

2019 Watermelon and Melon Variety Trial Report in Indiana

- *Standard-size triploid watermelon*
- *Personal-size triploid watermelon*
- *Cantaloupe and specialty melon varieties*



Production Practices

Fertilizers

Fertilizer	Rate (lb/acre)
Urea (46-0-0)	300
Potash (0-0-60)	250
Boron 14.3%	7
K-Mag granular (0-0-22)	100
Zinc 10% LS	10

Seeds were planted in a greenhouse on Apr. 17-19,
Seedlings were transplanted in the field around middle
May

Spacing

- Standard-size triploid: 4' in-row spacing; 8' bed spacing; pollenizer 1:2 ratio. SP7
- Personal-size watermelon: 2' in-row spacing, 6' bed spacing, pollenizers in one row of every three rows of personal-size triploid watermelons. SP7
- Cantaloupe and specialty melon: 2.5' in-row spacing, 6' bed spacing

Pest Management

- ✓ Melcast and the *Midwest Vegetable Production Guide for Commercial Growers*
- ✓ Bravo[®], Cabrio[®] EG, Zampro[®], Aprovia[®] Top were rotationally sprayed for disease control
- ✓ No insecticides were used on watermelon trials. For cantaloupe and specialty melon trial, Admire Pro[®], Warrior II[®] and Pounce 25WP[®] were used for insect pest control.
- ✓ Standard-size triploid watermelon field was fumigated with 85.5% chloropicrin, 150 lbs/acre, at 12-inch depth in spring 2019

2019 season was marked with above-normal precipitation

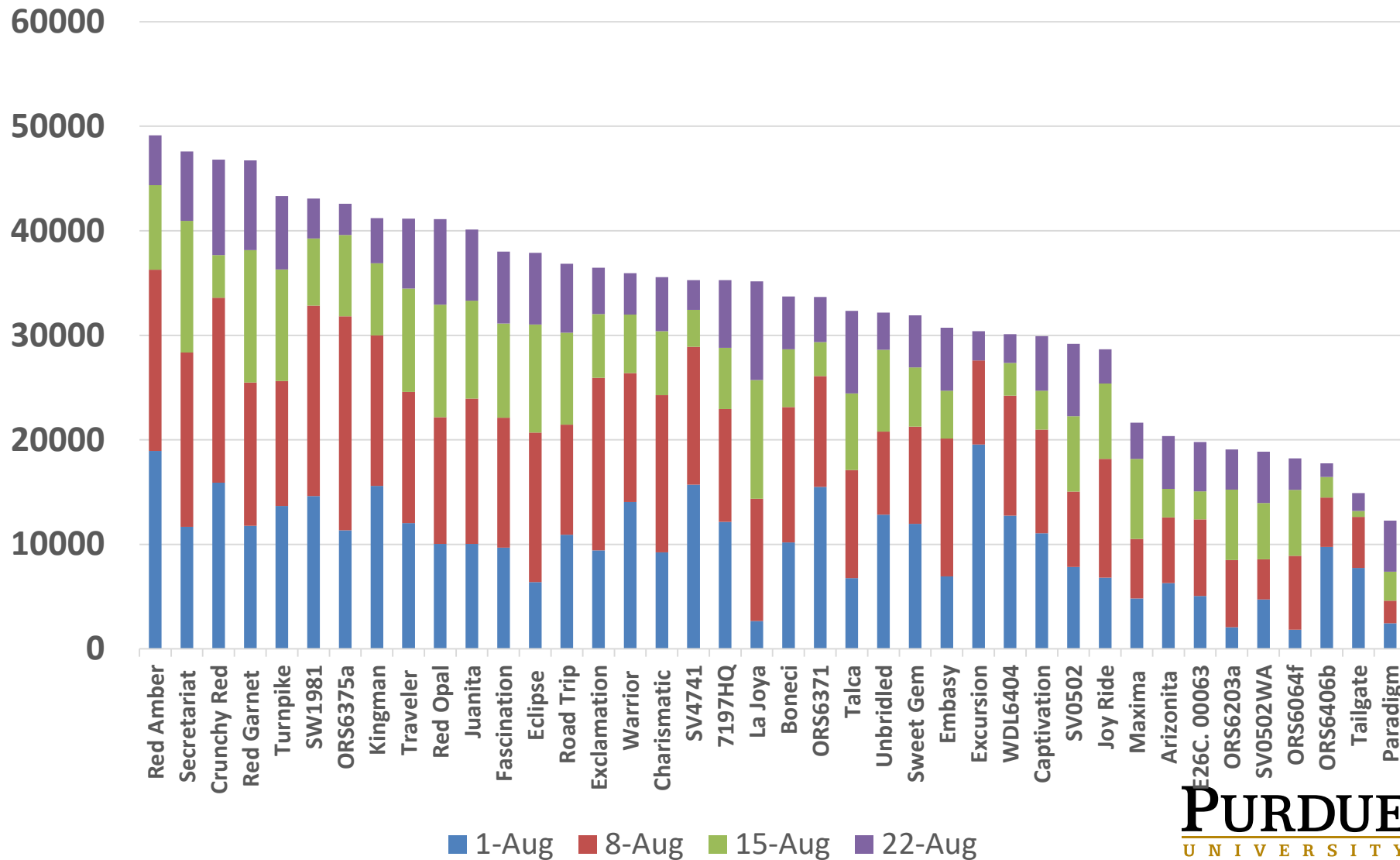
Monthly precipitation in Southwest Indiana

