

UNIVERSITY OF CALIFORNIA STRAWBERRY
BREEDING PROGRAM

2019 UPDATE ON NEW CULTIVAR RELEASES



2019 Cultivar Releases

- 1) UCD Victor (16SD045)
- 2) UCD Warrior (16SD034)
- 3) UCD Royal Royce (16DN009)
- 4) UCD Valiant (16DN011)
- 5) UCD Moxie (16DN012)

https://research.ucdavis.edu/industry/ia/industry/strawberry/cultivars/

OFFICE OF RESEARCH

ABOUT US RESEARCH INDUSTRY ENGAGEMENT PROPOSALS/GRANTS/CONTRACTS POLICIES/COMPLIANCE OFFICES RESOURCES CONTACT US

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The UC Patented Strawberry Cultivars

Day Neutral Varieties

- [Albion](#)
- [Cabrillo](#)
- [Monterey](#)
- [San Andreas](#)
- [Aromas](#)
- [UCD Royal Royce \(New\)](#)
- [UCD Valiant \(New\)](#)
- [UCD Moxie \(New\)](#)

Short Day Varieties

- [Camino Real](#)
- [Gaviota](#)
- [Mojave](#)
- [Petaluma](#)
- [Ventana](#)
- [Benicia](#)
- [Grenada](#)
- [Fronteras](#)
- [Merced](#)
- [Palomar](#)
- [UCD Victor \(New\)](#)
- [UCD Warrior \(New\)](#)

Summer Plant Varieties

- [Portola](#)



UCD Victor – New Short Day Cultivar

- Equitable marketable fruit yield to Commercial checks
- Good yields, comes on Mid to late season
- More compact plant, has performed well in organic culture
- Excellent post harvest fruit quality characteristics, firmer than Fronteras



Cultivar	Oxnard 2015-16	Santa Maria 2015-16	Camarillo 2016-17	Oxnard 2016-17	Across Location Fruit Size (g/plant)
UCD Victor	971	854	844	657	830
Fronteras	918	806	787	739	812
Petaluma	653	669	447	520	573
San Andreas	700	648	428	449	558



Variety	Type	Verticillium Resistance	Phytophthora Resistance	Fusarium Resistance	Macrophomina Resistance
UCD Victor	SD	3	2	1	3
Fronteras	SD	3	3	1	3
Petaluma	SD	2	3	3	3
San Andreas	DN	2	3	1	4

Fruit Quality Assessments in 5 locations in 2018

Cultivar	BRIX %	Firmness (g force)
UCD Victor	8.8	423
Fronteras	8.6	293



UCD Warrior – New Short Day Cultivar

- Equitable marketable fruit yield to Commercial checks
- Yields well early in the season
- Has very strong disease resistance package
- Good post harvest fruit quality characteristics



Cultivar	Oxnard 2015-16	Santa Maria 2015-16	Camarillo 2016-17	Oxnard 2016-17	Across Location Fruit Size (g/plant)
UCD Warrior	819	818	787	571	749
Fronteras	918	806	787	739	812
Petaluma	653	669	447	520	573
San Andreas	700	648	428	449	558



Variety	Type	Verticillium Resistance	Phytophthora Resistance	Fusarium Resistance	Macrophomina Resistance
UCD Warrior	SD	3	2	1	2
Fronteras	SD	3	3	1	3
Petaluma	SD	2	3	3	3
San Andreas	DN	2	3	1	4

Fruit Quality Assessments in 5 locations in 2018

Cultivar	BRIX %	Firmness (g force)
UCD Warrior	8.5	284
Fronteras	8.6	293



UCD Royal Royce – New Day Neutral Cultivar

- Significant marketable fruit yield advantage over Commercial checks
- Excellent yields over full season
- Significant reduction of runners during berry season
- Excellent post harvest fruit quality characteristics

