

Lemon Scion Trials in Southern California

Dr. Glenn Wright

Dr. Mikael Roose

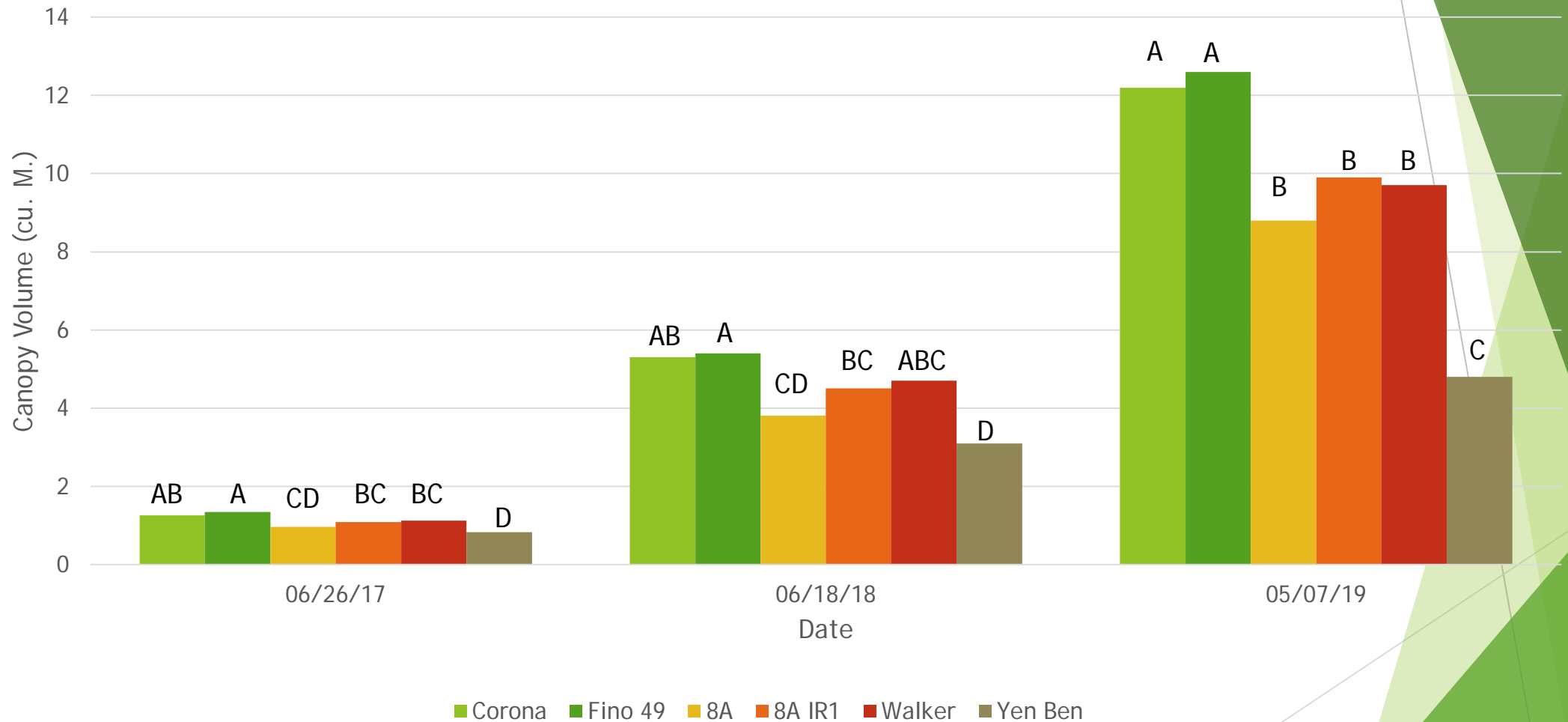
Dr. Tracy Kahn



Multilocation Lemon Scion Trials

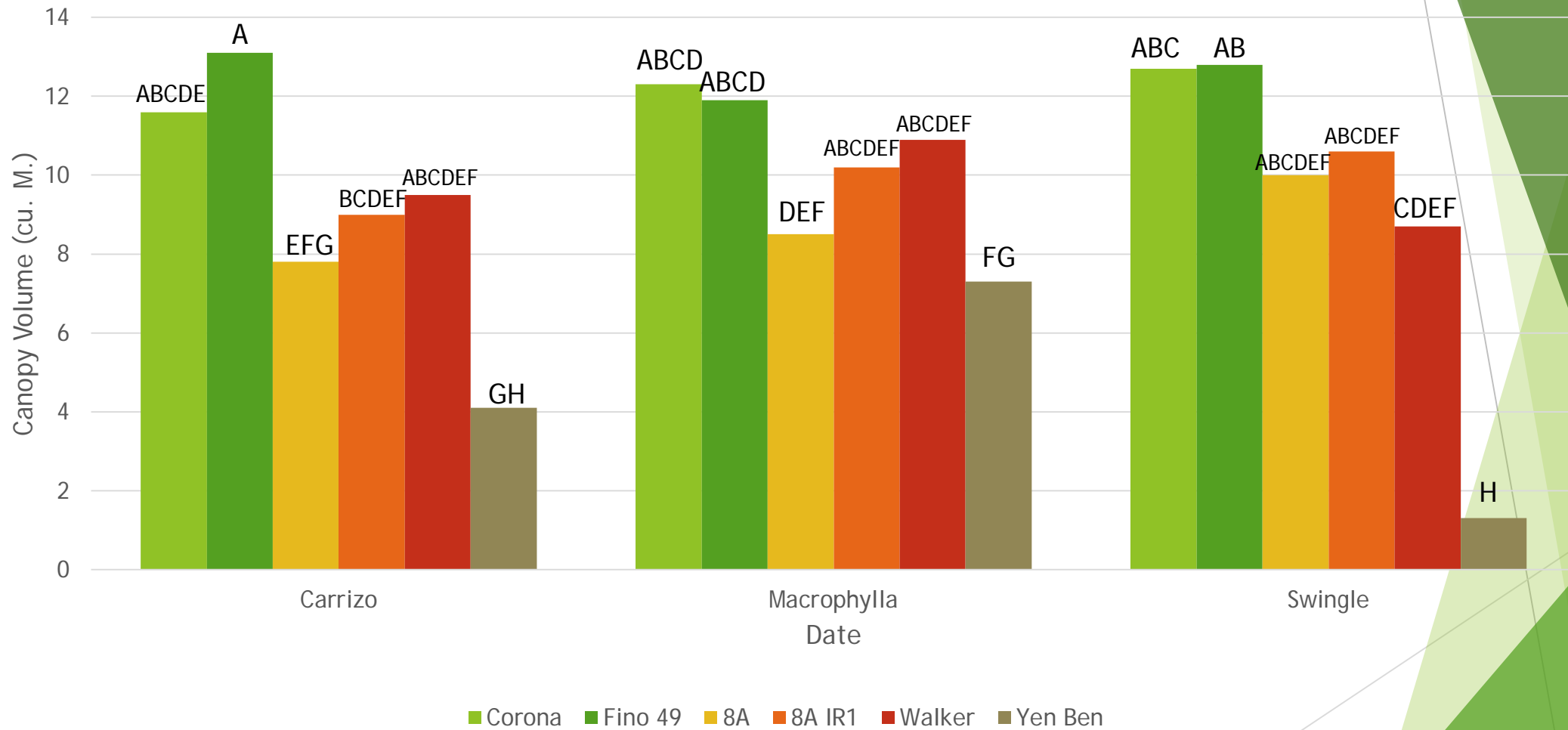
- ▶ Four locations - Santa Paula, Lindcove, UCR, CVARS,
- ▶ Five cultivars - Corona Foothills, Limonero Fino 49, Limoneira 8A, Limoneira 8A IR1, Walker Lisbon, Yen Ben
- ▶ Three Rootstocks
 - ▶ CVARS - Carrizo, Macrophylla, Volkameriana