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
2019	4.09	6.67	5.46	6.24	7.03	7.7	4.34	4.88
Normal (1981-2010)	3.05	2.94	4.04	4.41	5.63	4.13	4.26	3.23

Midwestern Regional Climate Center, cli-MATE: MRCC Application Tools Environment

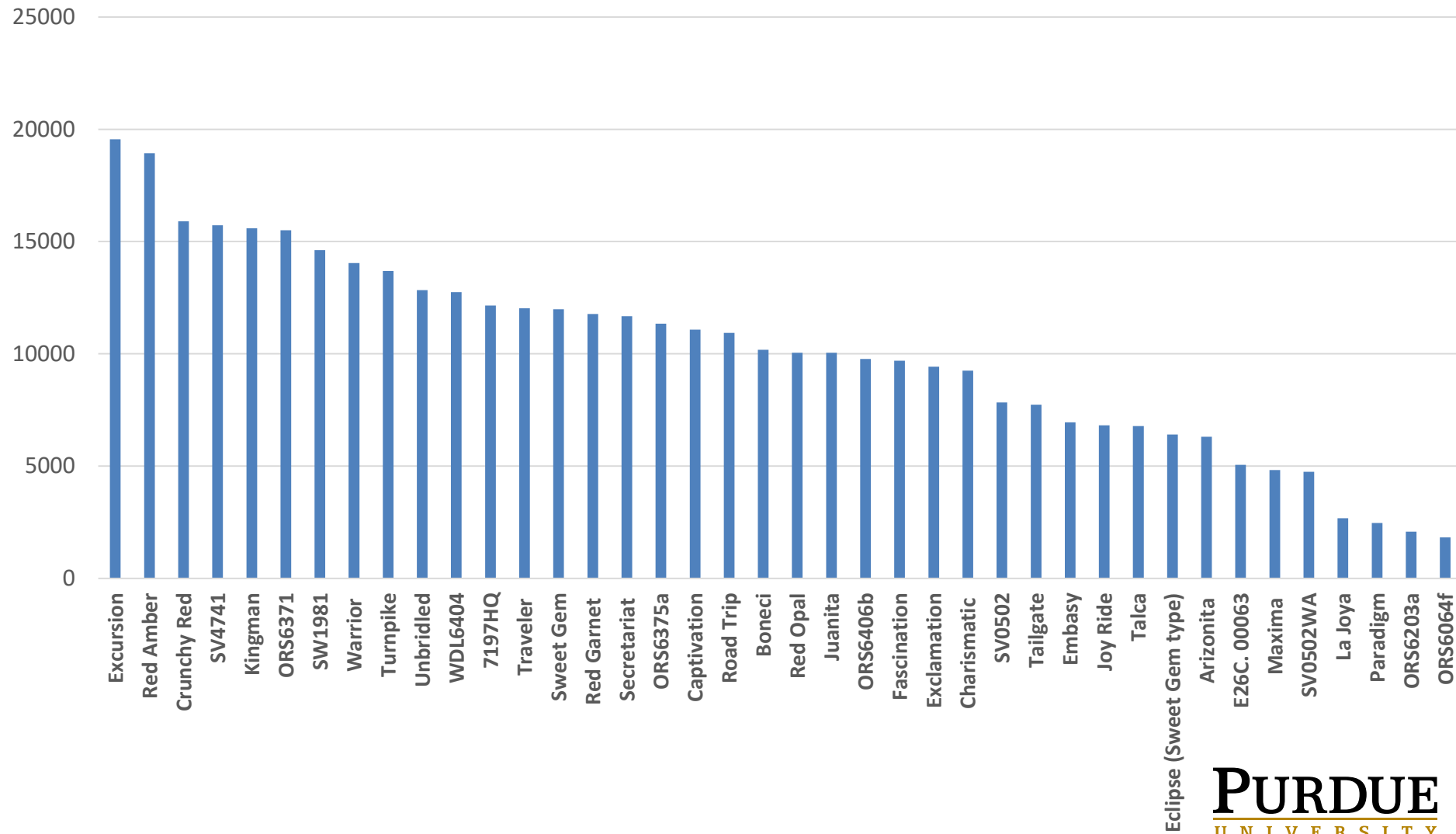
1. Standard-size triploid watermelons

Yield (lbs/acre)



