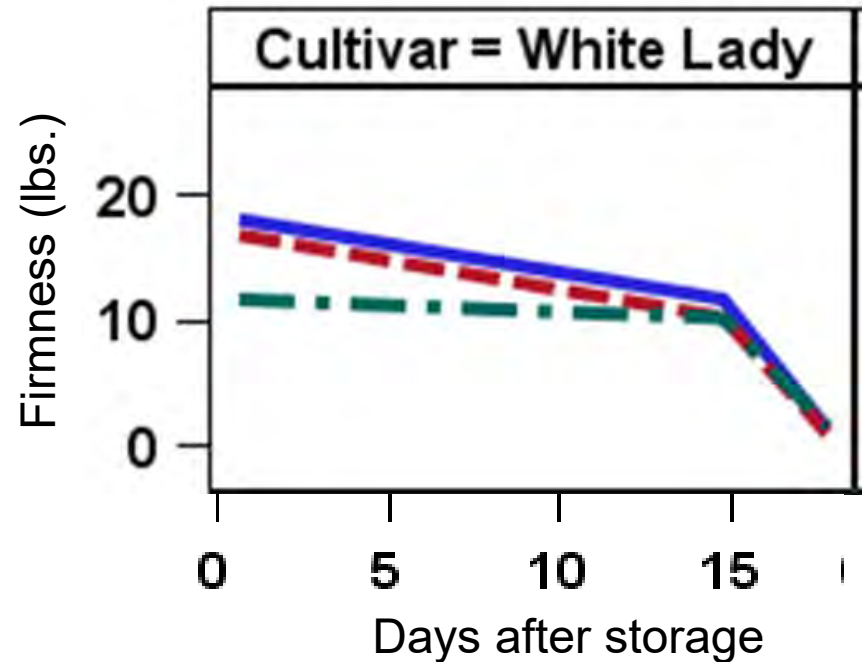
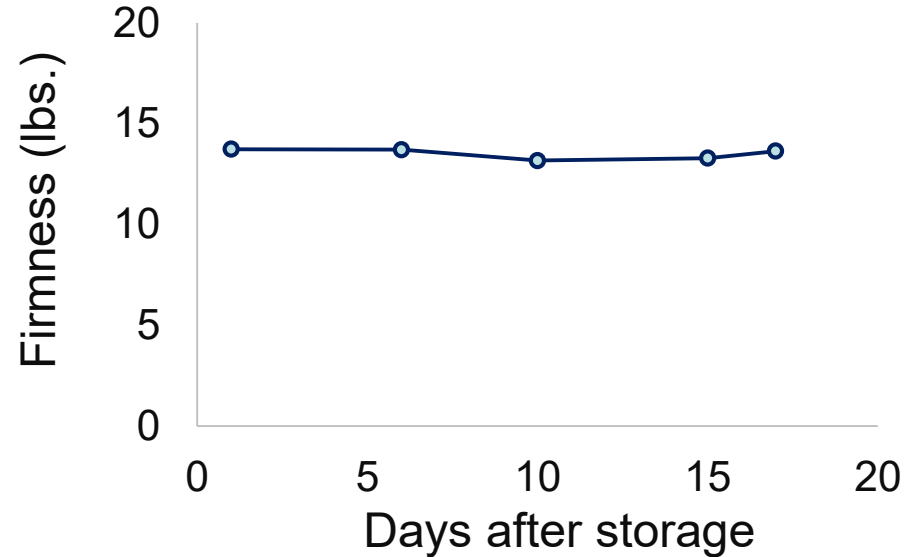
- Late season yellow peach with excellent firmness.
- Very large fruited with attractive 50-80% red-on- yellow background.
- Hangs well on tree unlike most late season
- Low susceptibility to bac spot and productive.