 - ▶ UCR - Carrizo, Rich 16-6, C-35
 - ▶ Santa Paula - Carrizo, Macrophylla, Swingle
 - ▶ LREC - Carrizo, Rich 16-6, C-35
- ▶ Planted April and May 2015
- ▶ UCR and LREC are bedded while CVARS and Santa Paula are not.

SP Scion Canopy Volume

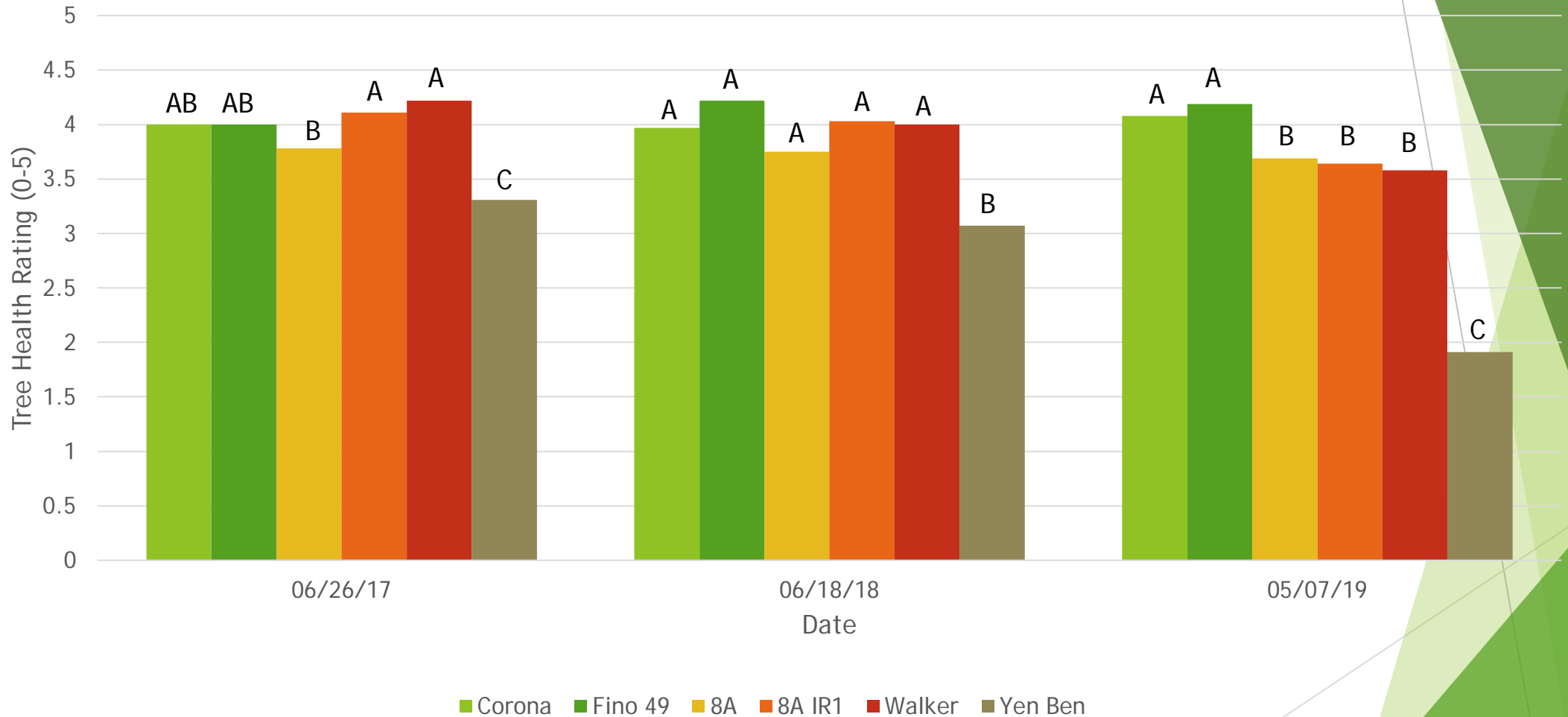


For 2018/19, no effect of rootstock alone on canopy volume - Carrizo = 9.2 m³, Swingle = 10.0 m³, Macrophylla = 10.2 m³)

