



# Delayed Harvest and Extended Storage of Gloria Peaches

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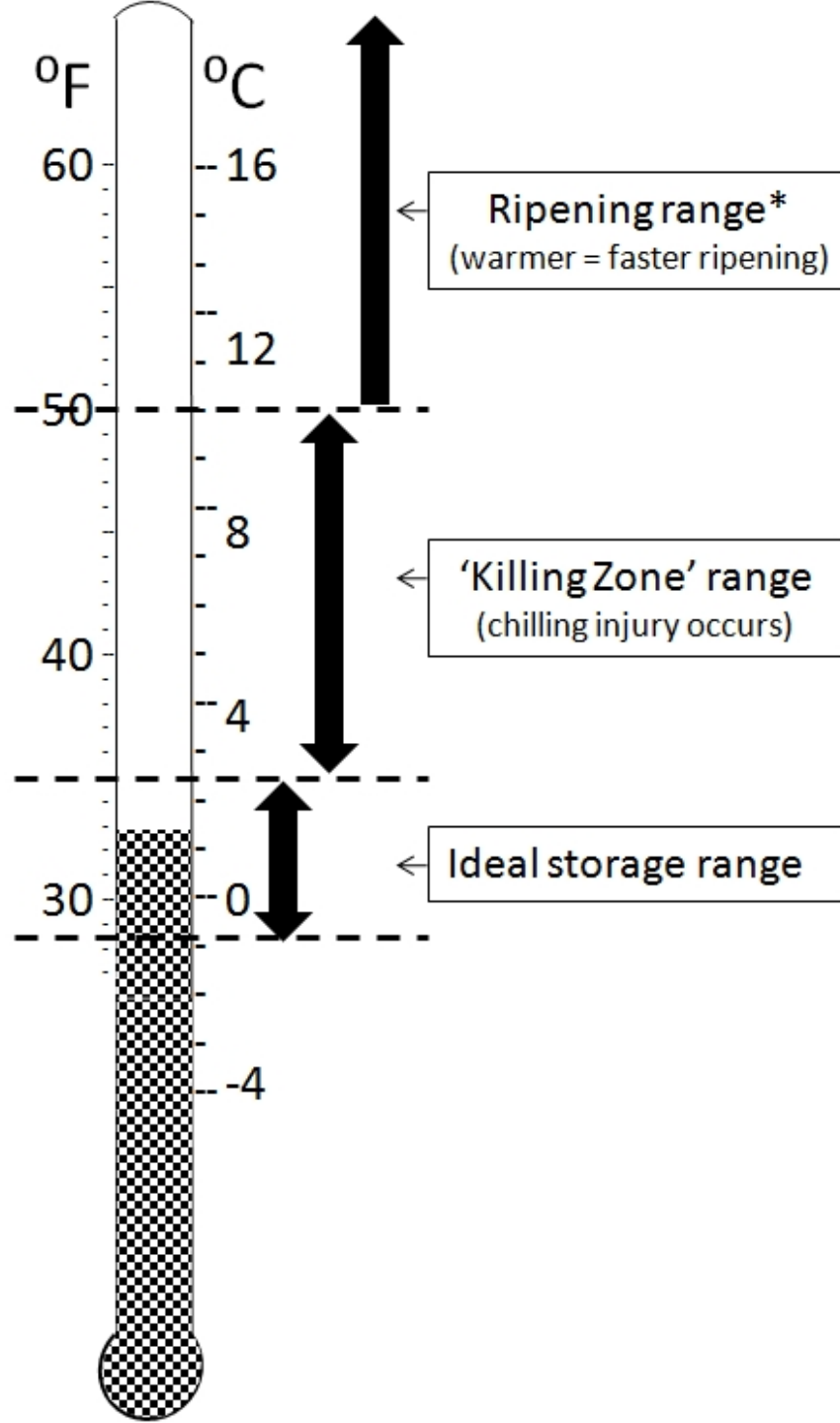
*Support from:*

*New Jersey Agricultural Experiment Station, and New Jersey Peach Promotion Council*



# Peach Harvest and Storage Considerations

- Peach fruit ripen quickly and non-uniformly on the tree.
- How ripe should you pick them, so that they can still withstand handling and storage?
  - Too ripe > bruising and deterioration
  - Too unripe > poor flavor, ^ mealiness development during storage
- The fruit lose quality quickly in storage.



# Types of peach/nectarine flesh texture

- **Non-Melting Flesh** – includes clingstone canning peaches. These fruit never melt. They often become rubbery as they age (e.g. 'Lovell'). Some freestones may also be non-melting.
- **Melting flesh** – Includes most fresh-market varieties. Flesh softens and bruises easily as they ripen
  1. **Traditional melting flesh** (e.g. 'Redhaven', 'Bounty', 'Raritan Rose')
  2. **Slow melting** (e.g. 'Big Top', 'White County', 'White Diamond')
  3. **Stony-Hard** – Now available. Fruit stays firm when ripe (e.g. '**Gloria**' perhaps 'White Rock', 'Scarlet Rose')

# Previously we saw that

## Letting 'Gloria' fruit hang longer:

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

# Gloria™ Peach

(NJ 351)

A large, yellow-fleshed, freestone, non-melting peach

Ripens August 19-22, late blooming.

From Rutgers/NJAES.

Very firm flesh with low acid and good sweet flavor.

A unique variety because of its very attractive color, low acidity and very firm flesh.







**'Gloria'**



Photo: J. Goffreda

## Days in Storage

Days Harvest Delayed

	<b>1</b>	<b>7</b>	<b>14</b>	<b>21</b>	<b>28</b>
<b>0</b>	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit
<b>3</b>	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit
<b>7</b>	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit
<b>10</b>	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit
<b>16</b>	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit	CircleM Summit







Samples of commercially mature fruit were obtained from Circle M and Summit City Farms from established, bearing trees.