	Yellow Peach	White Peach
AUG	Earnie's Choice	Lady Nancy
	PF 17	
	Crimson Rocket	
	Glohaven	
	Bounty	
	Allstar	
	Flavor burst	
	Contender	
	PF 19-007	
	Loring	
	Flamin Fury PF 23	
	July Prince	
	Gloria	
	PF 24-007	
SEPT	Cresthaven	
	Messina	
	<b>Selena</b>	Snow Giant
	Summerfest	Yukon King
	PF 28-007	September Snow
	Encore	
	<b>Tiana</b>	
	Autumn Star	
	Lauro	
	Victoria	

# Selena™ Peach

firmness	9.85 lbs.
diameter	3.10 in.
mass	8.6 oz. (244 g )
total titratable acidity	1.67 g/l
total soluble solids	12.07 °Brix

\*3 year average



## Tiana™ Peach (NJ359 Cv. )



- Late season yellow peach with free stone and very firm flesh.
- Beautiful coloring and large sized.
- High mottled (50-75%) scarlet-on-yellow.
- Perfect balance of sweetness and acidity.
- Low susceptibility to bacterial spot.

	Yellow Peach	White Peach
AUG	Earnie's Choice	Lady Nancy
	PF 17	
	Crimson Rocket	
	Glohaven	
	Bounty	
	Allstar	
	Flavor burst	
	Contender	
	PF 19-007	
	Loring	
	Flamin Fury PF 23	
	July Prince	
	Gloria	
	PF 24-007	
	Cresthaven	
Messina		
SEPT	<b>Selena</b>	Snow Giant
	Summerfest	Yukon King
	PF 28-007	September Snow
	Encore	
	<b>Tiana</b>	
	Autumn Star	
	Lauro	
Victoria		

## Tiana™ Peach

firmness	11 lbs.
diameter	2.67 in.
mass	9.6 oz. (271 g)
total titratable acidity	5.71 g/l
total soluble solids	11.72 °Brix

\*3 year average



## Brigantine (NJN102 Cv.)



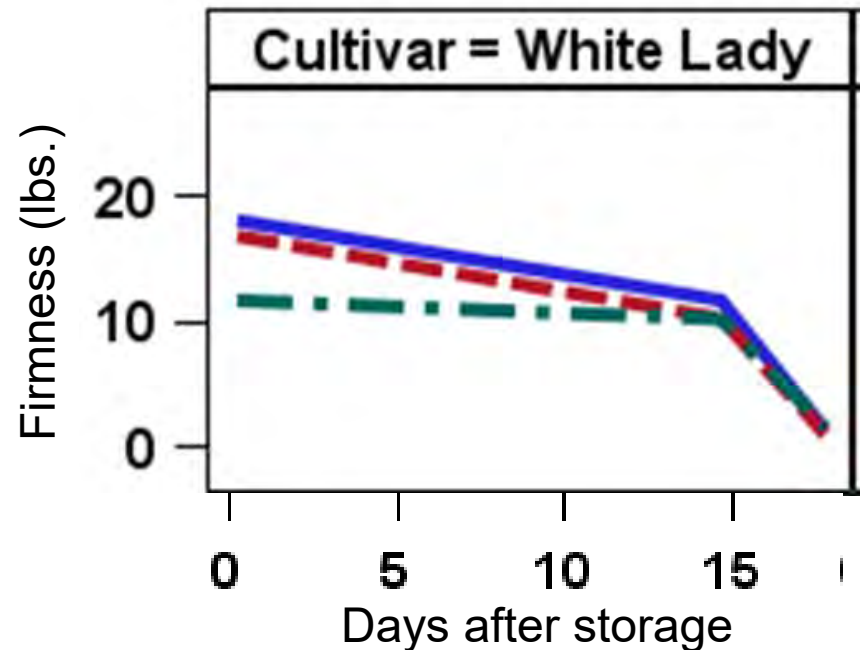
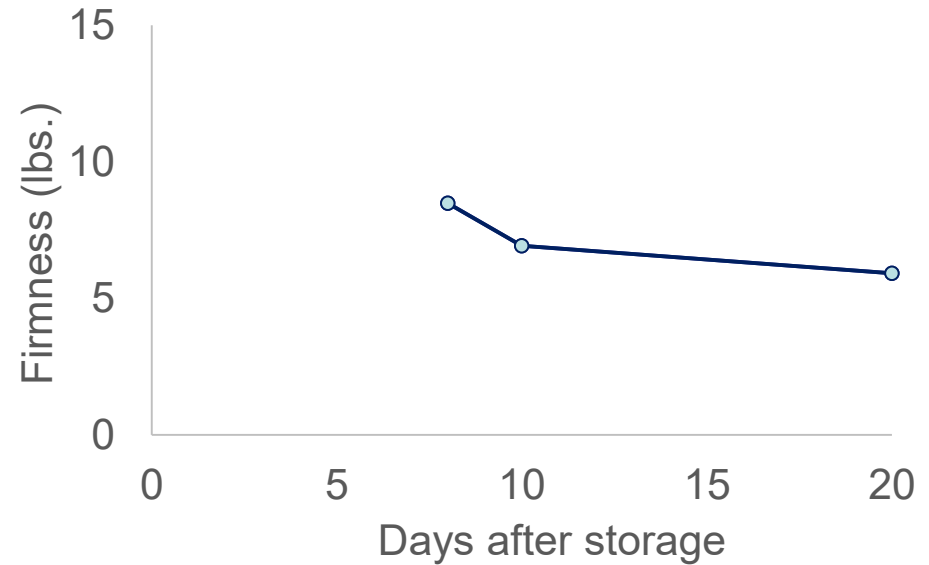
- Yellow fleshed nectarine with semi freestone and melting flesh.
- Solid scarlet coloring and a nice acidic flavor.
- Skin clean to blemishes.
- Low susceptibility to bac. spot while fruit has moderate susceptibility to bac. spot.