SP Canopy Volume Scion by Rootstock - 5/17/19

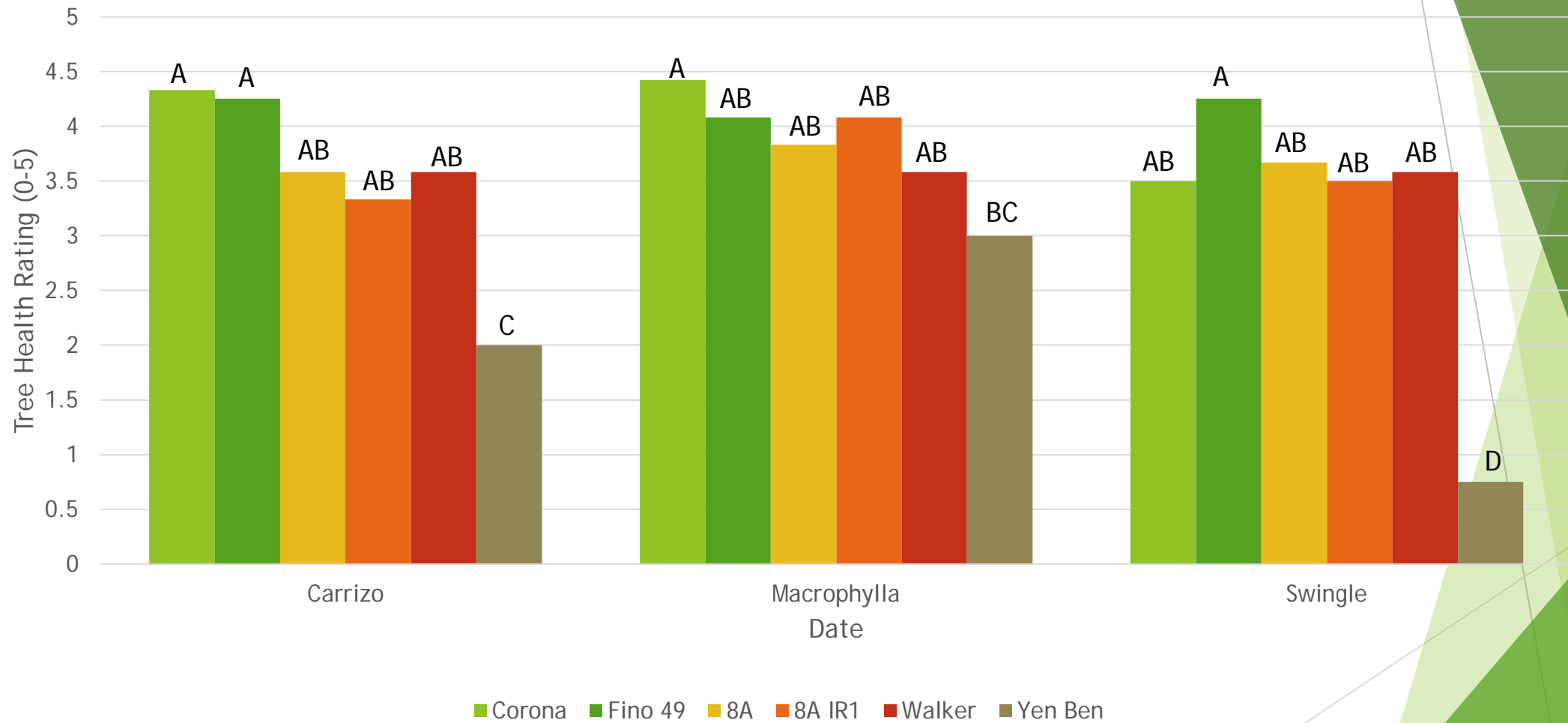


SP Scion Tree Health Rating

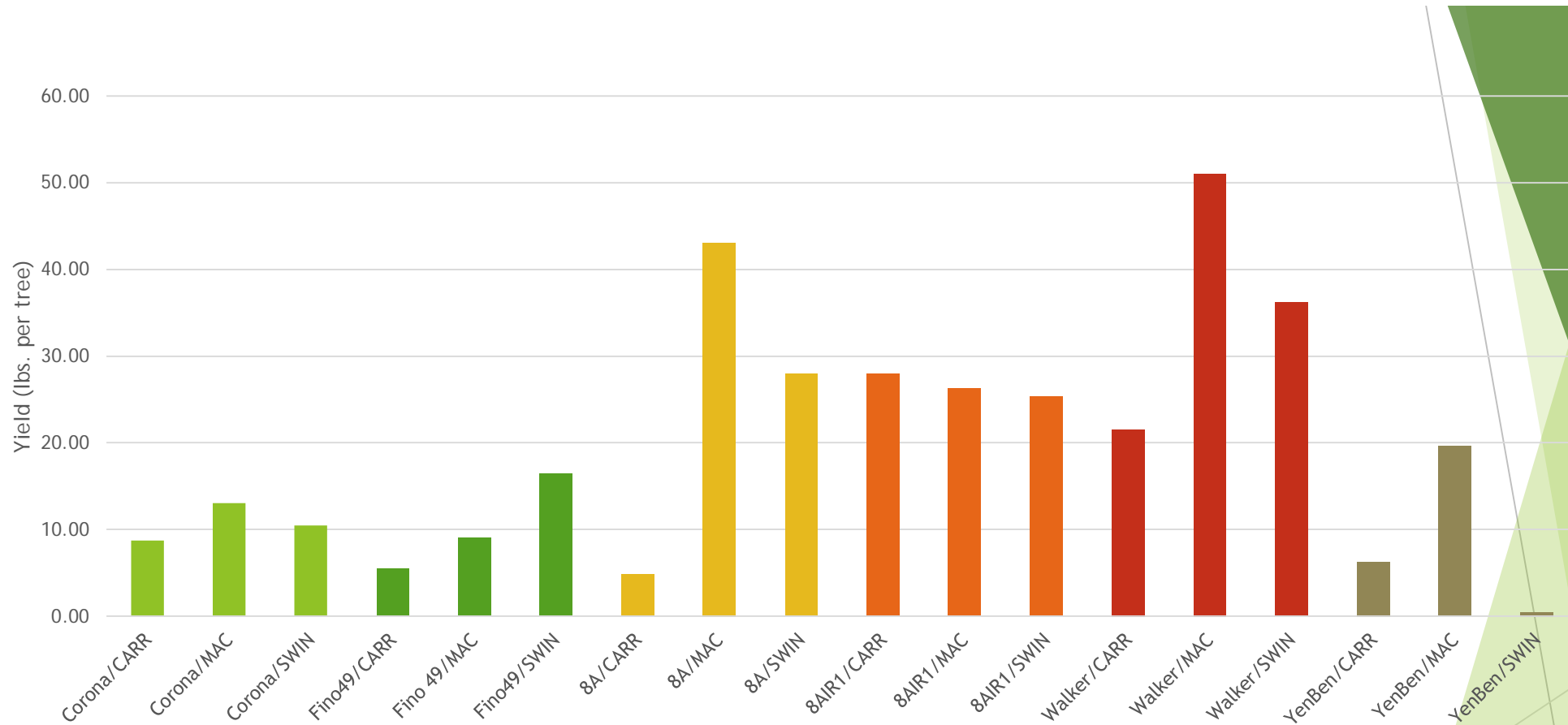


For 2018/19, no effect of rootstock alone