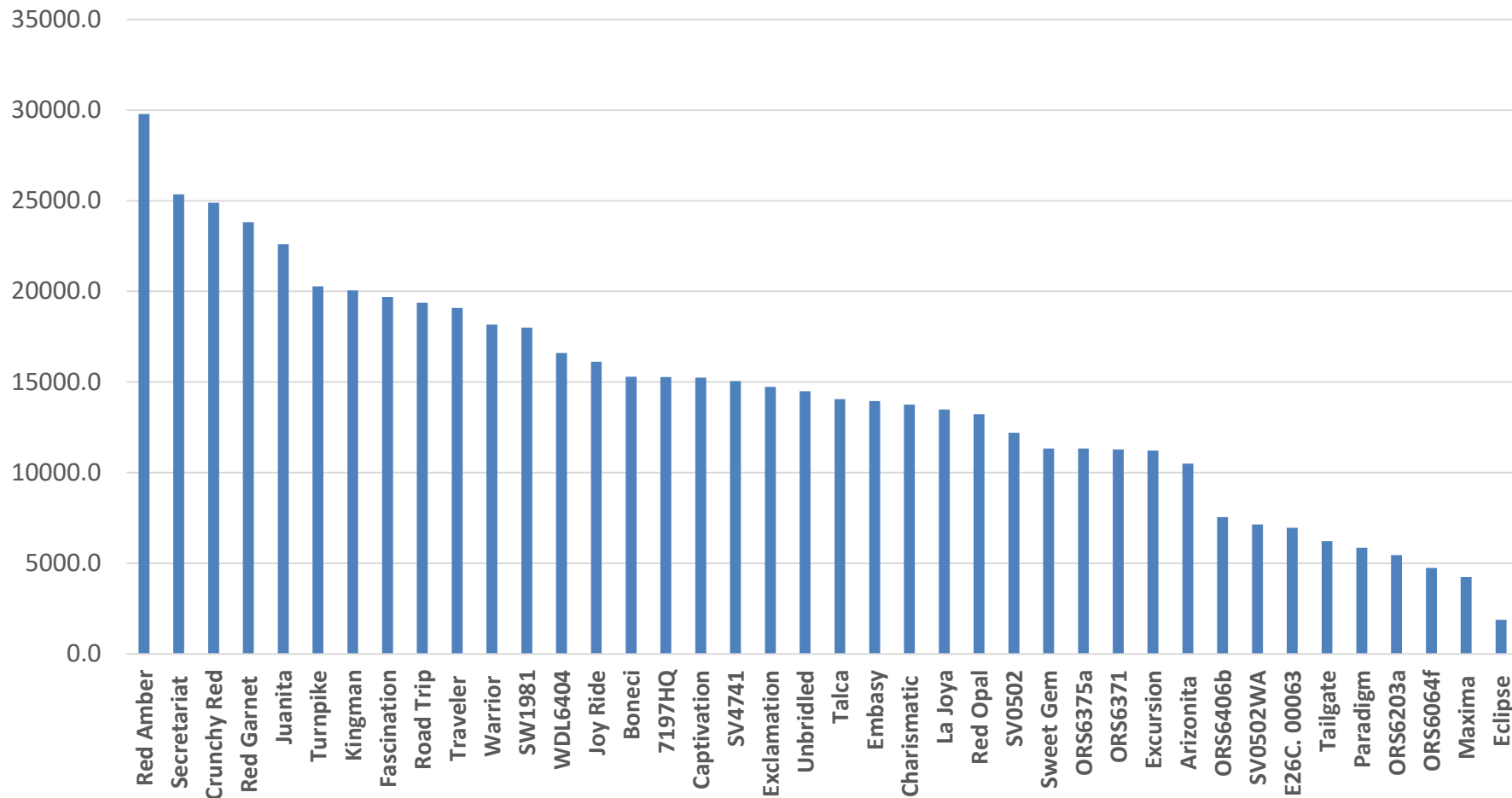
1. Standard-size triploid watermelons

Yield in the first harvest date (lbs/acre)

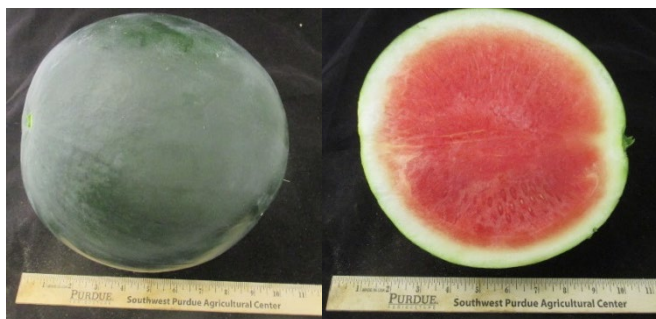


1. Standard-size triploid watermelons

Yield in 45-count fruit category (lbs/acre)



