

## Peach and Nectarine Variety Trial - 2018

Thank you to the following for their support of this work:

- Essex County Fruit Growers
- Apple Hill Farm
- Adams County Nursery
- New Hampshire Fruit Growers Association
- Renaë Moran, Peyton Ginakes, UMaine, Highmoor Farm
- George Hamilton, UNH Extension




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## Varieties Included Western block


Sugar May	Manon	July Rose	Scarlet Rose	White Lady	Silver Glo	Sugar Giant	August Rose	Desiree	PF 5D BFF	Glen Glo
West <span style="float: right;">East</span>										
Emeraude	Jade	Silver Gem	Nectafest	Avalon	Briantine	Buenos	Galaxy	Saturn	Tangos	Spring Snow
Southern row										



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## Varieties Included Eastern block

Conatlar	Selena	Messina	Gresthaven	PF 23 FF	Contender
West <span style="float: right;">East</span>					
PF 17 FF	John Boy	PF 9A 007	Redhaven	Evelynn	Starfire
Southern row					



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Determining Hardiness

- Observations in test winters
  - sporadic in occurrence
  - complicating factors
- Controlled freezing tests
  - rapid
  - specific to a point in time



The image shows a close-up of a tree branch that has been cut, revealing the internal wood structure. The wood appears to have some damage or decay, possibly related to the hardiness testing mentioned in the text.

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Artificial Freezing Tests

Collected/tested 5 shoots per temperature and variety in Feb. 2021 and 2022

Counted the number of living and dead buds  
Evaluated degree of browning in shoot tissues

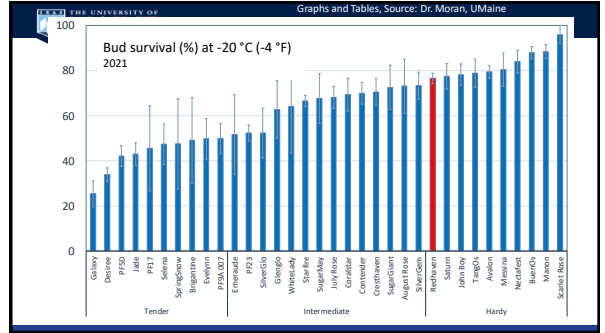
LT - lethal temperature for 50% tissue death estimated  
Means separation within a temperature

Extension

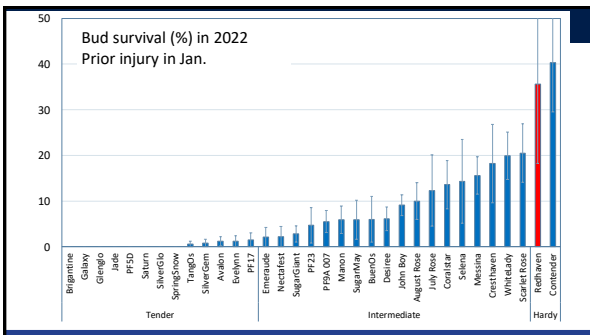
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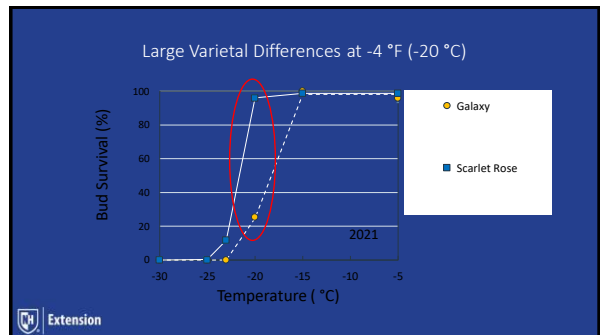
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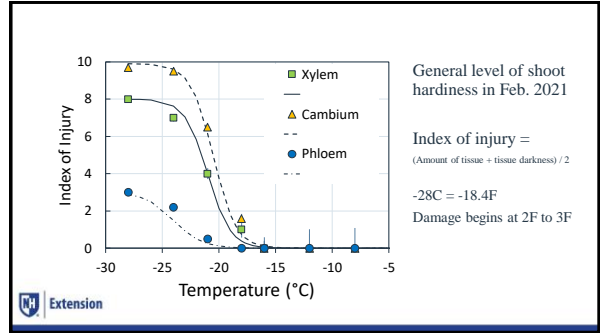