on tree health - Carrizo = 3.5, Swingle = 3.6, Macrophylla = 3.8)

SP Health Rating Scion by Rootstock - 5/17/19



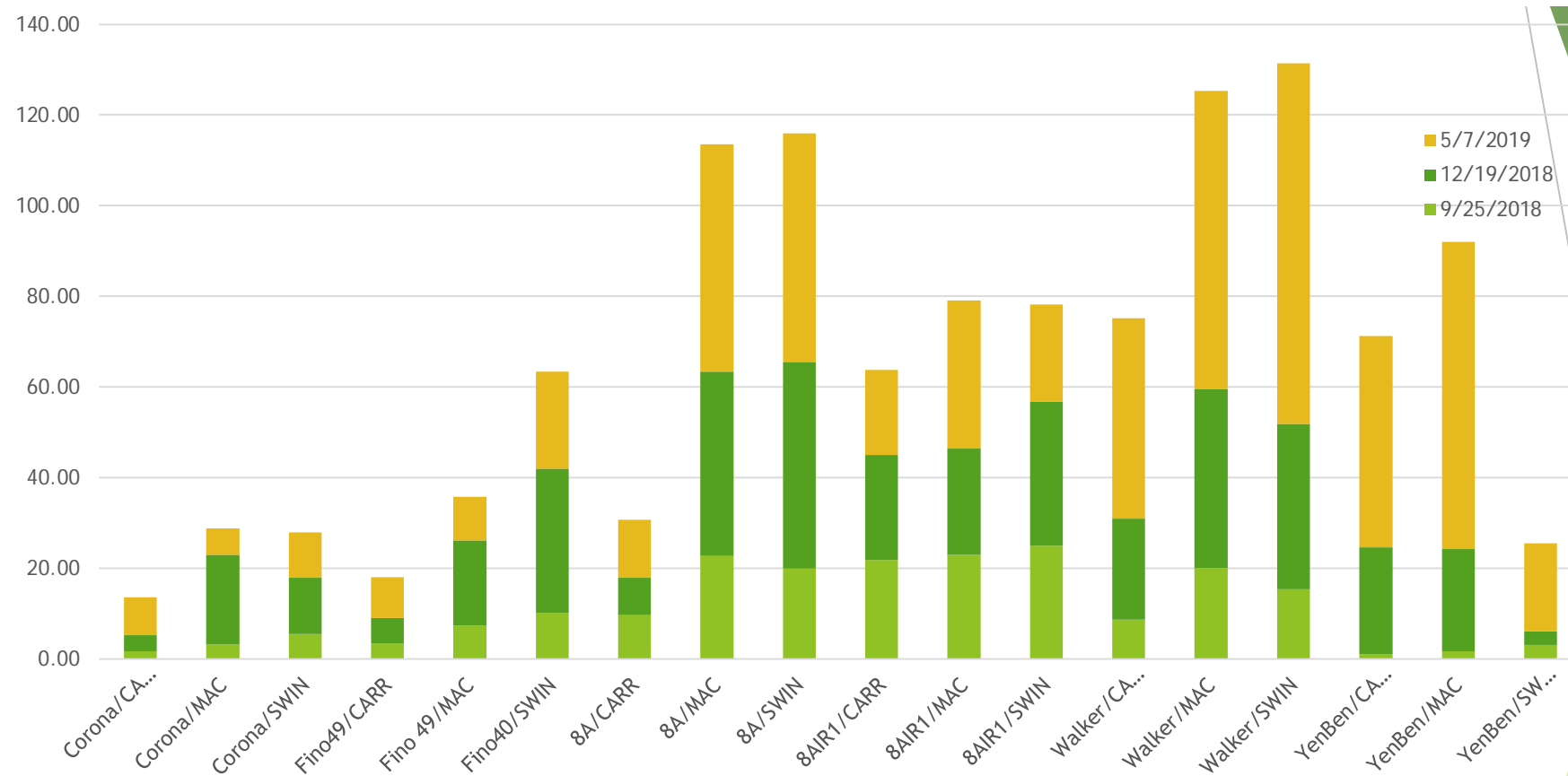
2017-18 SP Multilocation Lemon Scion Yield