Eclipse



Yield: 37891 lbs/acre
Avg. fruit weight: 9.71 lb

Sweet Gem



Yield: 31906 lbs/acre
Avg. fruit weight: 12.4 lb

WDL6404



Yield: 30109 lbs/acre
Avg. fruit weight: 13.75 lb

Red Amber



Picture was taken in 2018

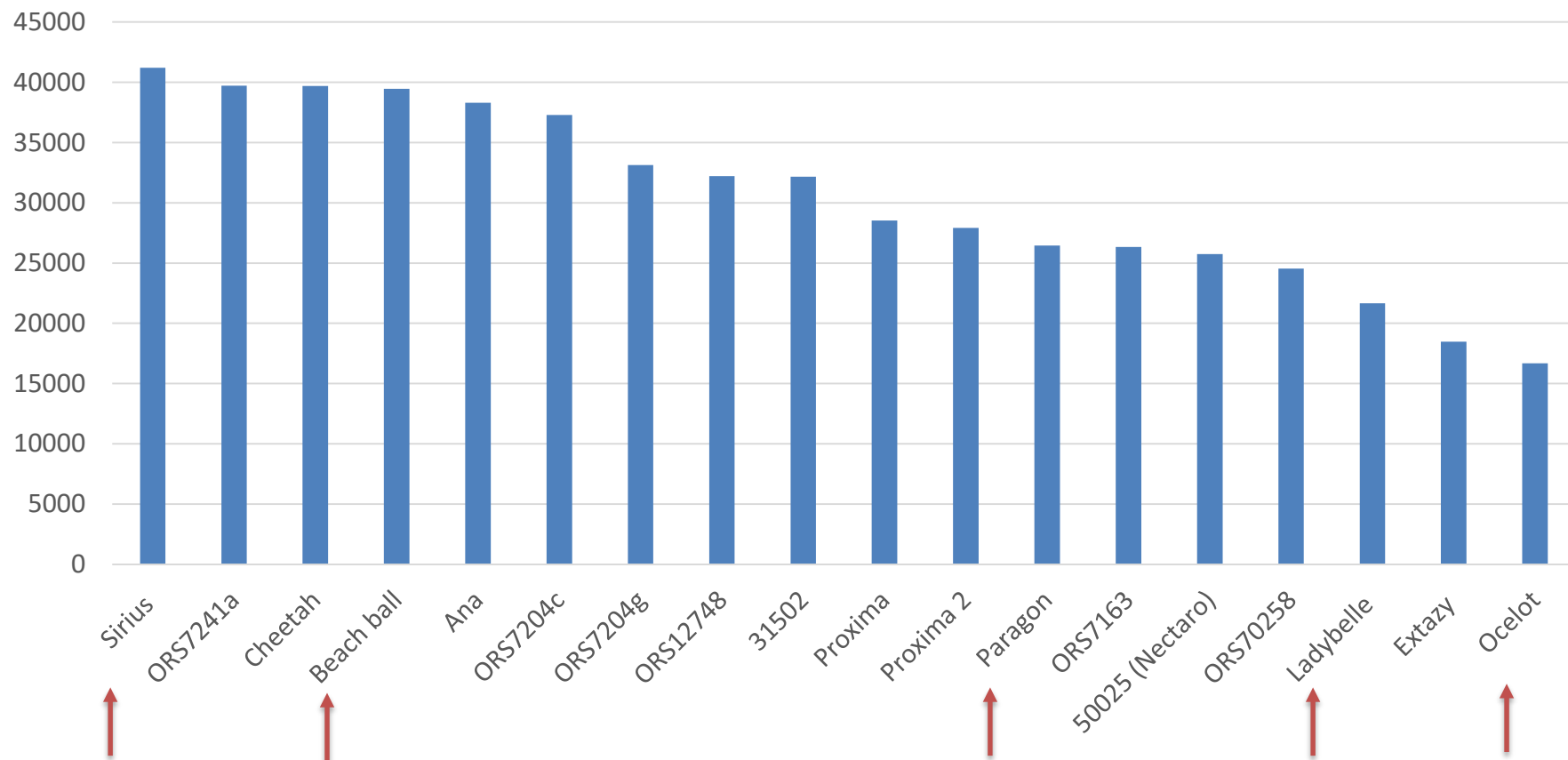
- Evaluated in 2017, 2018, 2019
- Red Amber was also the highest yield variety in 2017 (64792 lbs/acre) and one of the top yield varieties in 2018 (58433 lbs/acre).