	Yellow Nectarine	White Nectarine
JULY	Mayfire Eastern Glo Nectafest Avalon Honey Blaze <u>Brigantine</u>	Arctic Star Jade Silver Gem Arctic Sweet Arctic Glo
AUG	Summer Beaut Sunglo Flavortop Red Gold Fantasia	<u>Silverglo</u> Emeraude Arctic Jay Arctic Belle Honey Royale
SEPT	Ambre	Zephyr Arctic Pride

## Brigantine™ Nectarine

firmness	9.05 lbs.
diameter	2.60 in.
mass	6 oz. (172 g)
total titratable acidity	1.46 g/l
total soluble solids	10.05 °Brix

\*3 year average



## Silverglo (NJN103 Cv. )



- Cream fleshed nectarine, uniform sized
- Larger and more attractive than other white nectarines in this season.
- Lots of pinkish red color and very low skin blemishes.
- Tree moderately vigorous and low susceptibility of bacterial spot.

	Yellow Nectarine	White Nectarine
JULY	Mayfire Eastern Glo Nectafest Avalon Honey Blaze <u>Brigantine</u>	Arctic Star Jade Silver Gem Arctic Sweet Arctic Glo
AUG	Summer Beaut Sunglo Flavortop Red Gold Fantasia	<u>Silverglo</u> Emeraude Arctic Jay Arctic Belle Honey Royale
SEPT	Ambre	Zephyr Arctic Pride

## Silverglo™ (Nectarine)

firmness	10.05 lbs.
diameter	2.67 in.
mass	6.7 oz. (191 g)
total titratable acidity	7.36 g/l
total soluble solids	10.54 °Brix

\*3 year average firmness

NJ H 13-23 <sup>TM</sup> Flat Nectarine

- Early season (Late June) fruit
- Excellent color, flavor and firmness.
- Very Sweet (**14.4 - 19.3** brix)
- In some years – problems of open scars, cracks blemishes, split pits and other blemishes
- Great for retail and farm stand business