Corona Foothills - 10.76 lbs./tree (BC)
 Limonero Fino 49 - 10.32 lbs./tree (C)
 Limoneira 8A - 25.30 lbs./tree (ABC)
 Limoneira 8A IR1 - 26.54 lbs. per tree (AB)
 Walker Lisbon - 36.24 lbs. per tree (A)
 Yen Ben - 11.18 lbs. per tree (BC)

Carrizo - 12.07 lbs./tree (B)
 Macrophylla - 27.03 lbs. per tree (A)
 Swingle - 22.22 lbs. per tree (AB)

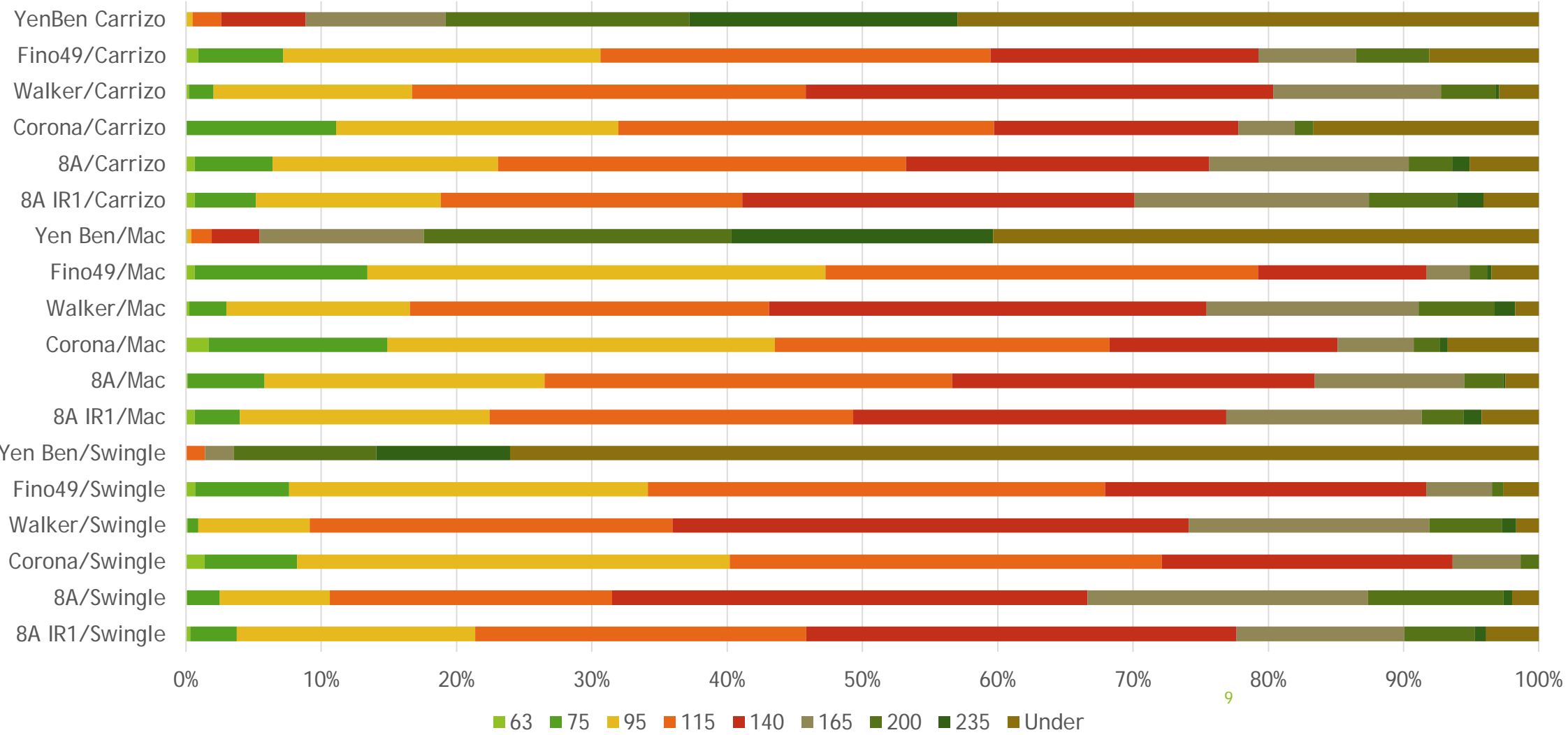
2018-19 SP Multilocation Lemon Scion Yield



