

UC Monarch Cultivar (2023 release)

This is a new short day cultivar from the UC Davis Strawberry breeding program. The initial breeding cross originated in 2017 and the selection 17C138P021 was made. It was subsequently tested as that number from 2020-2022. This cultivar is a early season short day variety that yields well into the season with excellent post-harvest keeping qualities.

UC Monarch produces both early and full season yields and % marketable fruit significantly higher than Fronteras and UCD Victor. UC Monarch does possess much firmer fruit than Fronteras. It performs best in fall planted production systems when harvested with at least 200 chilling hours from high elevation nurseries and grown in southern growing regions. The selection has also tested well in mechanical harvest trials and substrate culture systems.

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

Nursery productivity for UC Monarch is equal to that of Fronteras, a well-known short-day cultivar, as comparison.

Performance of UC Monarch in advanced trials in Oxnard and Santa Maria 2021-2022 (Yield in lbs/acre harvested through early June)

Cultivar	2021 Oxnard	2021 Santa Maria	2022 Oxnard	2022 Santa Maria	Across Location Yields	Across Location Fruit Size (g/fruit)
UC Monarch	45,894	46,220	13,026	31,097	34,059	25.6
UCD Victor	59,689	52,280	13,810	25,420	43,674	29.5
Fronteras	46,428	53,563	19,386	32,138	41,098	32.4

Disease Reaction of UC Monarch in trials at UC Davis and Cal-Poly SLO 2020-2022

Cultivar	Verticillium Resistance	Phytophthora Resistance	Fusarium Resistance	Macrophomina Resistance
UC Monarch	2	2	1	3
UCD Victor	3	2	1	3
Fronteras	3	2	1	3

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

Fruit Quality Assessments 2020-2022

Cultivar	BRIX %	Firmness (g force)
UC Monarch	7.7	307
UCD Victor	8	296
Fronteras	8.6	226