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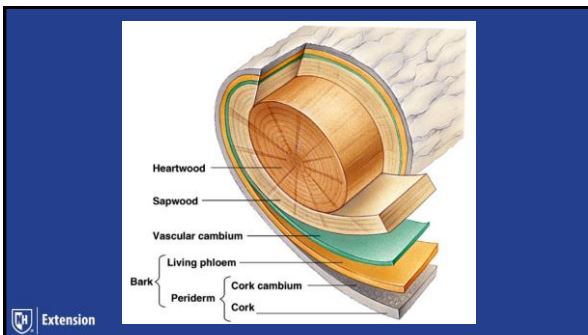
### Flower Bud Hardiness Rankings

Hardy	Inconsistently hardy	Intermediate	Inconsistently tender	Tender
Messina	August Rose	Coralstar	Desiree	Brigantine
Redhaven	Avalon	July Rose	Emeraude	Galaxy
Scarlet Rose	BuenOs	PF23	Evelynn	Jade
	Contender	Selena	Glenglo	PFSD
	Cresthaven	SilverGem	PF17	Silverglo
	John Boy	SugarGiant	PF9A-007	Spring Snow
	Manon	SugarMay		
	Nectafest	White Lady		
	Saturn			
	TangOs			

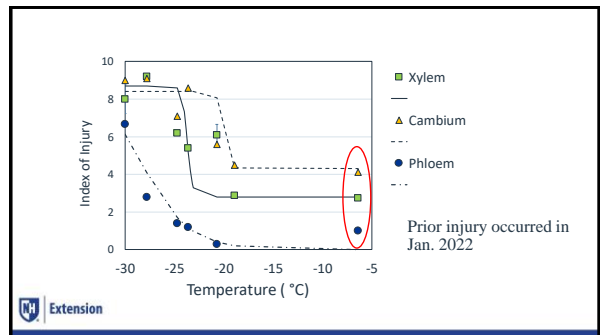
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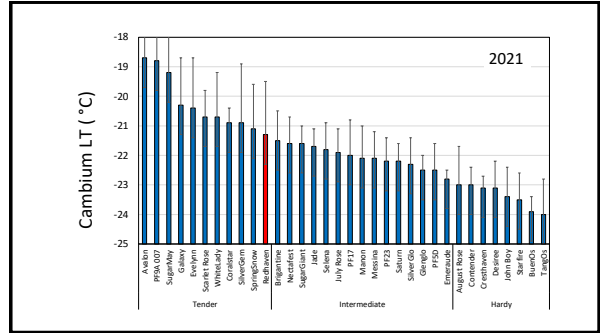


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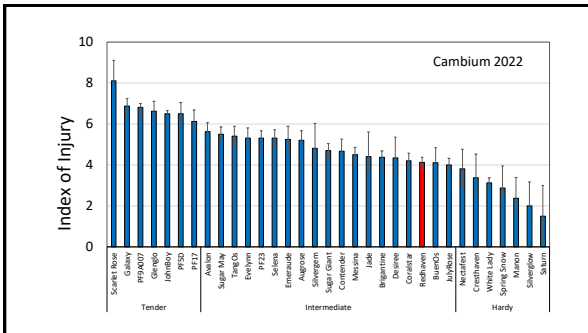
### Xylem Hardiness Rankings

Hardy	Inconsistently hardy	Intermediate	Inconsistently tender	Tender
BuenOs	Avalon	August Rose	Evelynn	Galaxy
Contender	Emeraude	Brigantine	Jade	Messina
Cresthaven	Glenglo	Coralstar	Nectafest	PF23
July Rose	John Boy	Sugar May	PFSD	Selena
PFSA007	Manon		Scarlet Rose	Spring Snow
Redhaven	PF17			
Saturn	Silverglo			
Sugar Giant	TangOs			
	White Lady			

