UC Eclipse Cultivar (2023 release)

This is a new extreme day neutral cultivar from the UC Davis Strawberry breeding program. The initial breeding cross originated in 2017 and the selection 17C242P023 was made. This cultivar is a day neutral variety excelling in its use for summer plant culture but it has also performed very well in Fall planted regions growing day neutral varieties.

UC Eclipse produces marketable yields significantly higher than Portola, the key cultivar in the summer plant market segment. UC Eclipse produces large, firm fruit through the growing season with higher % marketable fruit than Portola.

UC Eclipse is resistant to Fusarium wilt (*Fusarium oxysporum*), moderately resistant to Verticillium wilt (*Verticillium dahlia*) and Phytophthora crown rot (*Phytophthora cactorum*), and is moderately susceptible to Charcoal rot (*Macrophomina phaseolina*).

Nursery productivity for UC Eclipse exceeds that of Portola the key day neutral cultivar in the summer plant market segment.

Performance of UC Eclipse in summer plant trials in Santa Maria and Ventura regions 2019-2021 (Yield in lbs/a harvested August-December)(Conventional vs Organic)

Cultivar	2019 Nipomo Conv	2019 Ventura Conv	2020 Guadalupe Conv	2020 Nipomo Conv	2020 Santa Maria Organic	2021 Nipomo Conv	2021 Lompoc Organic	Across Location Yields	Across Location Fruit Size (g/fruit)
UC Eclipse	65,608	27,109	54,656	43,944	29,402	79,399	37,097	48,174	30.2
Portola	47,314	19,759	16,877	29,748	19,901	52,399	30,549	30,935	26.3

Performance of UC Eclipse in Fall planted trials in Santa Maria and Watsonville regions 2021-2022 (Yield in lbs/a harvested March-September)(Conventional)

Cultivar	2021 Nipomo Conv	2021 Prunedale Conv	2022 Nipomo Conv	2022 Prundale Conv	Across Location Yields	Across Location Fruit Size (g/fruit)
UC Eclipse	129,616	150,408	62,944	203,226	136,549	30
UCD Valiant	107,279	119,864	57,602	93,437	94,546	33
UCD Royal Royce	93,142	128,842	39,241	92,924	88,537	28.8
Monterey	70,682	97,456	69,976	152,127	97,560	29.7

Disease Reaction of UC Eclipse in trials at UC Davis and Cal-Poly SLO 2019-2021

Cultivar	Verticillium Resistance	Phytophthora Resistance	Fusarium Resistance	Macrophomina Resistance
UCD_Eclipse	2	2	1	3
Portola	3	2	1	4

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

Fruit Quality Assessments 2019-2021

	BRIX	Firmness
Cultivar	%	(g force)
UC Eclipse	7.5	315
Portola	8	302