Charlotte County Multi-Scion Rootstock Trial

Dr. Bill Castle – Dr. Fred Gmitter - Dr. Jude Grosser

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CREC Citrus Plant Improvement
Charlotte County Multi-Scion Rootstock Trial - Description

This trial was planted in the summer of 2014 SE of Arcadia along Highway 31 just inside Charlotte County. The primary objective is to evaluate Vernia, Valquarius, Valencia sweet orange and Ray Ruby grapefruit combined with the California C-Series [C-22:Bitters, C-54:Carpenter and C-57:Furr plus C-146; three hybrids FA5, FA13 and FA517 from the Forner program (Spain) and Willits citrange rootstocks. The scion-rootstock combinations are replicated 2-4x in plots of about 16 or more trees of each combination.
Charlotte County Multi-Scion Rootstock Trial - Summary

- Location: Charlotte County
- Scion - Rootstocks:
  - Valquarius (5 rootstocks)
  - Valencia (7 rootstocks)
  - Vernia (4 rootstocks)
  - Ray Ruby (4 rootstocks)
- Date Planted: May – July 2014
- Design:
  - Randomized Complete-Block Design with 2-4 replicates
  - Plot size: 16 or more trees
  - Spacing: 12.5 x 25 ft. (mostly)
- Data collected:
  - 2017-18: Tree Yield, Tree Size and Tree Health Ratings
  - 2018-19: Tree Health Rating
  - 2018-19: Yield (Val, Ver, Valq)
  - 2018-19: Juice Quality Data
2017-18 Charlotte County Multi-Scion Rootstock Trial – Tree Yield Rating: Mean + Std.Dev. - September 2017

**Tree yield rating**
1 = Below average for the trial in this year
2 = Average
3 = Above average

**Rootstock (Scion)**

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2017-18 Charlotte County Multi-Scion Rootstock Trial – Tree Size and Tree Health Ratings – Mean + Std.Dev. February 2018

Tree Size Rating
1= little sign of growth
2= some sign of growth
3= average size
4= above average size
5= largest tree

Tree Health Rating
1= few leaves
2= significant decline
3= good canopy
4= healthy canopy

(*) No variation on rating - SD=0

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2017-18 Charlotte County Multi-Scion Rootstock Trial – Tree Size and Tree Health Ratings - Mean + Std.Dev.

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Scion - Rootstock
2018-19 Charlotte County Multi-Scion Rootstock Trial – Tree Health Ratings - Mean + Std.Dev.

Tree Health Ratings
0= dead
1= heavy decline
2= mild decline
3= healthy
4= very healthy
(*) No variation on rating - SD=0

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2018-19 Charlotte County Multi-Scion Rootstock Trial – Tree Health Ratings - Mean + Std.Dev.

Tree Health Ratings
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2018-19 Charlotte County Multi-Scion Rootstock Trial – Yield [Boxes/tree] – Mean + Std.Dev

Valencia and Vernia

Valquarius

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2018-19 Charlotte County Multi-Scion Rootstock Trial – Juice Quality - Mean + Std.Dev.

* All rootstocks without a SD bar=no SD

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2018-19 Charlotte County Multi-Scion Rootstock Trial – Juice Color - Mean + Std.Dev.
2018-19 Charlotte County Multi-Scion Rootstock Trial – Juice Quality - Mean + Std.Dev.

* All rootstocks without a SD bar=no SD

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2018-19 Charlotte County Multi-Scion Rootstock Trial – Juice Color - Mean + Std.Dev.

* All rootstocks without a SD bar=no SD