Cultivar	Santa Maria		Prunedale		Across Locations & Years	% Marketable Fruit	Across Location Fruit Size (g/fruit)
	2015-16	2016-17	2015-16	2016-17			
UCD Royal Royce	2,016	2,329	1,750	2,632	2,183	87-88%	29.7
Cabrillo	1,617	2,073	1,362	2,299	1,838	86-87%	30
Monterey	1,115	1,324	1,077	1,722	1,310	79-82%	28.4
San Andreas	1,229	1,096	1,048	1,569	1,236	76-84%	26.7

Variety	Type	Verticillium Resistance	Phytophthora Resistance	Fusarium Resistance	Macrophomina Resistance
UCD Royal Royce	DN	2	3	4	3
Cabrillo	DN	2	3	4	4
Monterey	DN	3	3	4	4
San Andreas	DN	2	3	1	4



Fruit Quality Assessments in 5 locations in 2018

Cultivar	BRIX	%	Firmness (g force)
UCD Royal Royce	7.9		430
Cabrillo	8		360
Monterey	8.7		294

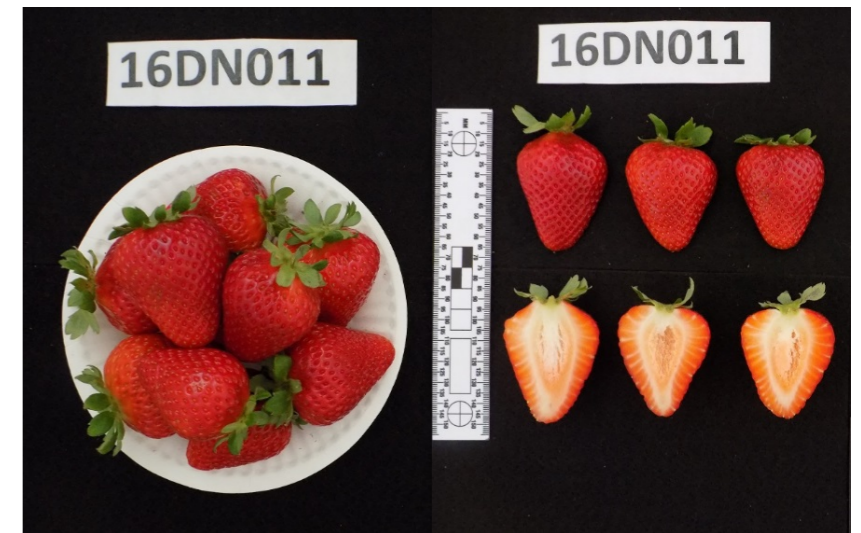


UCD Valiant – New Day Neutral Cultivar

- Significant marketable fruit yield advantage over Commercial checks
- Excellent yields especially early in the season
- Big vigorous plant, has performed well in organic culture
- Excellent post harvest fruit quality characteristics

Cultivar	Santa Maria		Prunedale		Across Locations & Years	% Marketable Fruit	Across Location Fruit Size (g/fruit)
	2015-16	2016-17	2015-16	2016-17			
UCD Valiant	1,984	2,380	1,460	2,482	2,078	84-86%	35.3
Cabrillo	1,617	2,073	1,362	2,299	1,838	86-87%	30
Monterey	1,115	1,324	1,077	1,722	1,310	79-82%	28.4
San Andreas	1,229	1,096	1,048	1,569	1,236	76-84%	26.7

Variety	Type	Verticillium Resistance	Phytophthora Resistance	Fusarium Resistance	Macrophomina Resistance
UCD Valiant	DN	2	3	4	4
Cabrillo	DN	2	3	4	4
Monterey	DN	3	3	4	4
San Andreas	DN	2	3	1	4



Fruit Quality Assessments in 5 locations in 2018

Cultivar	BRIX	%	Firmness (g force)
UCD Valiant	7.6		377
Cabrillo	8		360
Monterey	8.7		294



UCD Moxie – New Day Neutral Cultivar

- Significant marketable fruit yield advantage over Commercial checks
- Excellent yields especially later in the season
- Significant reduction of runners during berry season
- Excellent post harvest fruit quality characteristics