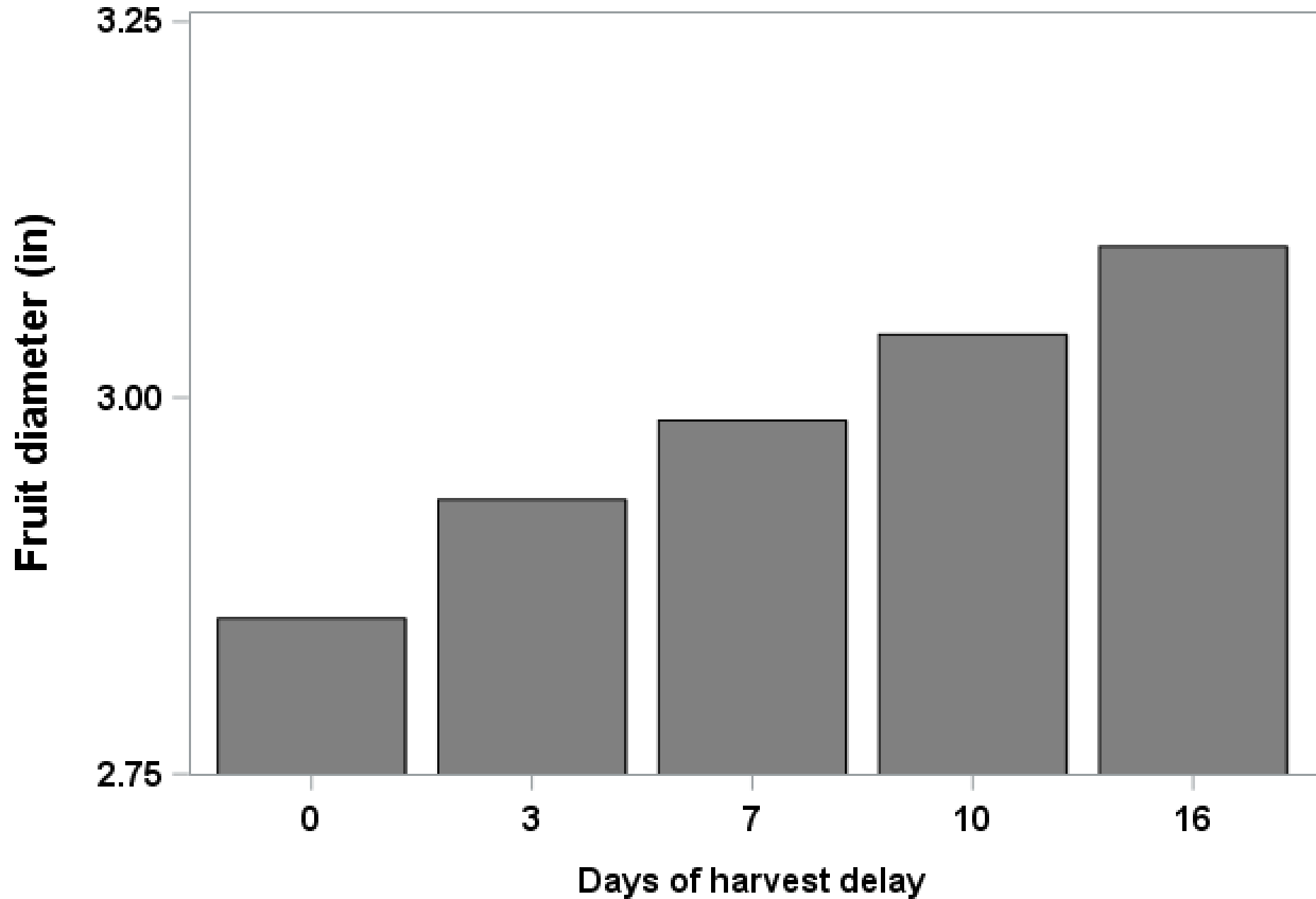
Harvest when: Mature (day 0) and after 3, 7, 10, 16 days.

All fruit and then stored overnight in conventional cold storage.