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### Conclusions

- Bud hardiness ranged from -19.5 to -22.1 °C among 33 varieties, a narrow range.
- Messina, Redhaven and Scarlet Rose had consistent year-to-year bud hardiness.
- Xylem hardiness ranged from -20 to -25 °C (-4 to 13F) among 33 varieties.
- Good overall hardiness – Cresthaven, Contender, BuenOs
- Poor overall hardiness – Galaxy, PF50 and PF17

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### \*\*Redhaven - Peach Yellow 8/12

4/28 early pink, 5/8 FB, shuck split 5/26, good fruit set




Source: NCSU




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### \*\*Scarlet Rose™ - Peach White (8/13)

Flesh color: white  
 Size: 3"  
 Fuzz: light  
 Bac Spot: none  
 Red skin: 90%  
 Split pit: few  
 Attractiveness: good  
 Clingstone  
 Flesh Red: 85%  
 Firmness: 5  
 Sol solids: 11  
 Delicate sweet flavor, low acid



4/28 - 1/4" green, 5/5 pink, 5/12 FB, significant bud kill



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### \*\*Messina® - Peach Yellow (9/10)

Harvest (+17 days) Redhaven

Flesh color: yellow  
 Size: 3"  
 Fuzz: moderate  
 Bac Spot: slight  
 Red skin: 85%  
 Split pit: few  
 Attractiveness: fair  
 Freestone  
 Flesh Red:  
 Firmness: 4  
 Sol solids: 10

5/5 pink, 5/12 FB




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### \*BuenOs™ - Flat Peach (8/6)

Flesh color: yellow  
 Size: 2.5"  
 Fuzz: light  
 Bac Spot: none  
 Red skin: 50%  
 Split pit: few  
 Attractiveness: good  
 Semi freestone  
 Flesh Red: none  
 Firmness: 4  
 Sol solids: 10  
 Nice flavor, melting texture

Pink 4/21, FB 5/5




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### \*\*Contender- Peach Yellow 8/28



- Flesh color: yellow
- Size: 2.8"
- Fuzz: moderate
- Bac Spot: none
- Red skin: 85%
- Split pit: few
- Attractiveness: good
- Freestone
- Flesh Red: none
- Firmness: 3.5
- Sol solids: 11
- Nice flavor, ugly trees



4/28 swollen bud, 5/5 pink, 5/12 FB, 5S 5/26, good set



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### \*Manon™ - Peach White (7/31)



- Flesh color: white
- Size: 2.8"
- Fuzz: light
- Bac Spot: none
- Red skin: 95%
- Split pit: few
- Attractiveness: excellent
- Semi freestone
- Flesh Red: 25%+
- Firmness: 4
- Sol solids: 10
- Large, attractive, delicate flavor, pink-red flesh



4/21 Pink, 5/5 FB

Source: Rutgers University



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### \*Cresthaven - Peach Yellow (9/9)

Harvest (+24 days) Redhaven 5/5 pink, 5/12 FB, 5S 5/26






- Flesh color: yellow
- Size: 2.8"
- Fuzz: light
- Bac Spot: none
- Red skin: 50%
- Split pit: few
- Attractiveness: good
- Freestone
- Flesh Red: none
- Firmness: 2
- Sol solids: 11
- Excellent flavor, inconsistent sizing




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### Conclusions

Bud hardiness ranged from -19.5 to -22.1 °C among 33 varieties, a narrow range. Messina, Redhaven and Scarlet Rose had consistent year-to-year bud hardiness. Xylem hardiness ranged from -20 to -25 °C (-4 to 13F) among 33 varieties. Good overall hardiness – Cresthaven, Contender, BuenOs Poor overall hardiness – Galaxy, PF5D and PF17

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## Desiree® - Peach Yellow 7/26

4/28 early pink, 5/8 FB




Photo credit: Rutgers University

- Flesh color: yellow
- Size: 2.6"
- Fuzz: very
- Bac Spot: none
- Red skin: 90%
- Split pit: none
- Attractiveness: fair
- Semi freestone
- Flesh Red: none
- Firmness: 4
- Sol solids: 9


Picking tricky due to short stem held tight against branch.

 Extension


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## TangOs® - Flat Peach 8/8

4/28 Pink, 5/5 FB, light colored bloom, some bud kill, large showy flowers.