Fruit Quality Assessments in 5 locations in 2018

Cultivar	Santa Maria		Prunedale		Across Locations & Years	% Marketable Fruit	Across Location Fruit Size (g/fruit)
	2015-16	2016-17	2015-16	2016-17			
UCD Moxie	1,815	1,460	1,627	2,580	2,033	87-89%	32.1
Cabrillo	1,617	2,073	1,362	2,299	1,838	86-87%	30
Monterey	1,115	1,324	1,077	1,722	1,310	79-82%	28.4
San Andreas	1,229	1,096	1,048	1,569	1,236	76-84%	26.7

Variety	Type	Verticillium Resistance	Phytophthora Resistance	Fusarium Resistance	Macrophomina Resistance
UCD Moxie	DN	2	3	1	4
Cabrillo	DN	2	3	4	4
Monterey	DN	3	3	4	4
San Andreas	DN	2	3	1	4

Cultivar	BRIX	%	Firmness (g force)
UCD Moxie	7.6		425
Cabrillo	8		360
Monterey	8.7		294



University of California Strawberry Varieties' Yield

Instructions: Use the filters on the left and select various sections of each chart below to create custom reports. Use the tabs at the bottom to navigate to other report pages.

Trial Year

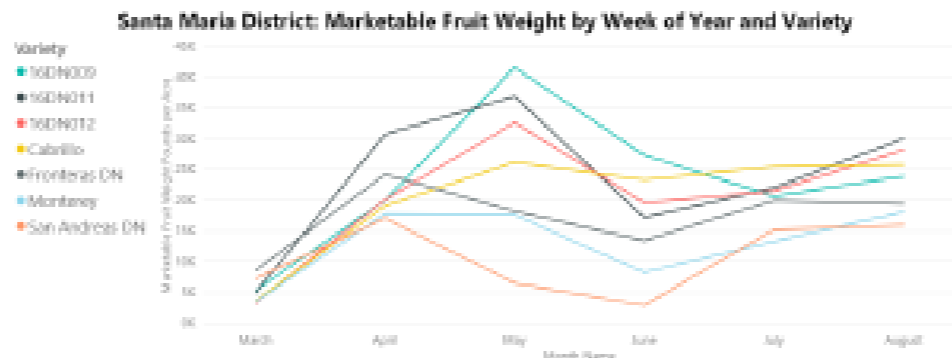
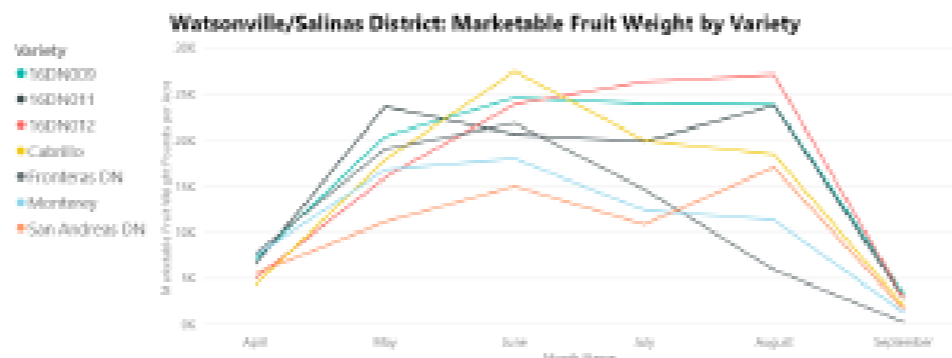
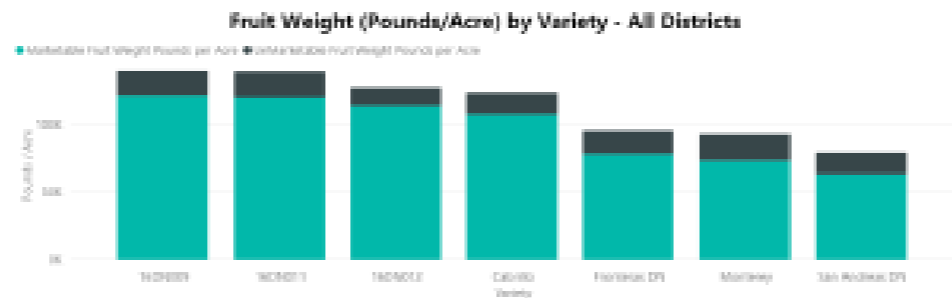
- 2017
- 2016