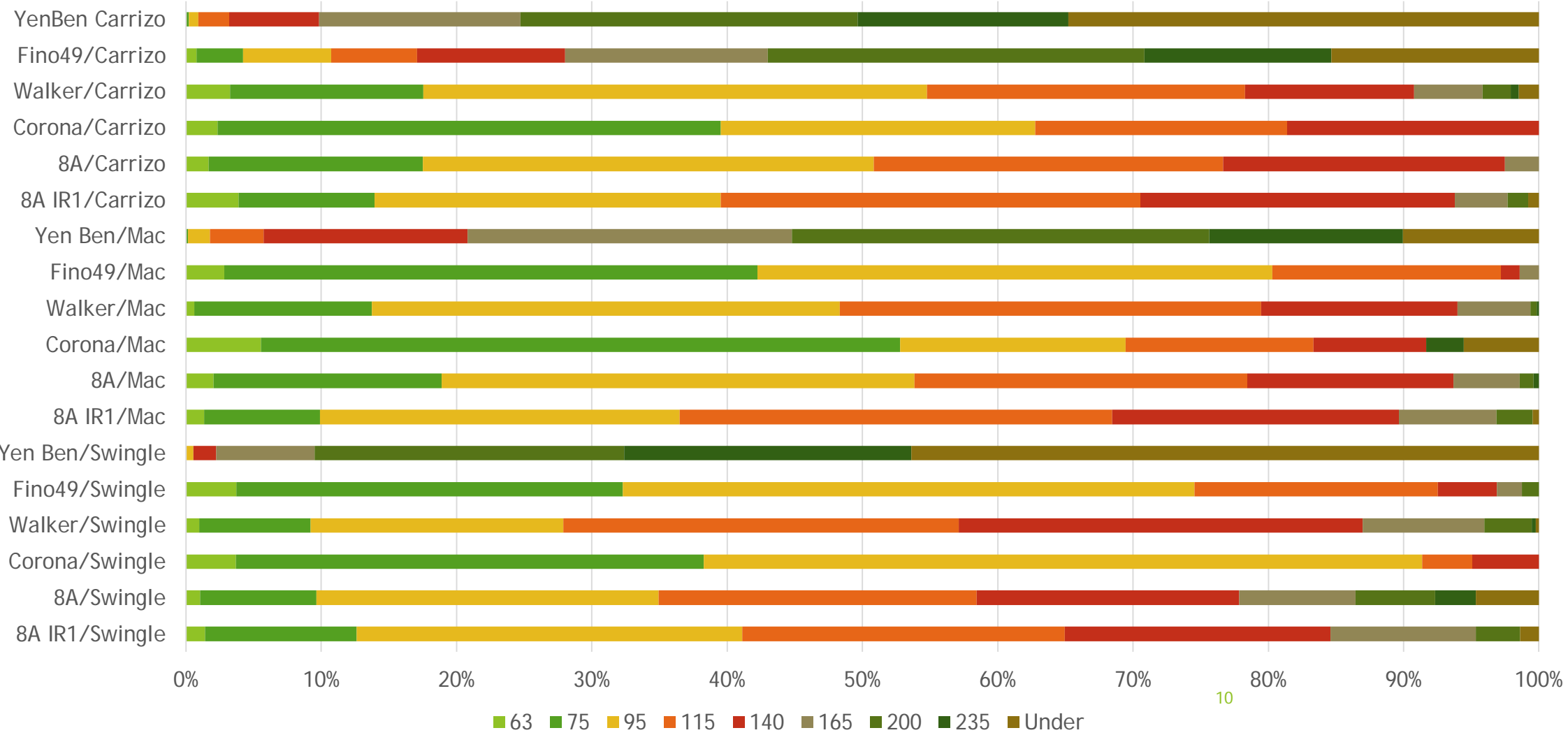
Corona Foothills - 23.42 lbs./tree (C)
 Limonero Fino 49 - 39.08 lbs./tree (C)
 Limoneira 8A - 86.73 lbs./tree (AB)
 Limoneira 8A IR1 - 73.68 lbs. per tree (B)
 Walker Lisbon - 110.62 lbs. per tree (A)
 Yen Ben - 74.07 lbs. per tree (B)

Carrizo - 45.44 lbs./tree (B)
 Macrophylla - 79.07 lbs. per tree (A)
 Swingle - 80.22 lbs. per tree (A)