 Extension

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## John Boy® - Peach Yellow (8/18)

Harvest (+3 days) Redhaven 4/21 pink, 5/2 FB, nice spreading habit




Credit: Jim Travis, Apple Tree Vineyard

- Flesh color: yellow
- Size: 2.5"
- Fuzz: very
- Bac Spot: none
- Red skin: 70%
- Split pit: few
- Attractiveness: good
- Semi freestone
- Flesh Red: trace
- Firmness: 7
- Sol solids: 10

Excellent flavor and texture

 Extension

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## Coralstar® - Peach Yellow 8/22

4/28 swollen bud, 5/8 pink, 5/15 FB, good set, lots of doubles




- Flesh color: yellow
- Size: 3"+
- Fuzz: moderate
- Bac Spot: none
- Red skin: 50%
- Split pit: few
- Attractiveness: excellent
- Freestone
- Flesh Red: none
- Firmness: 2
- Sol solids: 9

Excellent flavor, firm flesh

 Extension

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### August Rose™ - Peach White (9/8)

4/28 pink, 5/5 FB

Flesh color: white  
 Size: 3.4"  
 Fuzz: light  
 Bac Spot: none  
 Red skin: 60%  
 Split pit: few  
 Attractiveness: good  
 Freestone  
 Flesh Red: none  
 Firmness: 7  
 Sol solids: 11  
 Largest peach in trial, late, good flavor, sweet




Extension

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### SilverGem® - Nectarine White (8/16)

4/21 Pink, 5/5 FB, lots of small wood, many fruiting shoots, good bud survival

\*Excellent color  
 \*Mild sub-acid flavor  
 \*Low susceptibility to bacterial spot






Photo credit - Rutgers University

Extension

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### Glenglo™ - Peach Yellow 7/30

Harvest (-13 days) Redhaven  
 4/28 pink, 5/5 FB, significant bud kill





Extension

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### Avalon™ - Nectarine Yellow (8/1)



4/21 Pink, 5/5 FB, large showy flowers, good fruit set




Extension


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### SilverGlo - Nectarine White 8/13



Flesh color: white  
 Size: 2.6"  
 Fuzz: none  
 Bac Spot: none  
 Red skin: 95%  
 Split pit: few  
 Attractiveness: excellent  
 Clingstone/semi free  
 Flesh Red: none  
 Firmness: 2  
 Sol solids: 12  
 Good flavor, slightly acidic

4/21 Pink, 5/5 FB, heavy bloom, light fruit set




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### Sugar May - Peach White (7/28)

Flesh color: white  
 Size: 2.9"  
 Fuzz: moderate  
 Bac Spot: none  
 Red skin: 100%  
 Split pit: none  
 Attractiveness: excellent  
 Freestone  
 Flesh Red: 25%+  
 Firmness: 6  
 Sol solids: 9  
 Nice flavor

4/21 Pink, 5/5 FB, large showy flowers



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### Spring Snow - Peach White (8/1)






Flesh color: white  
 Size: 2.6"  
 Fuzz: moderate  
 Bac Spot: none  
 Red skin: 100%  
 Split pit: none  
 Attractiveness: excellent  
 Freestone  
 Flesh Red: 25%+  
 Firmness: 6  
 Sol solids: 9  
 Nice flavor

4/28 Pink, 5/5 FB, light bloom




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### Nectafest™ - Nectarines Yellow (8/7)

4/28 Pink, 5/5 FB



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### PF 9A-007 Flamin' Fury® - Peach Yellow (8/10)

4/28 early pink, 5/8 FB  
Harvest (-2 days) Redhaven





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### Jade™ - Nectarine White 8/13

- Flesh color: white
- Size: 2.5"
- Fuzz: none
- Bac Spot: slight
- Red skin: 100%
- Split pit: few
- Attractiveness: excellent
- Clingstone
- Flesh Red: none
- Firmness: 2
- Sol solids: 11
- OK flavor, not great



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### Brigantine™ - Nectarine Yellow 8/15

4/21 Pink, 5/5 FB, good bud survival





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### Emeraude™ - Nectarines White 8/16




- Flesh color: white
- Size: 2.7"
- Fuzz: none
- Bac Spot: none
- Red skin: 90%
- Split pit: few
- Attractiveness: good
- Freestone
- Flesh Red: none
- Firmness: 8
- Sol solids: 10
- Limb breakage