	Average fruit weight (lb)	< 9 lb	60 count	45 count	36 count	30 count
2019	14.3	3	30	58	5	4
2018	16.6	0	20	43	22	13
2017	16.1	2	23	41	23	11

- Sugar content was moderately low

2. Personal-size triploid watermelons

Total yield (lbs/acre)



2. Personal-size triploid watermelons

Sirius



- Highest yield variety in 2019 (41198.5 lbs/acre), one of the top yield varieties in 2018 (65680 lbs/acre).
- Average fruit weight was 6.3 lb in 2019, 9.06 lb in 2018
- High sugar content

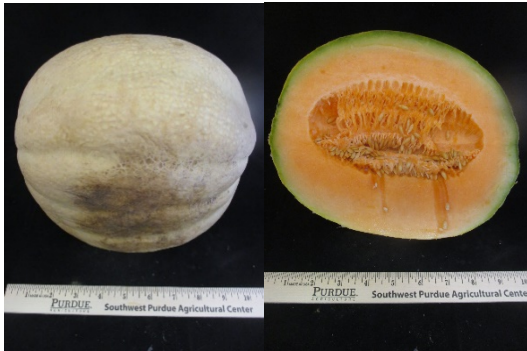


United States Department of Agriculture
National Institute of Food and Agriculture