# Gloria® (NJ 351)



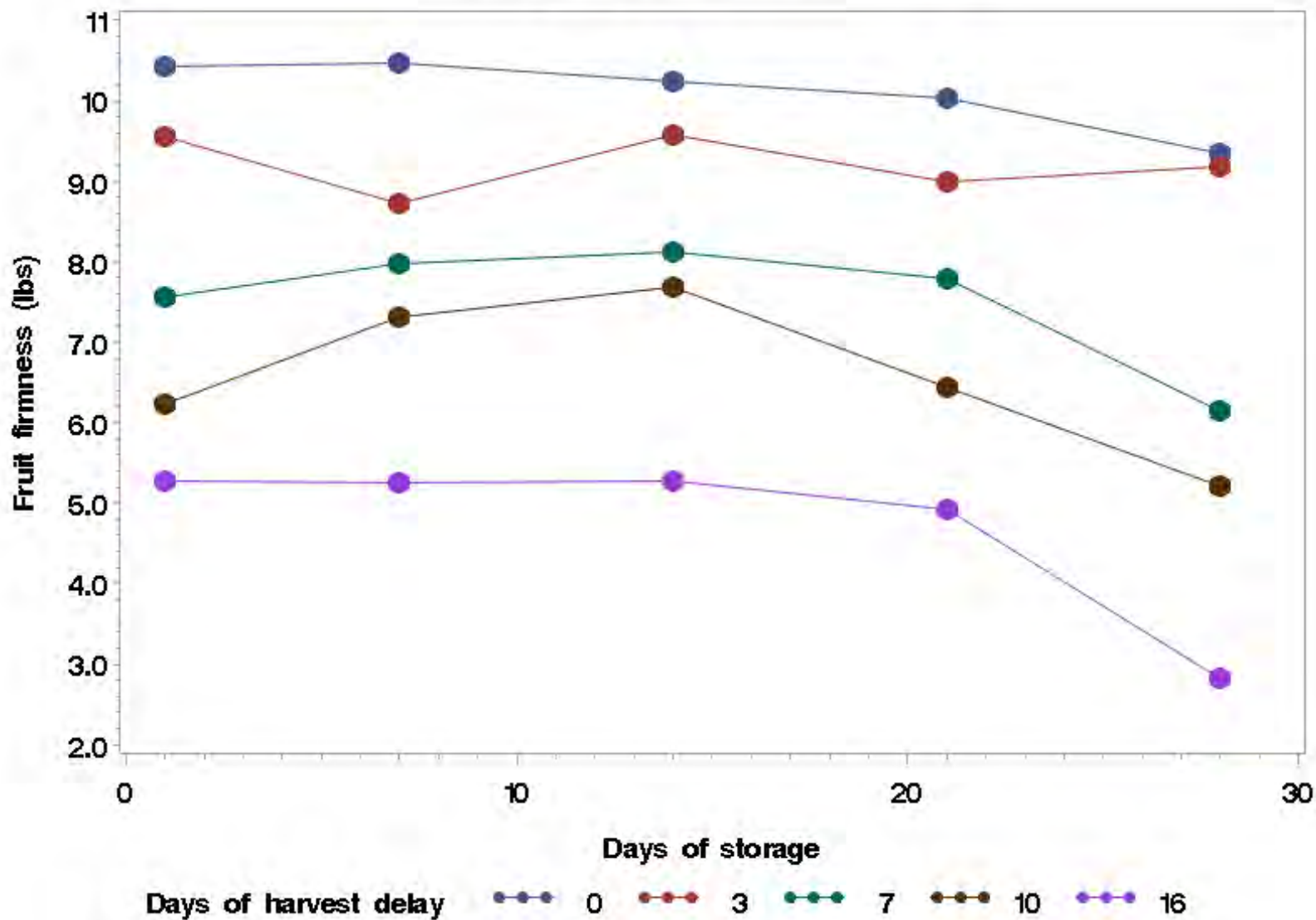
- Yellow fleshed 'neat' Peach
- Large sized and sub acid, sweet flavor
- High cropping
- Fruit hangs on tree for one week after maturity without significant loss of firmness.