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### (-)Galaxy - Flat Peach 8/17



4/28 Pink, 5/5 FB, significant bud damage, light bloom


Flesh color: white  
 Size: 3.5  
 Fuzz: vey  
 Bac Spot: none  
 Red skin: 75%  
 Split pit: few  
 Attractiveness: good  
 Freestone: semi  
 Flesh Red: none  
 Firmness: 8  
 Sol solids: 10  
 Nice mild flavor





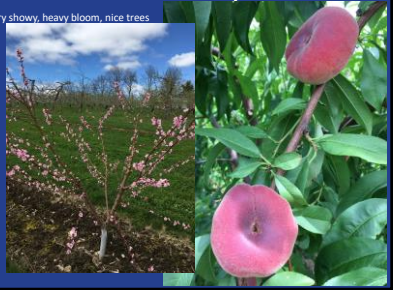
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### Saturn - Flat Peach 8/19



4/28 Pink, 5/5 FB, Light pink petals, very showy, heavy bloom, nice trees

Flesh color: white  
 Size: 3.5  
 Fuzz: vey  
 Bac Spot: none  
 Red skin: 75%  
 Split pit: few  
 Attractiveness: good  
 Freestone: semi  
 Flesh Red: none  
 Firmness: 8  
 Sol solids: 10  
 Nice mild flavor





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### White Lady - Peach White (8/26)



4/28 pink, 5/5 FB

Flesh color: white  
 Size: 2.8"  
 Fuzz: light  
 Bac Spot: none  
 Red skin: 90%  
 Split pit: few  
 Attractiveness: excellent  
 Freestone  
 Flesh Red: none  
 Firmness: 4  
 Sol solids: 9





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### Sugar Giant - Peach White (9/8)



4/28 pink, 5/5 FB, lighter bloom, some winter kill, decent fruit set

Flesh color: white  
 Size: 3.2"  
 Fuzz: light  
 Bac Spot: none  
 Red skin: 85%  
 Split pit: few  
 Attractiveness: good  
 Freestone  
 Flesh Red: none  
 Firmness: 4  
 Sol solids: 10  
 Flavor lacking, juicy, huge





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### (-)PF 5D Big Flamin' Fury® - Peach Yellow

9/06



Harvest (-25 days) Redhaven

4/28 swollen bud stage, 5/5 pink, 5/12 FB, significant bud kill



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### Evelynn™ - Peach Yellow

Harvest (0 days) Redhaven



- Flesh color:
- Size: \*
- Fuzz: moderate
- Bac Spot: none
- Red skin: %
- Split pit:
- Attractiveness:
- Freestone
- Flesh Red:
- Firmness:
- Sol solids:
- Nice flavor



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### Starfire® - Peach Yellow

Harvest (+3 days) Redhaven

4/28 pink, 5/5 FB, good fruit set




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### (-)PF 17 Flamin' Fury® - Peach Yellow

8/24

Harvest (+12 days) Redhaven



- Flesh color: yellow
- Size: 2.5"
- Fuzz: moderate
- Bac Spot: none
- Red skin: 85%
- Split pit: few
- Attractiveness: good
- Freestone
- Flesh Red: none
- Firmness: 3.5
- Sol solids: 12
- Good flavor, melting flesh



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### PF 23 Flamin' Fury® - Peach Yellow (9/7)

Harvest (+20 days) Redhaven 5/5 pink, 5/12 FB, good fruit set



- Flesh color: Yellow
- Size: 2.8"
- Fuzz: moderate
- Bac Spot: none
- Red skin: 60%
- Split pit: few
- Attractiveness: good
- Freestone
- Flesh Red: none
- Firmness: 5
- Sol solids: 11
- Nice flavor

 Extension

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### Selena™ - Peach Yellow (9/11)



- Flesh color: yellow
- Size: 3"
- Fuzz: light
- Bac Spot: none
- Red skin: 60%
- Split pit: few
- Attractiveness: fair
- Semi freestone
- Flesh Red: none
- Firmness: 3
- Sol solids: 11
- Smooth texture, good flavor

 Extension

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