3. Cantaloupe and specialty melons

Eastern cantaloupe varieties

Aphrodite



Astound

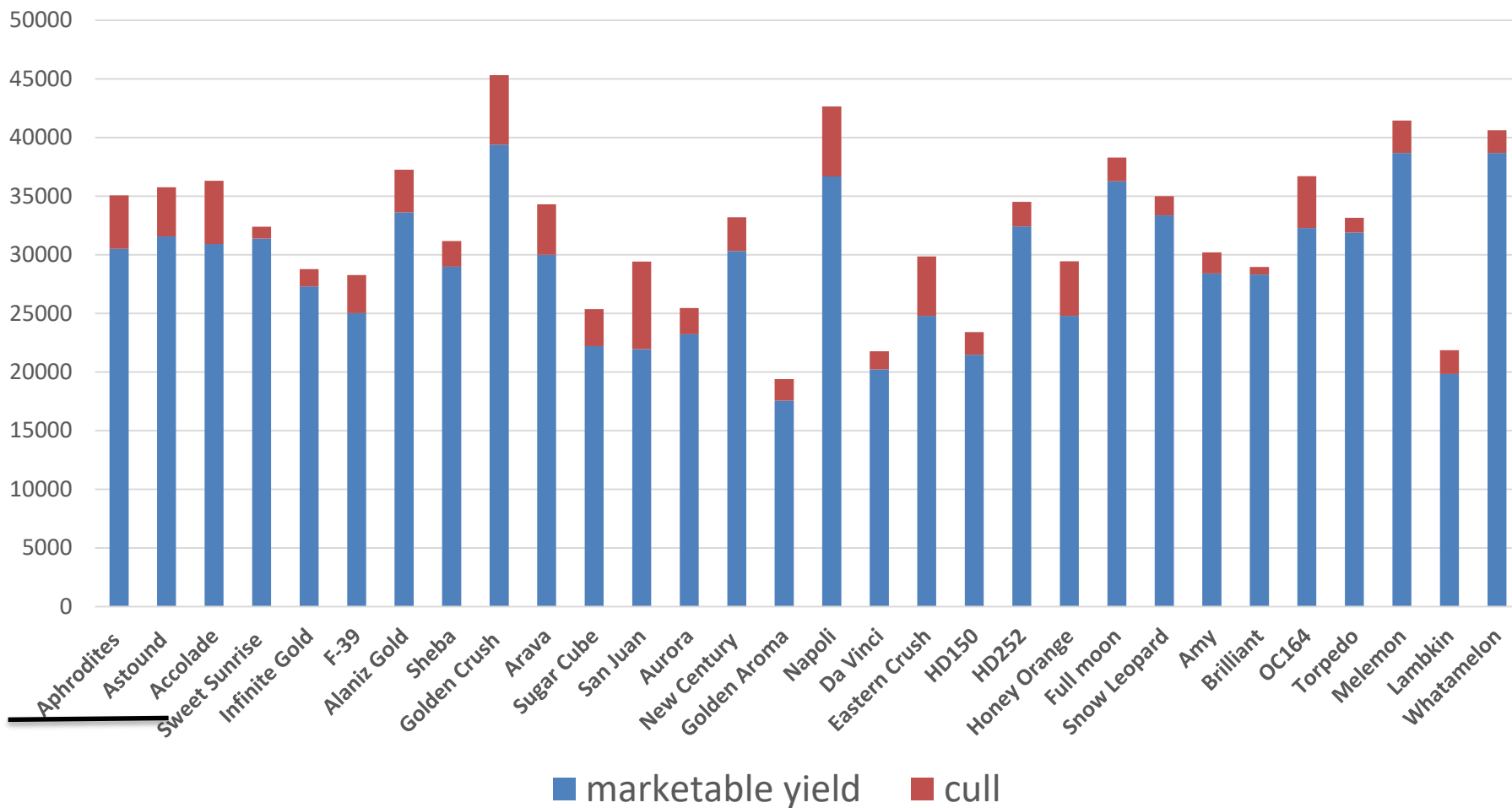


Accolade



	Aphrodite	Astound	Accolade
2019	30503	31562	30915
Average of 2016-2018	45095	42046	42046

Total Yield of cantaloupe and specialty melons in 2019



Golden Crush



Non-slip muskmelon

Marketable Yield: 13.6 lbs/plant

Average fruit weight: 4.8 lb

SSC%: 9.82 °Brix

Napoli



Tuscan melon

Yield: 12.6 lbs/plant

Average fruit weight: 5.1 lb

Flesh was soft, SSC%: 10.64 °Brix

Melemon



Yield: 13.3 lbs/plant

Average fruit weight: 5.1 lb

SSC%: 10.85 °Brix

pH: 4.72

Full moon



Honeydew

Yield: 12.5 lbs/plant

Average fruit weight: 4.9 lb

SSC%: 10.9 °Brix

Snow Leopard



Personal honeydew melon with unique exterior appearance

Yield: 11.5 lbs/plant

Average fruit weight: 2.5 lb

Producing 5-6 melons per plant, long harvest window

SSC%: 10.67 °Brix

Torpedo



Korean melon

Yield: 10.9 lbs/plant

Average fruit weight: 1.1 lb

Producing up to 10 melons per plant, long harvest window