## Yellow Peach

## White Peach

	Reliance	White Lady
	<b>Evelynn</b>	Snow Beauty
	<u>Red haven</u>	Klondike
	PF 9A-007	Caroline Belle
	Blazing Star	Sugar Giant
	Flamin Fury PF 13	Opale
	John Boy	Benedict
	Starfire	Blushing Star
	John Boy II	August Rose
	Earnie's Choice	Lady Nancy
	PF 17	
AUG	Crimson Rocket	
	Glohaven	
	Bounty	
	Allstar	
	Flavor burst	
	Contender	
	PF 19-007	
	Loring	
	Flamin Fury PF 23	
	July Prince	
	<b>Gloria</b>	
	PF 24-007	
	Cresthaven	
	Messina	
	Selena	Snow Giant

## 2016 Gloria Fruit Firmness



## Letting 'Gloria' fruit hang longer:

- Lets fruit get sweeter
- Lets fruit get larger
- Loses some firmness
- Loses acidity

'Gloria' fruit often develops good color and size *before* it is ready to pick. Be Careful!

How can we market this "*neat*" peach



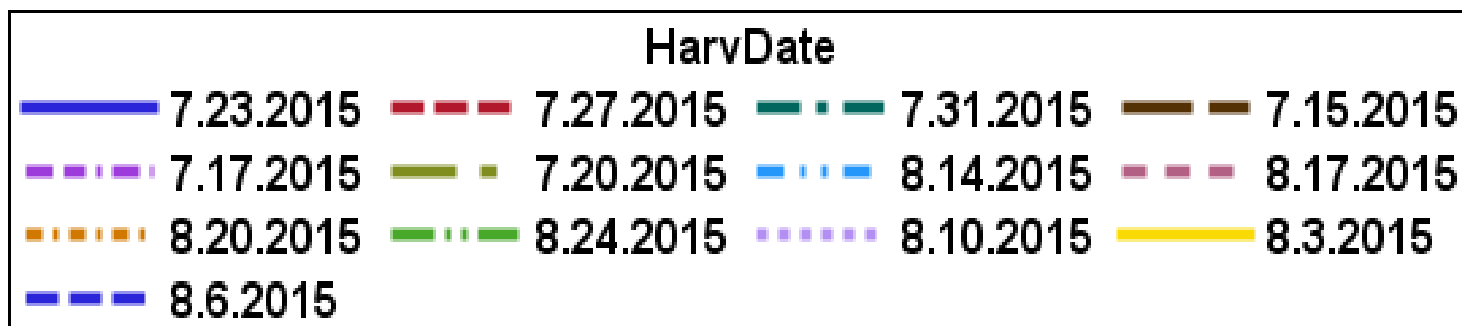
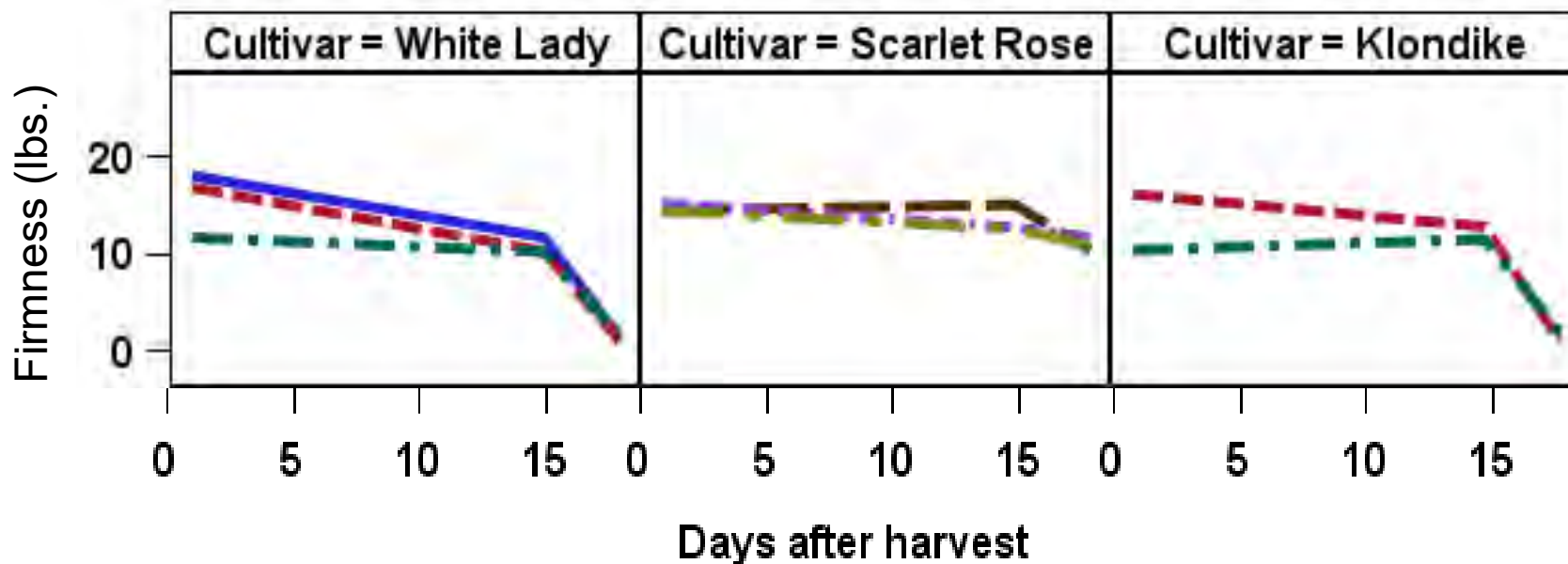
## Scarlet Rose®



