



**UC DAVIS STRAWBERRY BREEDING PROGRAM**  
**DAY NEUTRAL CULTIVAR RELEASES**  
**PRUNEDALE, CA**  
**JUNE 14, 2023**

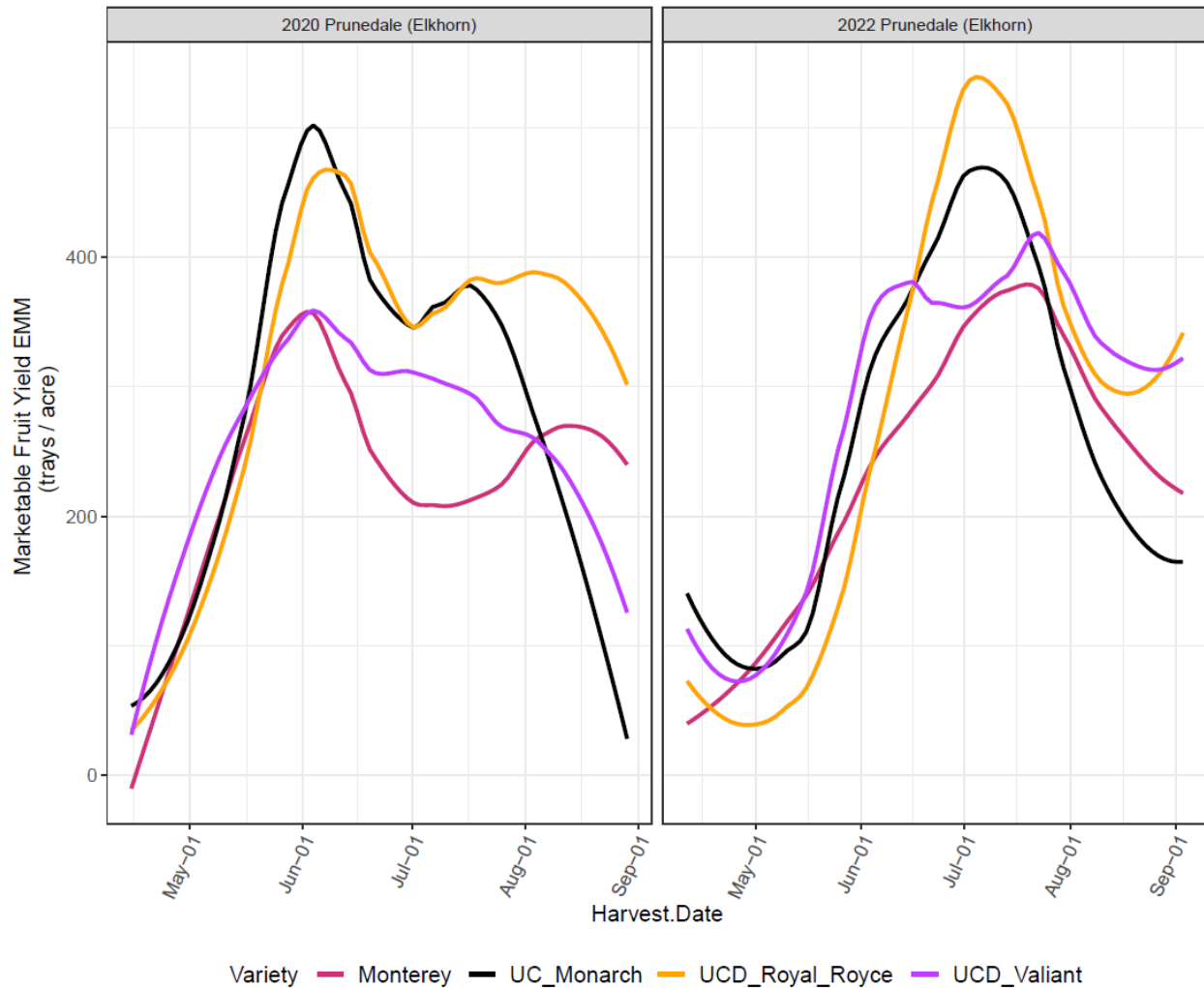
Cultivar	2020 Total Marketable Fruit Yield		2021 Total Marketable Fruit Yield		2022 Total Marketable Fruit Yield		Percent Marketable Fruit	Yield Increase Over Monterey
	g/plant	trays/acre*	g/plant	trays/acre*	g/plant	trays/acre*		
UC Monarch	2,786 ab	11,122	NA	NA	2,717 bc	10,846	76-78%	+ 11-22%
UC Golden Gate	3,224 a	12,872	3,869 a	15,445	3,285 a	13,113	84-88%	+ 27-41%
UC Keystone	3,227 a	12,882	3,626 ab	14,475	2,825 ac	11,278	80-85%	+ 15-41%
UC Eclipse	NA	NA	4,065 a	16,227	3,182 ab	12,702	80-90%	+ 30-33%
UCD Valiant	2,560 b	10,221	3,744 a	14,947	2,923 ac	11,669	69-79%	+ 12-23%
UCD Royal Royce	3,164 a	12,632	4,030 a	16,091	2,907 ac	11,605	84-91%	+ 19-38%
Monterey	2,293 b	9,154	3,051 b	12,182	2,453 c	9,792	81-89%	