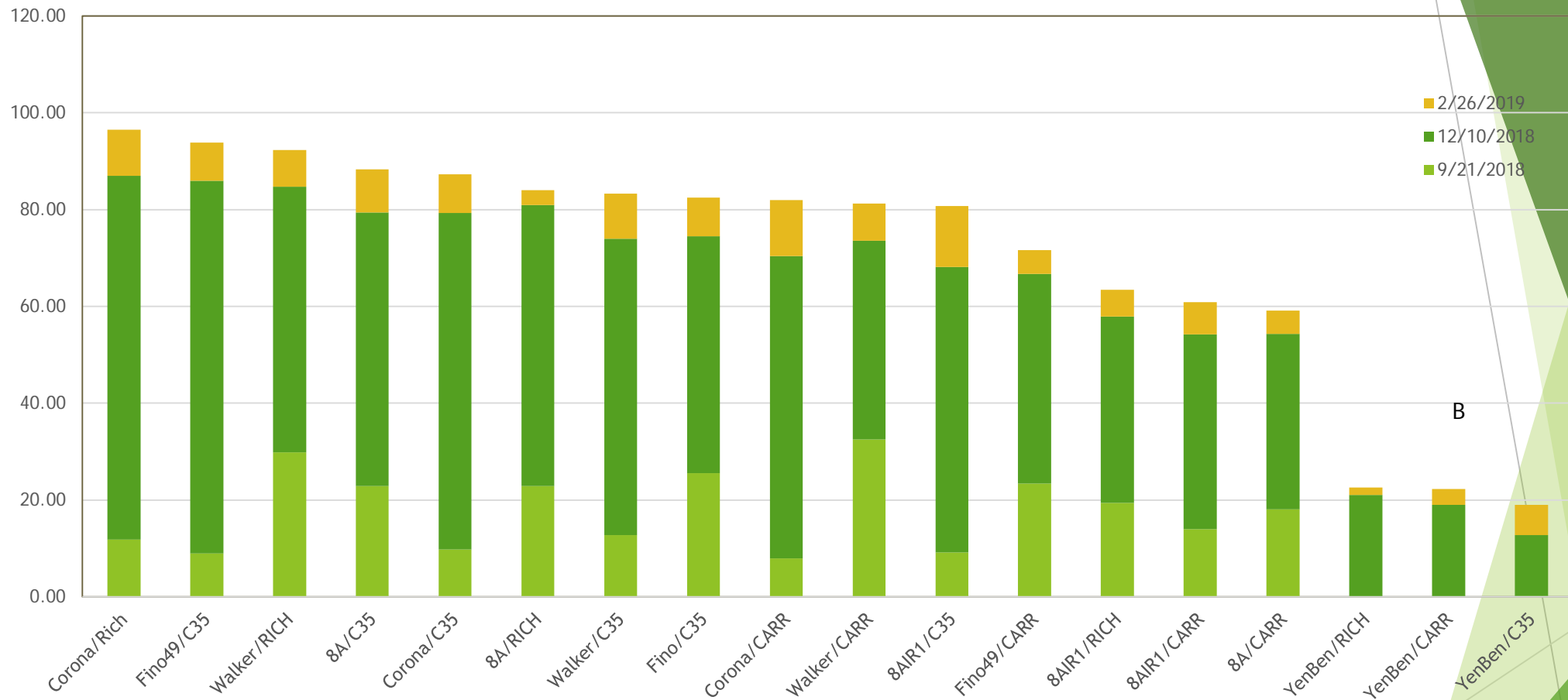
Packout - 12-21-18 Harvest



Packout - 5/7/19 Harvest



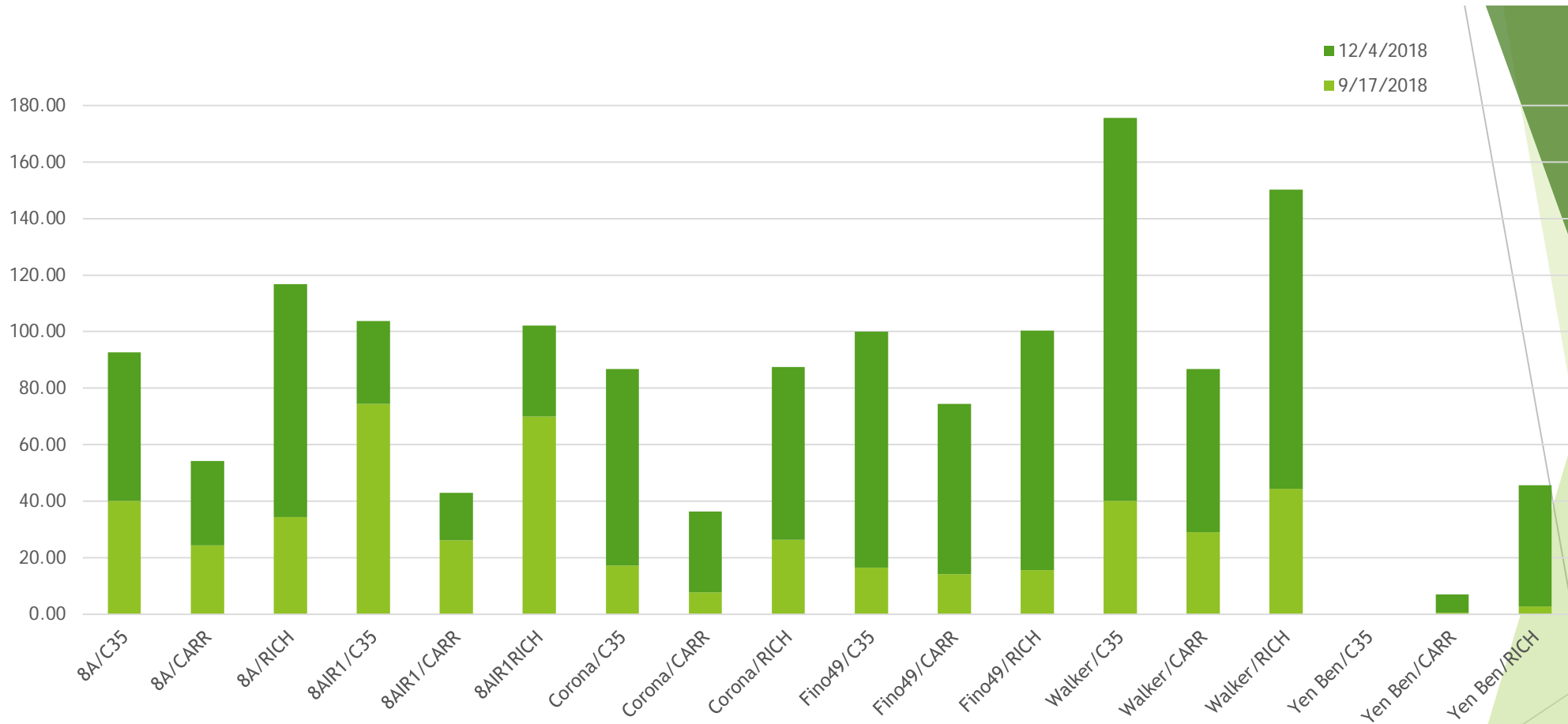
2018-19 UCR Multilocation Lemon Scion Yield



Corona Foothills - 87.30 lbs./tree (A)
 Limonero Fino 49 - 86.82 lbs./tree (A)
 Limoneira 8A - 78.63 lbs./tree (A)
 Limoneira 8A IR1 - 72.48 lbs. per tree (A)
 Walker Lisbon - 77.71 lbs. per tree (A)
 Yen Ben - 20.75 lbs. per tree (B)

Carrizo - 60.88 lbs./tree (B)
 Rich 16-6 - 76.35 lbs. per tree (A)
 C-35 - 82.58 lbs. per tree (A)