DN or SD

- Day Neutral
- Short Day

Variety

- Select All
- 16DN009
- 16DN011
- 16DN012
- Cabrillo
- Frontenas DN
- Monterey
- San Andreas DN



Disclaimer: This report is generated using data provided from UC Davis and the Cal Poly Strawberry Center. The California Strawberry Commission does not validate the accuracy of the data obtained from UC Davis or the Cal Poly Strawberry Center and is not responsible for any misuse of the data furnished.

University of California Strawberry Varieties' Resistance

Instructions: Use the filters on the left, and select various sections of each chart below to create custom reports. Use the tabs at the bottom, to navigate to other report pages.

DN or SD

- Day Neutral
- Short Day

Variety

- Select All
- 16DN009
- 16DN011
- 16DN012
- 16SD034
- 16SD045
- 16SD103
- Albion
- Benicia
- Cabrillo
- Camarosa
- Camino Real
- Diamante
- Fronteras
- Gaviota
- Grenada
- Merced
- Mojave
- Monterey
- Palomar
- Petaluma
- Portola
- San Andreas
- Seascape
- Selva
- Ventana

Legend Acronym	Legend	Resistance Numerical Category
R	Resistant	1
MR	Moderate Resistance	2
MS	Moderate Susceptibility	3
S	Susceptible	4

Variety	Type	Macrophomina Resistance	Verticillium Resistance	Fusarium Resistance	Phytophthora Resistance
16SD034	SD	2	3	1	2
16SD045	SD	3	3	1	2
Camino Real	SD	4	1	3	1
Portola	DN	4	2	1	2
San Andreas	DN	4	2	1	2
16DN012	DN	4	2	1	3
Diamante	DN	3	3	1	3
Fronteras	SD	3	3	1	3
Grenada	SD	2	2	4	3
Petaluma	SD	3	2	3	3
Ventana	SD	4	3	1	3
16DN009	DN	3	2	4	3
Merced	SD	4	3	4	1
Palomar	SD	3	3	3	3
Selva	DN	3	2	4	3
16DN011	DN	4	2	4	3
16SD103	SD	4	3	3	3
Albion	DN	4	2	4	3
Cabrillo	DN	4	2	4	3
Gaviota	SD	4	3	4	3
Mojave	SD	4	3	4	3
Monterey	DN	4	3	4	3
Benicia	SD	4	4	4	3
Camarosa	SD	4	4	4	3
Seascape	DN	4	4	4	3

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2019 Fall Release of Cultivars