**TABLE 1.** Cumulative marketable yield for three newly released day-neutral cultivars (UC Golden Gate, UC Keystone and UC Eclipse) and one short-day (UC Monarch) compared to three commercial checks (UCD Valiant, UCD Royal Royce and Monterey) tested in Prunedale, CA in 2020-2022 from April to August.

Values followed by different letters indicate significant statistical differences ( $\alpha=0.05$ )

\*Calculations made based on a planting density of 14,500 plants/acre

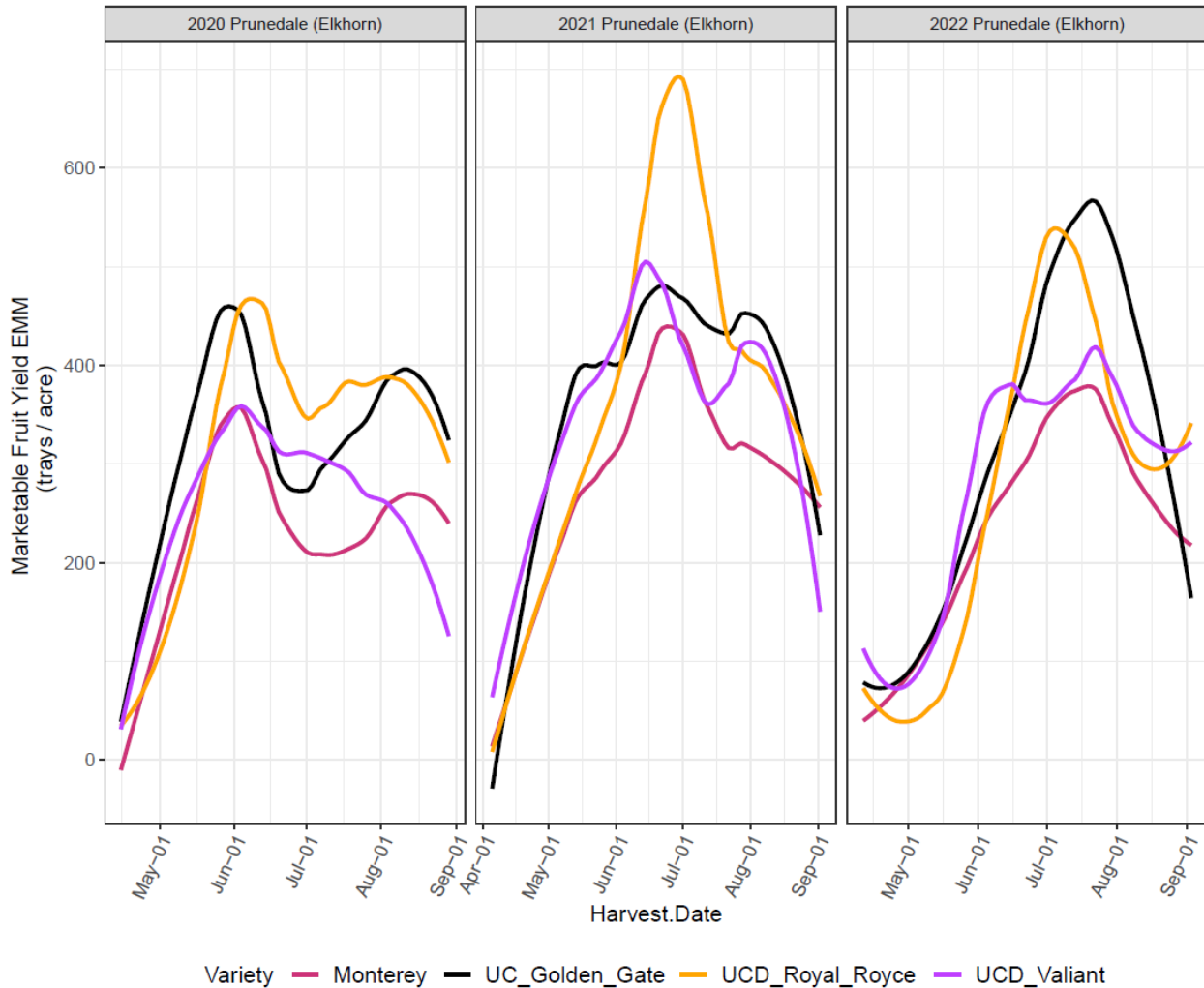
## UC MONARCH (17C138P021)



**FIGURE 1.** Marketable yields in trays/acre of UC Monarch compared to Monterey, UCD Royal Royce, UCD Valiant in Prunedale, CA during the fall plant harvest seasons of 2020 and 2022 (April to August).