- Cream-fleshed Clingstone peach with Stony-hard gene
- Excellent firmness and good eating qualities.
- The fruit will hang on the tree for two weeks after maturity without significant loss of firmness.
- Some susceptibility to bacterial leaf spot

	Yellow Peach	White Peach
JULY	Rich May	Spring Snow
	Desiree	Sugar May
	PF 5D B	Manon
	Early Star	Scarlet Pearl
	Sentry	Snowbrite
	Garnet Beauty	Arctic Sweet
	Summer Serenade	July Rose
	Glen Glo	<b>Scarlet Rose</b>
	Gala	
	Flamin Fury PF 15A	
AUG	Reliance	White Lady
	<b>Evelynn</b>	Snow Beauty
	<u>Red haven</u>	Klondike
	PF 9A-007	Caroline Belle
	Blazing Star	Sugar Giant
	Flamin Fury PF 13	Opale
	John Boy	Benedict
	Starfire	Blushing Star
	John Boy II	August Rose
	Earnie's Choice	Lady Nancy
	PF 17	
	Crimson Rocket	
	Glohaven	
	Bounty	

## Scarlet Rose - Changes in firmness during the cold storage



Firm flesh type peach cultivars soften more slowly than traditional melting-flesh cultivars in cold storage, and to a larger degree during room temperature shelf storage - **providing more flexibility to retailers and consumers.**

Cultivar	Fruit softening rate (lbs/day)	
	During 14d in cold storage	During shelf storage (room temp.)
<b>Bounty</b>	0.230	2.03
<b>Gloria</b>	0.074	2.62
<b>Klondike</b>	0.083	3.57
<b>Scarlet Rose</b>	0.088	0.80
<b>White Lady</b>	0.340	2.34

**Thanks To,**

Joseph Goffreda, Tree Fruit Breeder, Rutgers

Industry cooperators:

Fralinger Farms – Mr. Robert Fralinger,

Circle M Farms - Mr. Santo Maccherone

Larchmont Farms - Mr. Charles Haines and

Summit City Farms - Dr. Lewis DeEugenio

Our technical help:

Ms. Laura Zuzek

Ms. Angela Faustino

Mr. Jeff Hammerstedt

Jerry Frecon, Consultant Adams County Nursery



**Thanks**