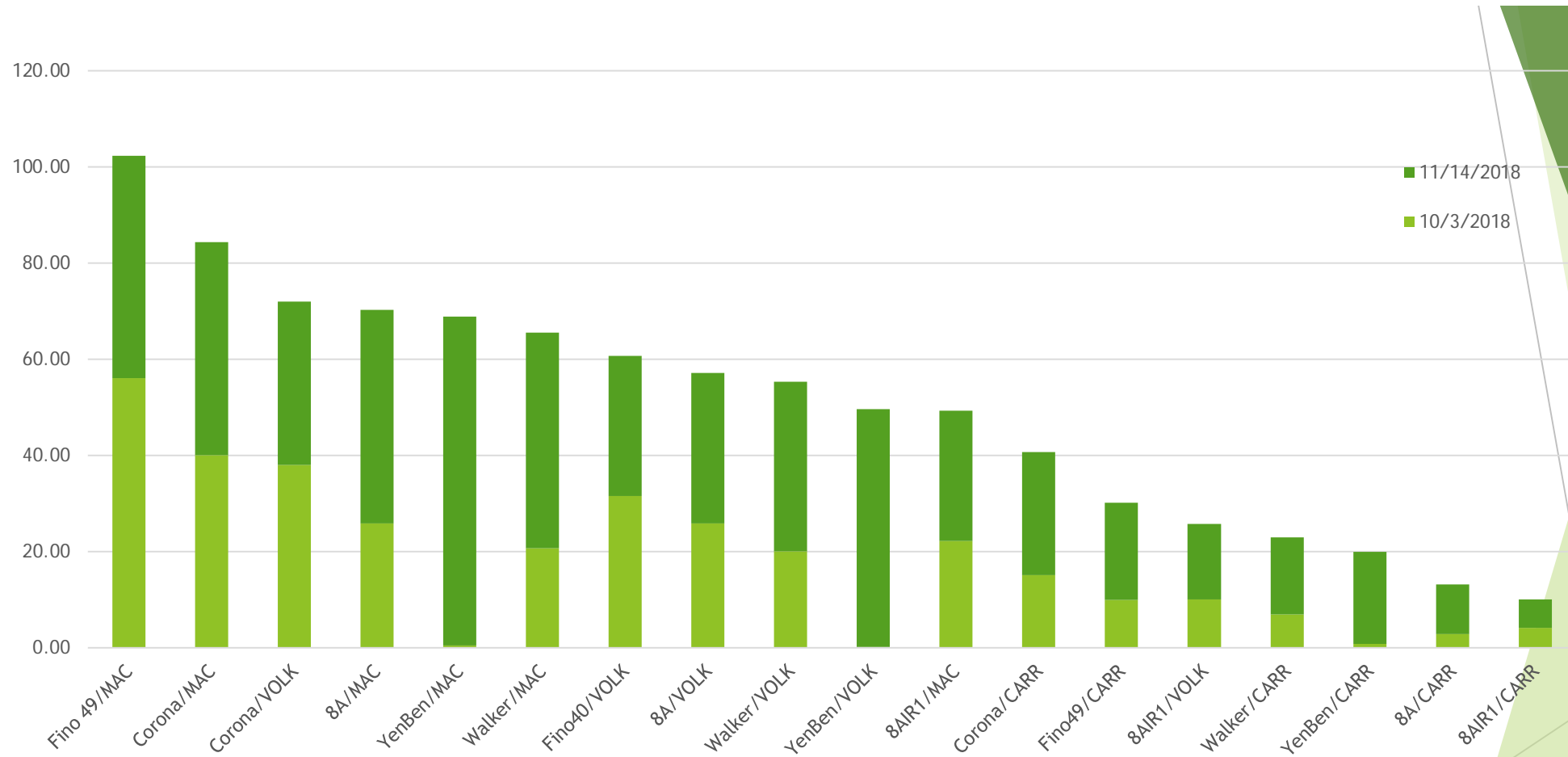
2018-19 LREC Multilocation Lemon Scion Yield



Corona Foothills - 70.20 lbs./tree (BC)
 Limonero Fino 49 - 91.60 lbs./tree (AB)
 Limoneira 8A - 87.87 lbs./tree (AB)
 Limoneira 8A IR1 - 83.00 lbs. per tree (AB)
 Walker Lisbon - 133.60 lbs. per tree (A)
 Yen Ben - 26.89 lbs. per tree (C)

Carrizo - 51.31 lbs./tree (B)
 Rich 16-6 - 100.43 lbs. per tree (A)
 C-35 - 108.33 lbs. per tree (A)

2018-19 CVARS Multilocation Lemon Scion Yield



Corona Foothills - 65.70 lbs./tree (A)
 Limonero Fino 49 - 58.70 lbs./tree (A)
 Limoneira 8A - 46.85 lbs./tree (AB)
 Limoneira 8A IR1 - 28.38 lbs. per tree (B)
 Walker Lisbon - 47.97 lbs. per tree (AB)
 Yen Ben - 46.12 lbs. per tree (AB)

Carrizo - 22.82 lbs./tree (C)
 Volkameriana - 53.43 lbs. per tree (B)
 Macrophylla - 70.60 lbs. per tree (A)

UCR Interior Fruit Quality 2017-18

Selection	Juice Content (%)	Seeds per fruit	Peel Thickness (mm)	Peel Smoothness Rating
Corona Foothills	49.06	7.37	3.91	4.00
Limonero Fino 49	47.44	7.58	3.71	4.33
Limoneira 8A Lisbon	49.94	7.48	4.23	4.00
Limoneira 8A IR1	47.32	0.68	4.75	4.67
Walker Lisbon	47.34	7.55	4.18	4.00
Yen Ben	52.29	0.00	0.74	1.33

CVARS Interior Fruit Quality 2017-18

Selection	Juice Content (%)	Seeds per fruit	Peel Thickness (mm)	Peel Smoothness Rating
Corona Foothills	57.92	11.72	3.12	3.33
Limoneiro Fino 49	59.96	10.67	3.06	5.00
Limoneira 8A Lisbon	52.96	15.33	2.48	3.67
Limoneira 8A IR1	47.07	1.57	4.51	4.33
Walker Lisbon	56.74	14.27	2.68	4.00
Yen Ben	59.44	9.20	1.69	3.00

Acknowledgements

- ▶ Wright, Roose and Kahn Labs
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 - ▶ Vince Samons, Dr. Peggy Mauk and staff
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Questions?

Thank you!