- ✚ **High yielding short-day cultivar**, comparable yields to Fronteras and UCD Victor. Performs well in day-neutral environments with higher chill: Watsonville-Salinas and Santa Maria districts. Yield increase of 11-22% over Monterey observed in 2020 & 2022.
- ✚ Unique long-truss plant architecture, compact, suitable for table top and machine harvesting
- ✚ Firm, flavorful long-shelf life fruit with enhanced aroma
- ✚ **Resistant to fusarium** and moderately resistant to phytophthora and verticillium

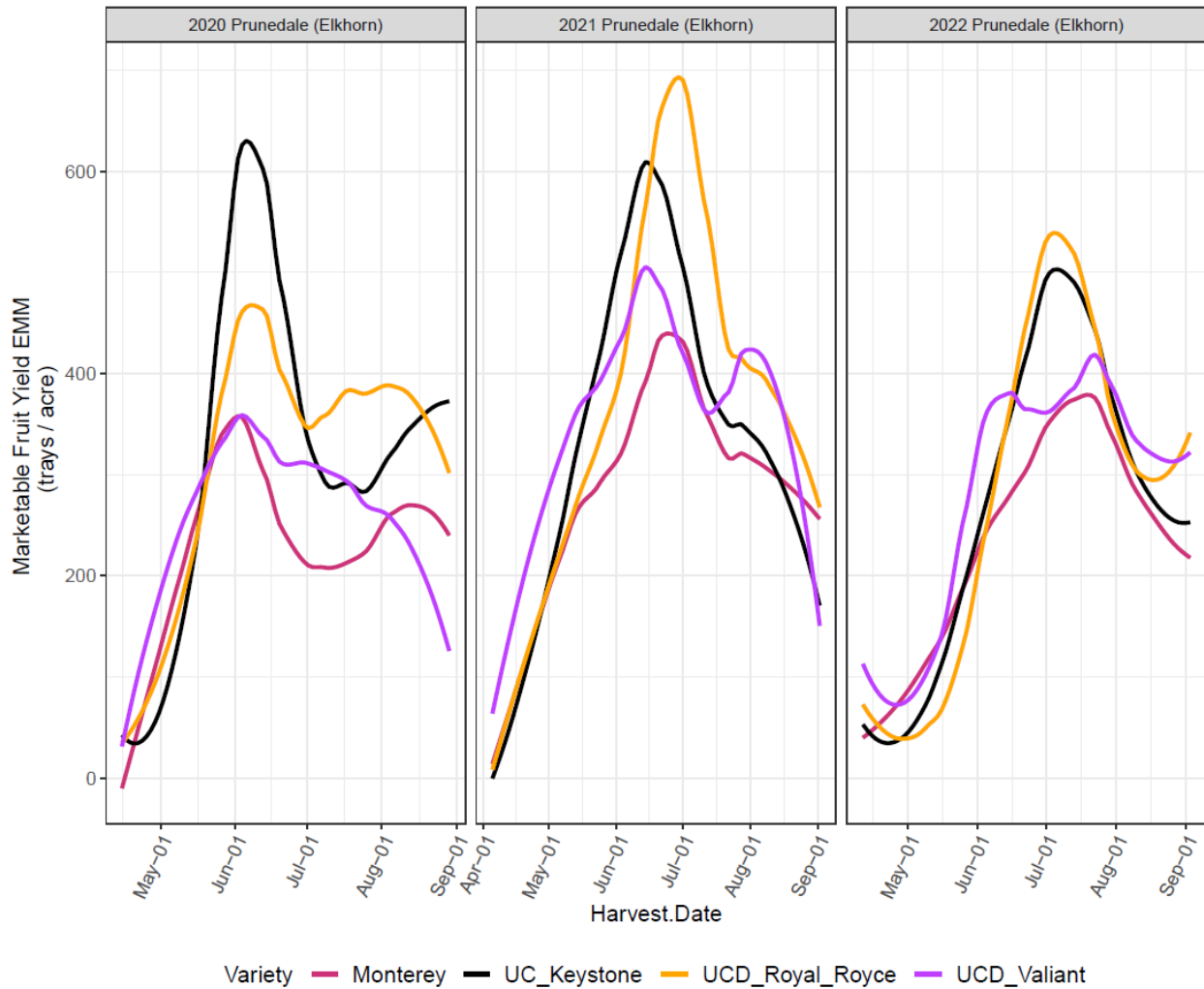
## UC GOLDEN GATE (17C139P045)



**FIGURE 2.** Marketable yields in trays/acre of UC Golden Gate compared to Monterey, UCD Royal Royce, UCD Valiant in Prunedale, CA during the fall plant harvest seasons of 2020, 2021 and 2022 (April to August).