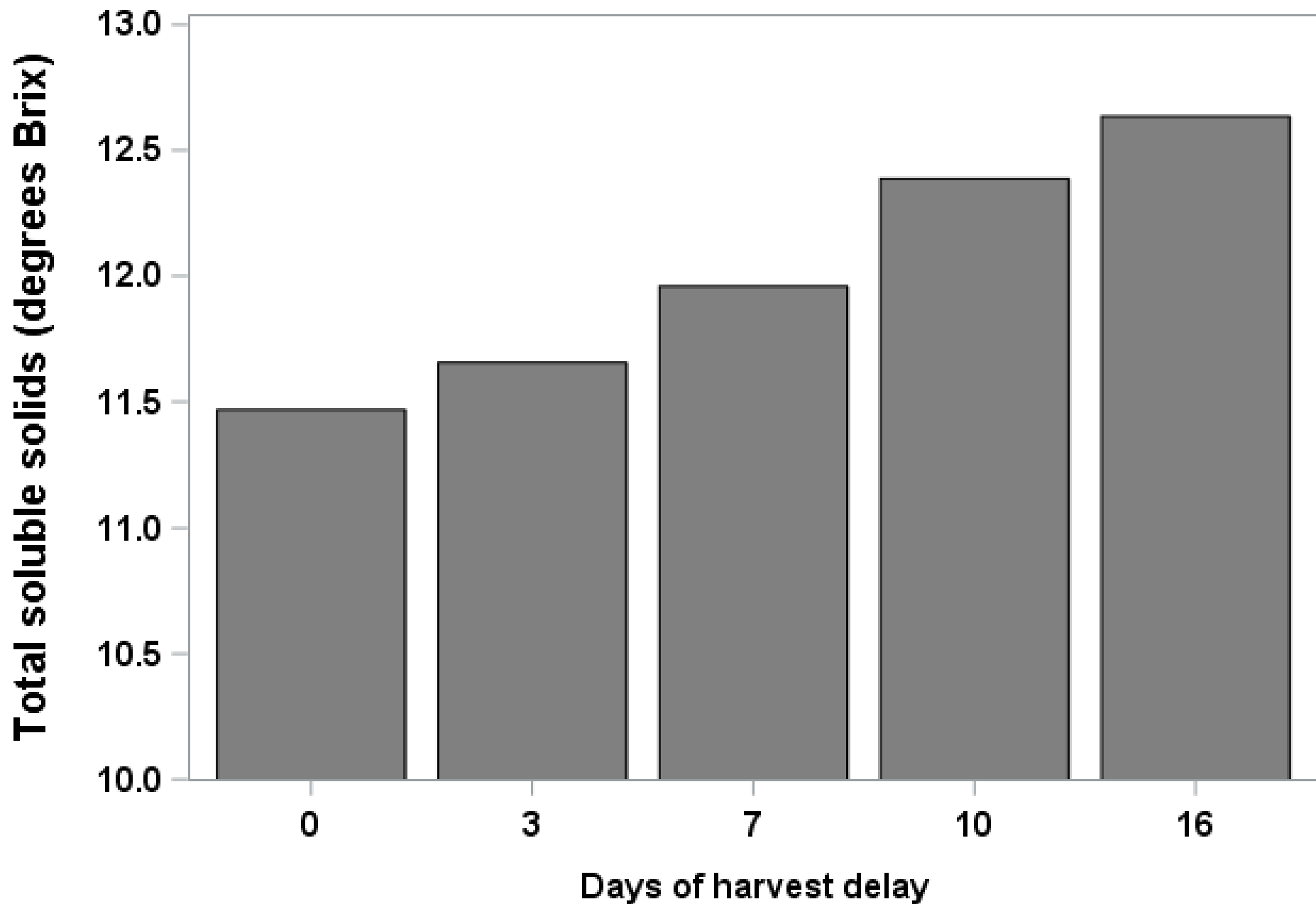
Each harvested sample ( $n=100$ ) was immediately hydro-cooled, then divided into five groups and placed into cold storage

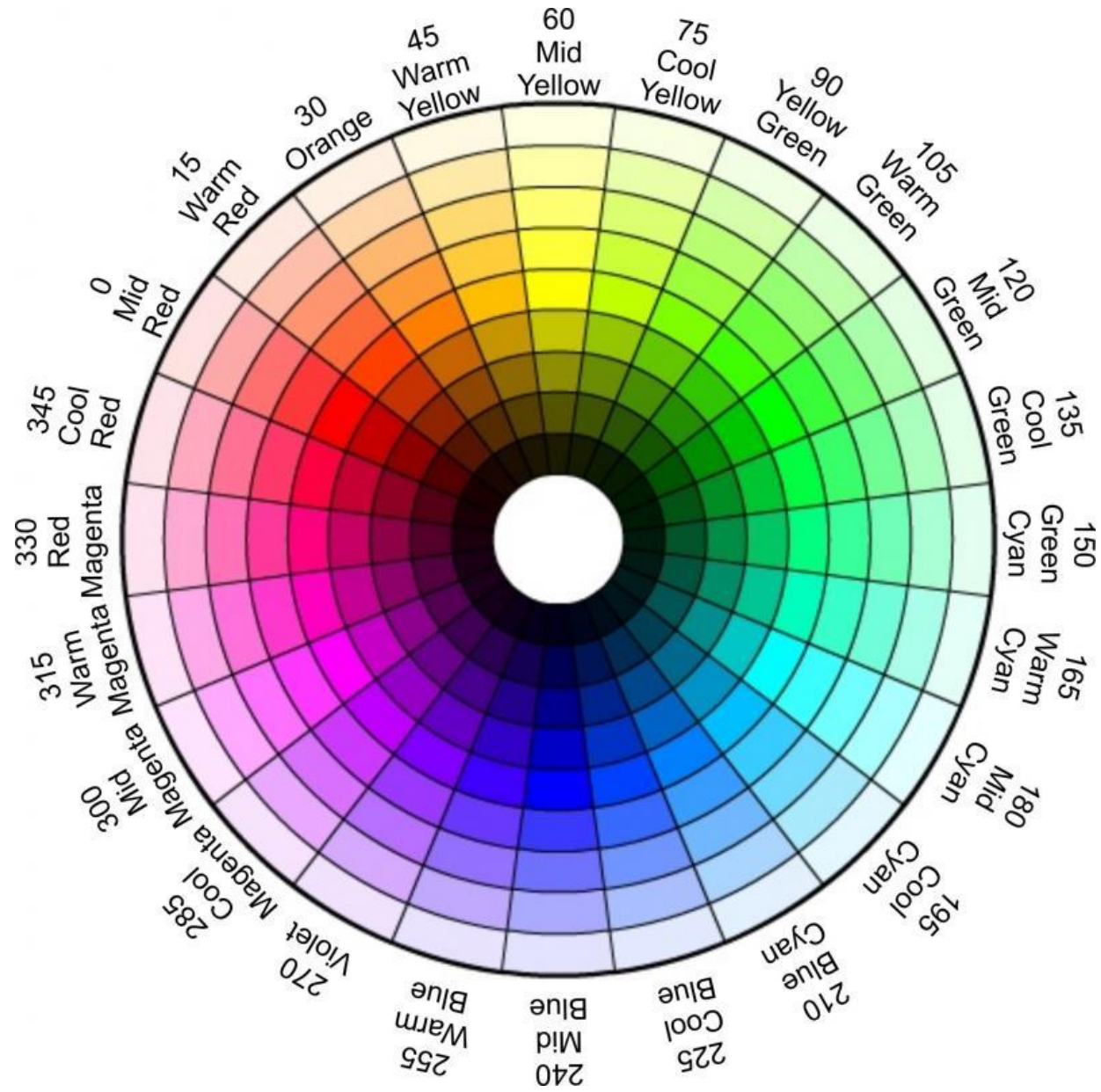
Held in Cold Storage for 1, 7, 14, 21, or 28 days then evaluated.