- UCD Victor
- UCD Warrior
- UCD Royal Royce
- UCD Valiant

UCD Public Strawberry Breeding Program Operations

6

High-Elevation Nurseries
Asexual Propagation

2

Wolfskill Orchard
Germplasm Preservation & Statewide
Breeding Support

3

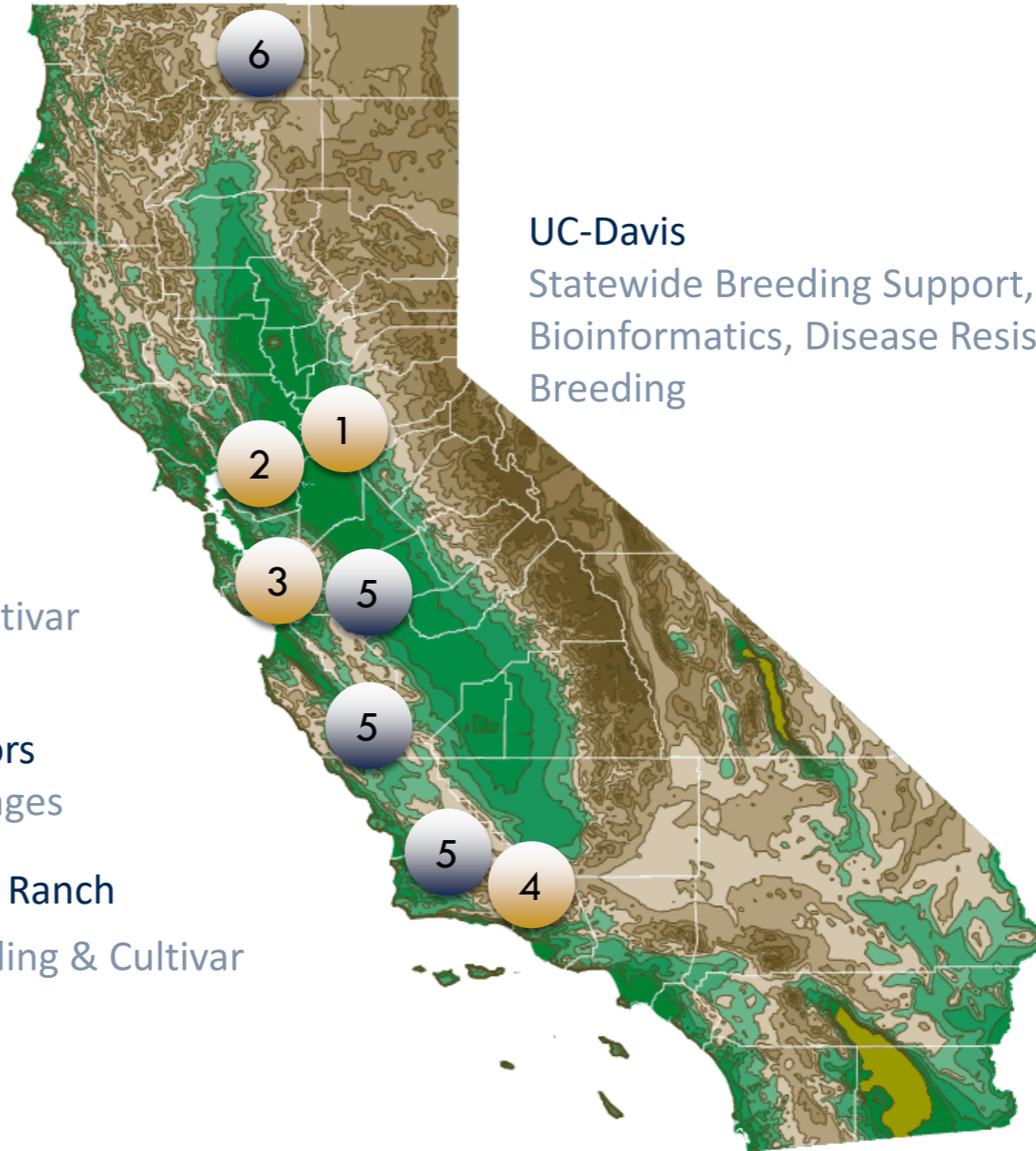
USDA Salinas
Day-Neutral Breeding & Cultivar
Development

5

Industry Collaborators
Several Breeding Stages

4

UC ANR Hanson Ranch
Short-Day Breeding & Cultivar
Development



UC-Davis
Statewide Breeding Support, Genomics,
Bioinformatics, Disease Resistance
Breeding

1



Summer Plant Selections – Strip Testing 2019

4 locations – Santa Maria/Lompoc
3 locations – Camarillo/Oxnard/Ventura

Tentative field day October 15 – Santa Maria



Selections in Trial

- Portola
- 17EDN012
- 17EDN013
- 17EDN015
- 17EDN019



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