Very firm flesh, crispy

SSC%: 10.55 °Brix

Sugar Cube



Cantaloupe, slip

Yield: 7.7 lbs/plant

Average fruit weight: 2.1 lb

SSC%: 12.43°Brix

Amy



Canary melon

Yield: 9.8 lbs/plant

Average fruit weight: 4.1 lb

SSC%: 11.83 °Brix

Brilliant



Canary melon

Yield: 9.7 lbs/plant

Average fruit weight: 4.9 lb

SSC%: 12.19 °Brix

Arava



Galia melon

Yield: 10.32 lbs/plant

Average fruit weight: 4.5 lb

SSC%: 10.34 °Brix

San Juan



Ananas melon

Yield: 7.6 lbs/plant

Average fruit weight: 3.9 lb

SSC%: 10.18 °Brix

New Century



Hami melon

Yield: 10.4 lbs/plant

Average fruit weight: 5.5 lb

SSC%: 11.52 °Brix

Aurora



Hami melon

Yield: 7.9 lbs/plant

Average fruit weight: 4.2 lb

SSC%: 10.59 °Brix

Acknowledgements

Everyone at SWPAC

Seed Companies:

Harris Moran

Hazera

HighMark

Enza Zaden

Known-You Seed

Nunhems/Bayer

Sakata

Seedway

Seminis

Syngenta

Sostena

Origene

US Agriseeds

United Genetics



United States Department of Agriculture
National Institute of Food and Agriculture