# 2016 Gloria Fruit Diameter

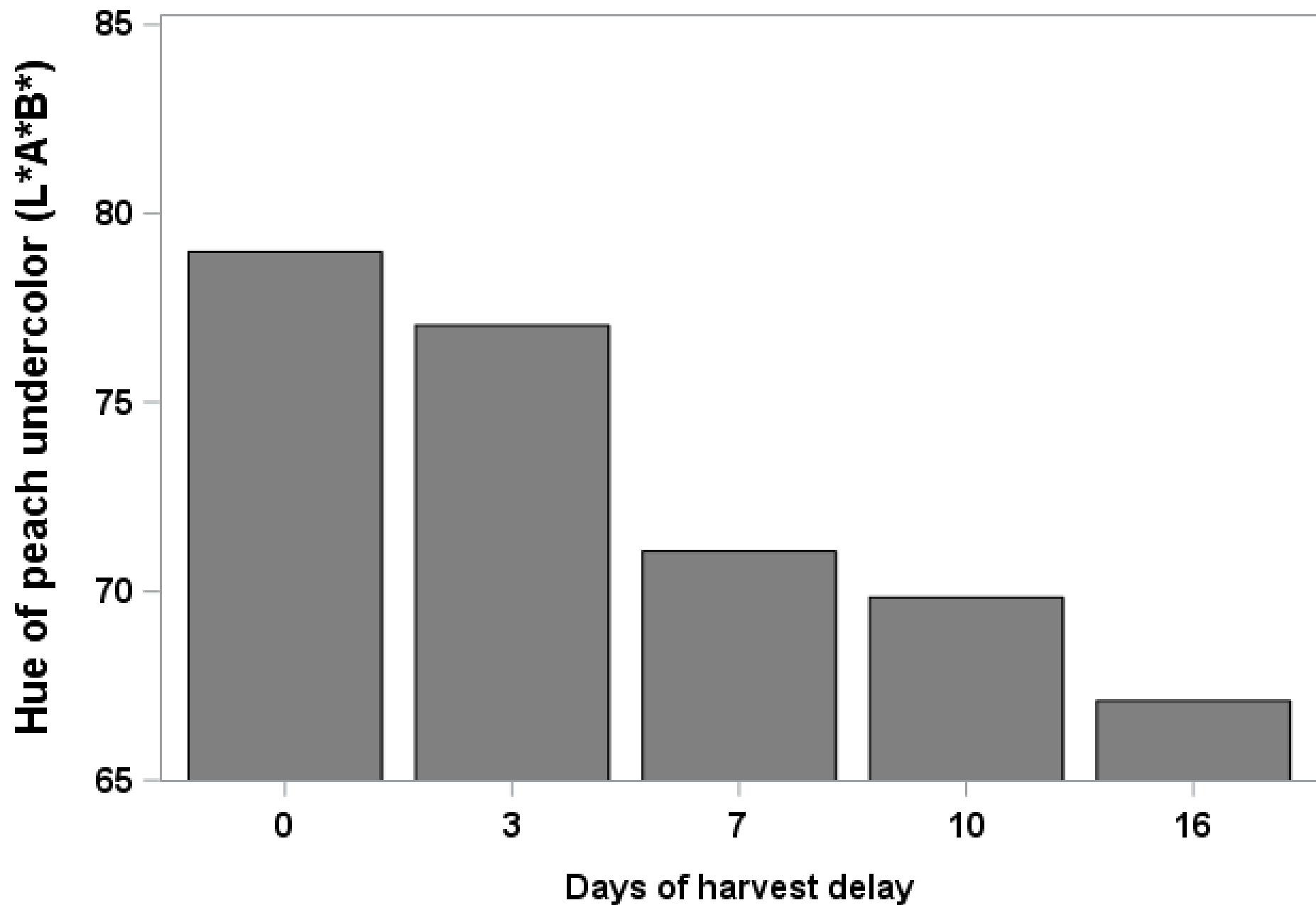


# 2016 Gloria Total Soluble Solids



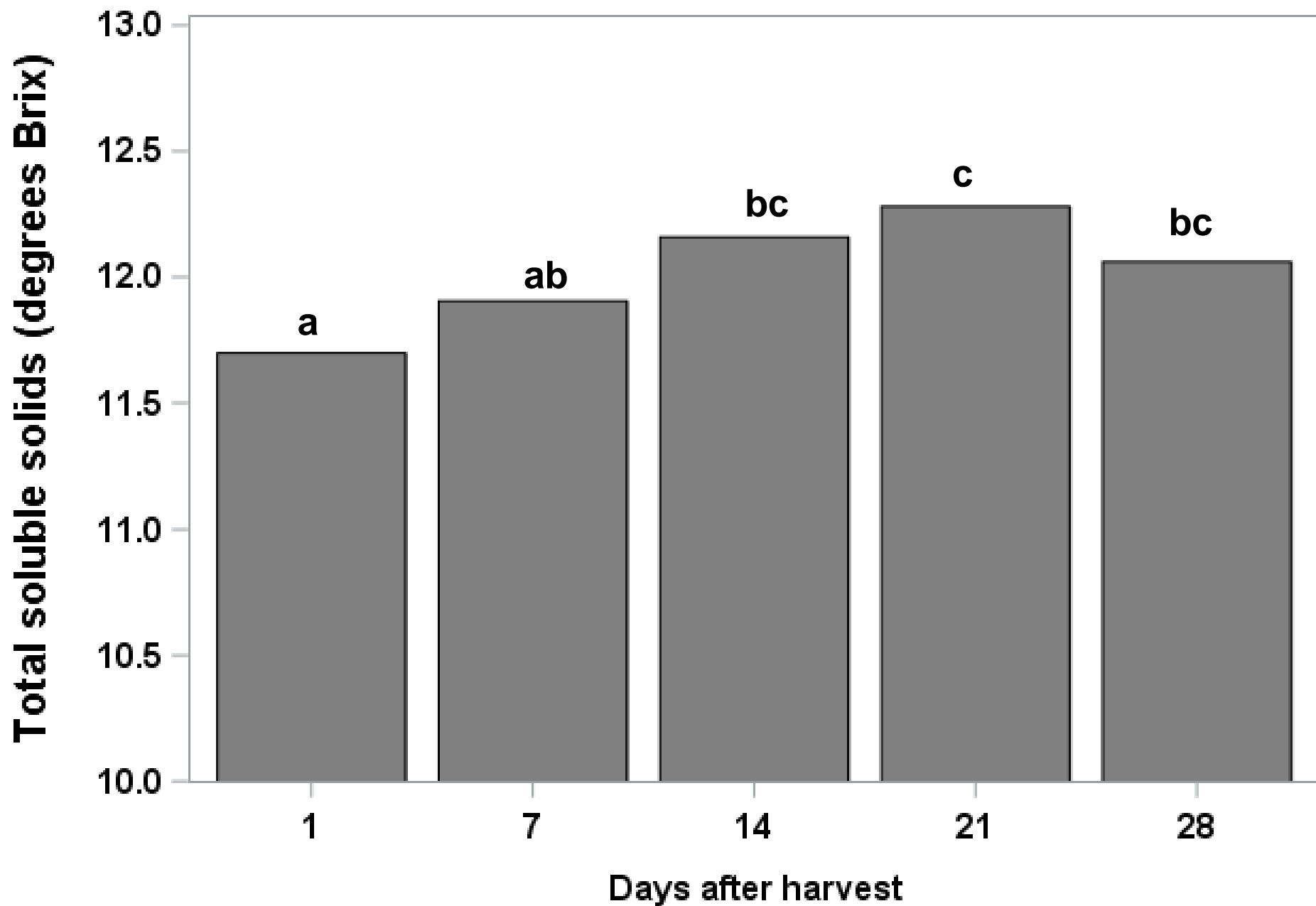


# 2016 Gloria Hue of Background Color

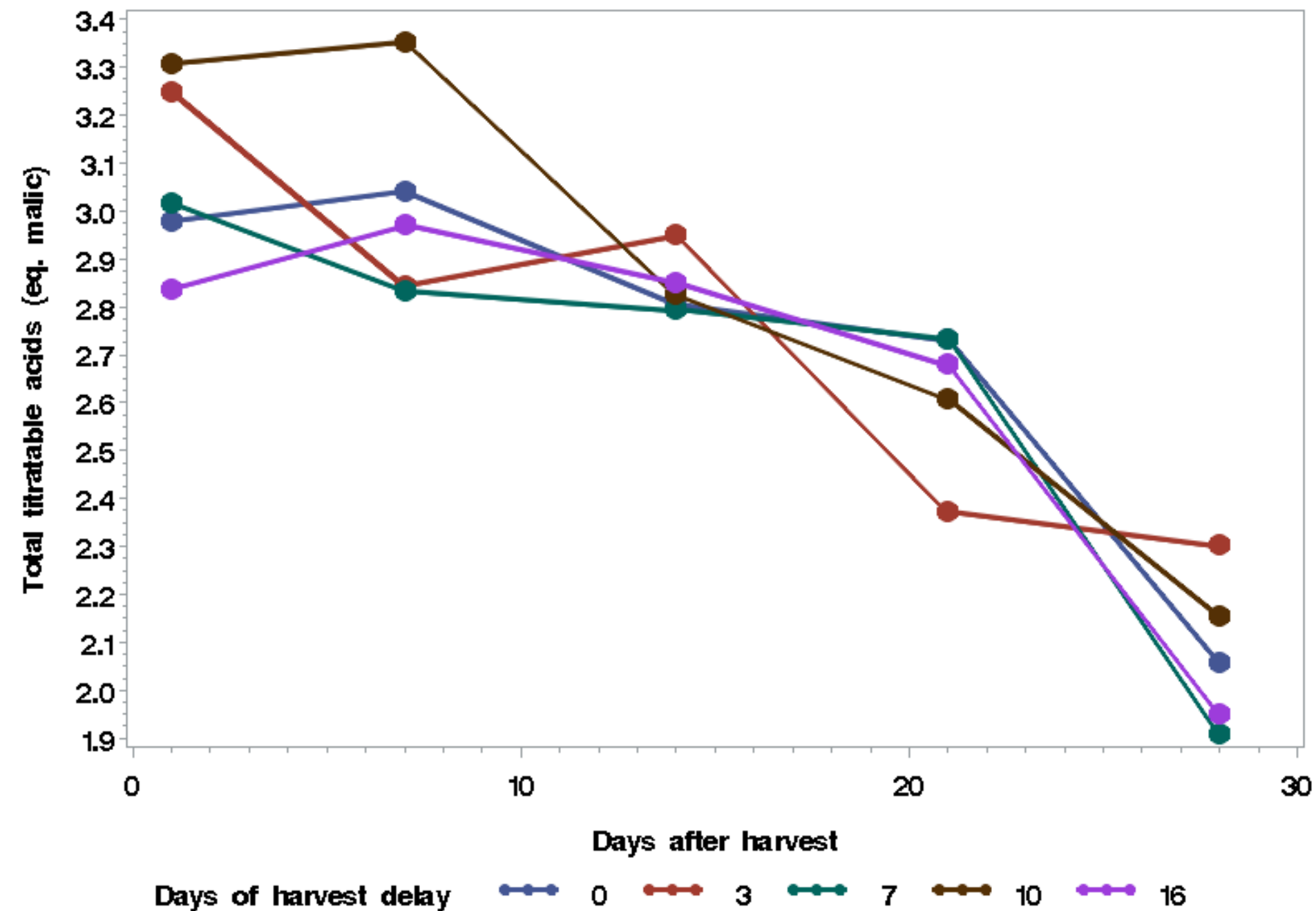




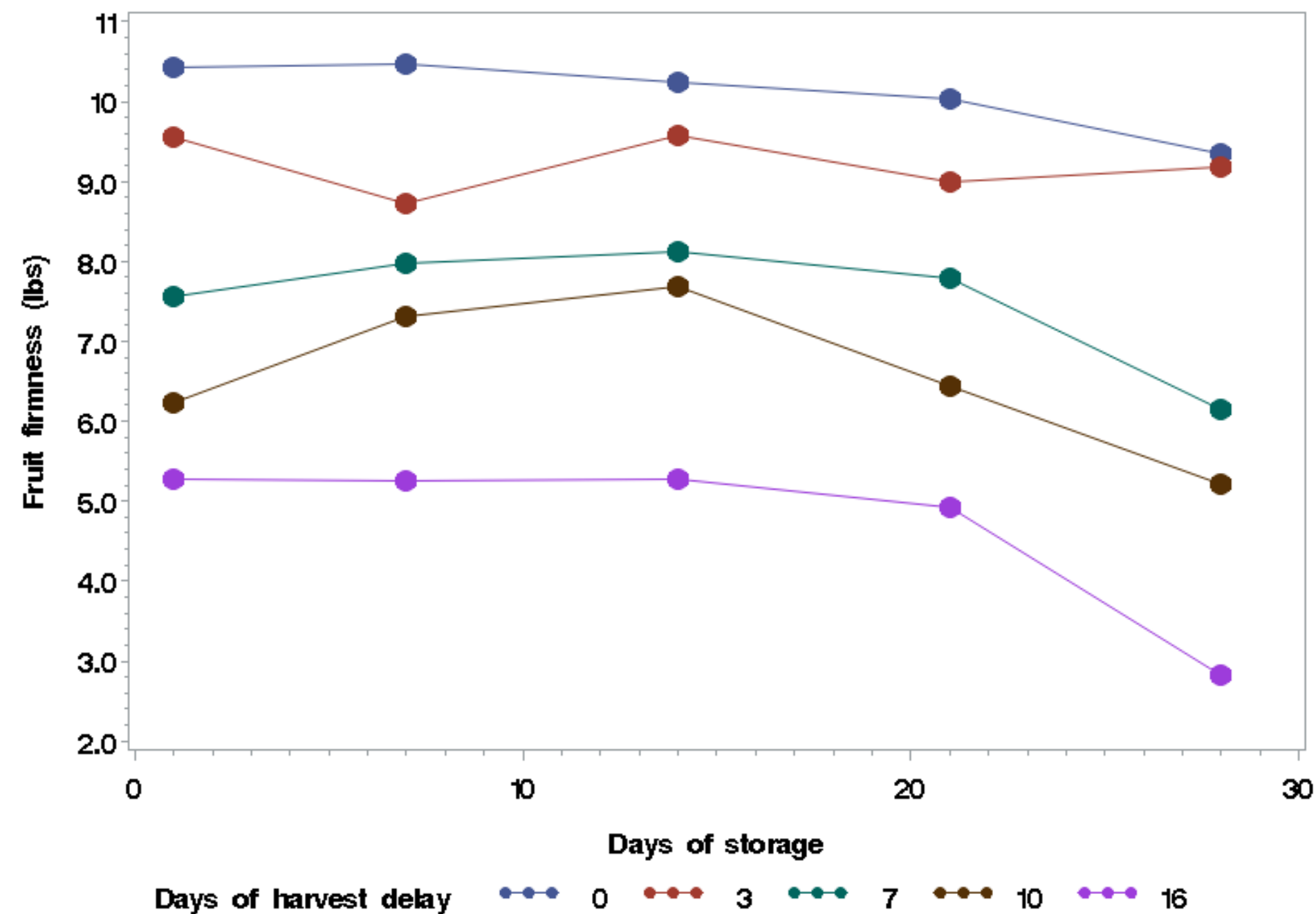
# 2016 Gloria Total Soluble Solids



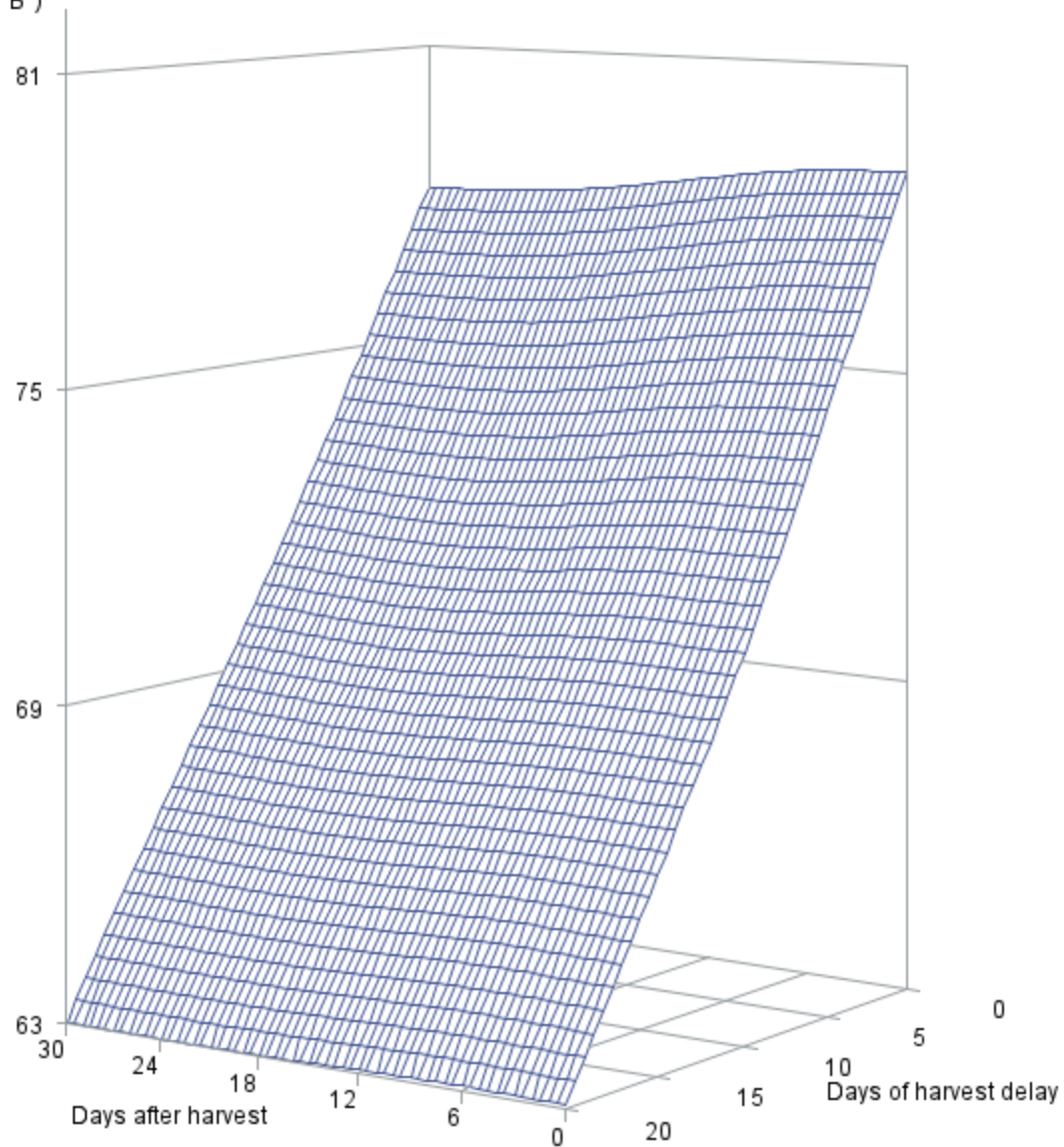
2016 Gloria Total Titratable Acidity

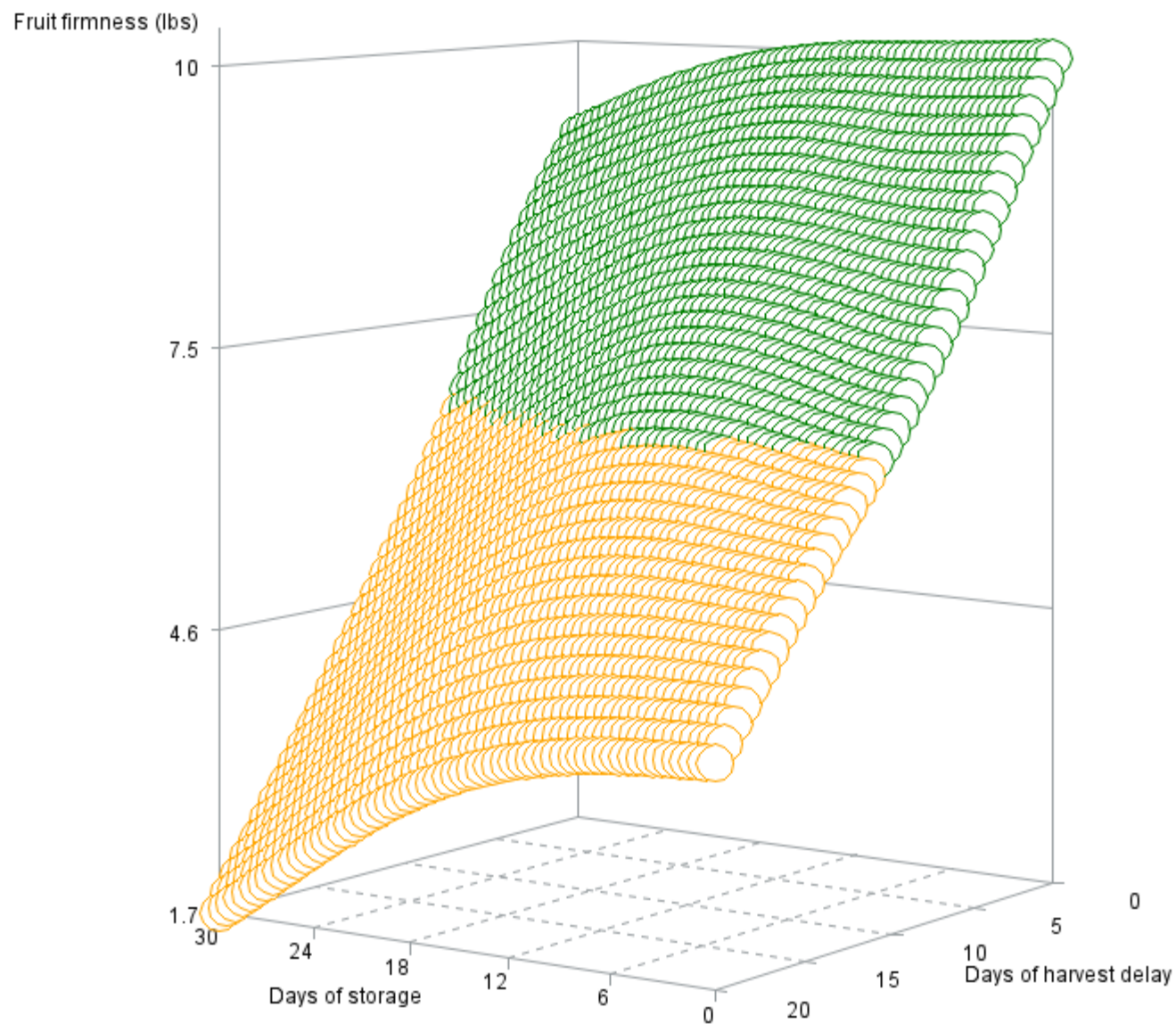


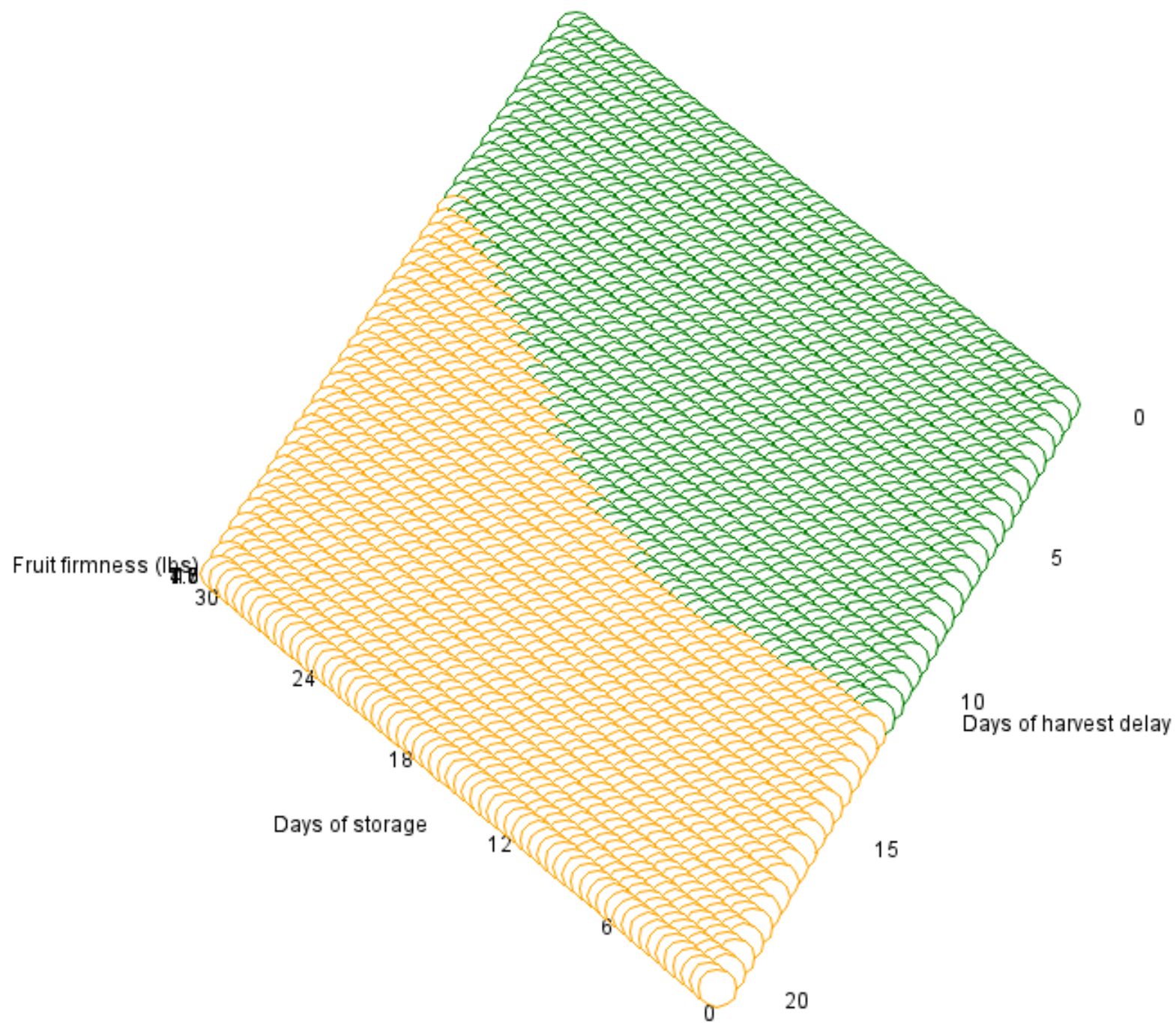
2016 Gloria Fruit Firmness



Hue of peach undercolor ( $L^*A^*B^*$ )









Tally of Ratings for Flesh Defects	
Flesh Rating	Percentage
0	96.91
1	2.26
2	0.48
3	0.36

Only small frequency of flesh defects.

No significant effects of harvest delay or storage time on flesh defects.

2016 Gloria Harvest 0 (no delay) Storage 28 Days





A close-up photograph of two ripe 'Gloria' peaches hanging from a tree branch. The peaches are a deep red color with a slight yellowish-orange tint at the base. They are surrounded by green leaves, some of which are in sharp focus while others are blurred in the background. The lighting is bright, suggesting a sunny day.

# **‘Gloria’ Peaches**

**Can hang on the tree for 5-7 days after they reach commercial maturity.**

**Hanging longer than 7 days reduces their storage life significantly and is not recommended.**

**The fruit will soften on the tree if left for 5-7 days after reaching commercial maturity, but only slowly.**

Thanks to industry cooperators:

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