- ✚ **High-yielding day neutral cultivar**, comparable or higher to UCD Valiant and UCD Royal Royce
- ✚ UC Golden Gate is slightly earlier than Monterey, displaying higher yields through the season (+27-41% over Monterey observed in 2020-2022)
- ✚ Compact type plant with long-truss architecture (potential for mechanical harvest)
- ✚ **Resistant to fusarium** and moderately resistant to phytophthora and verticillium

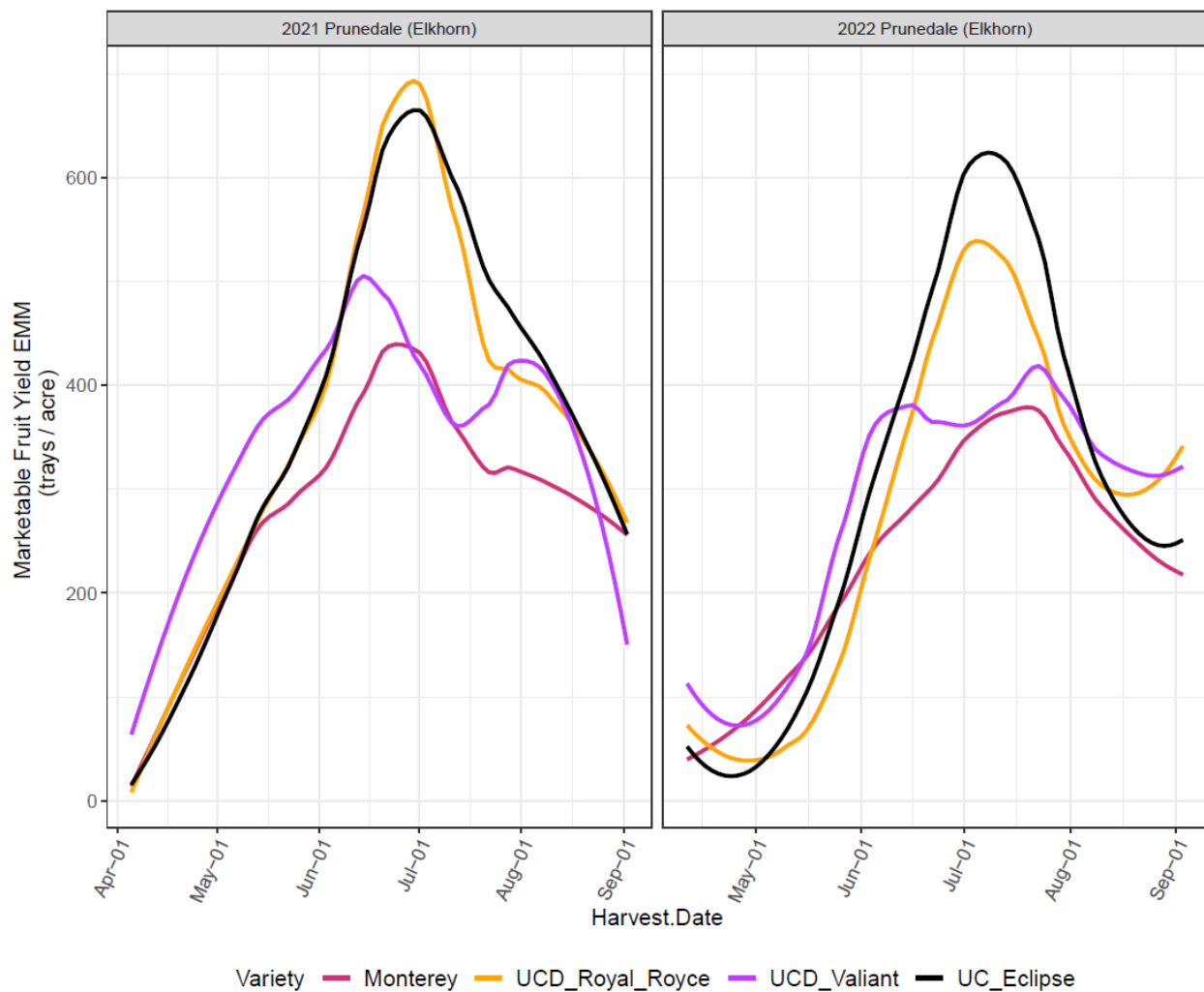
## UC KEYSTONE (17C138P062)



**FIGURE 3.** Marketable yields in trays/acre of UC Keystone compared to Monterey, UCD Royal Royce, UCD Valiant in Prunedale, CA during the fall plant harvest seasons of 2020, 2021 and 2022 (April to August).

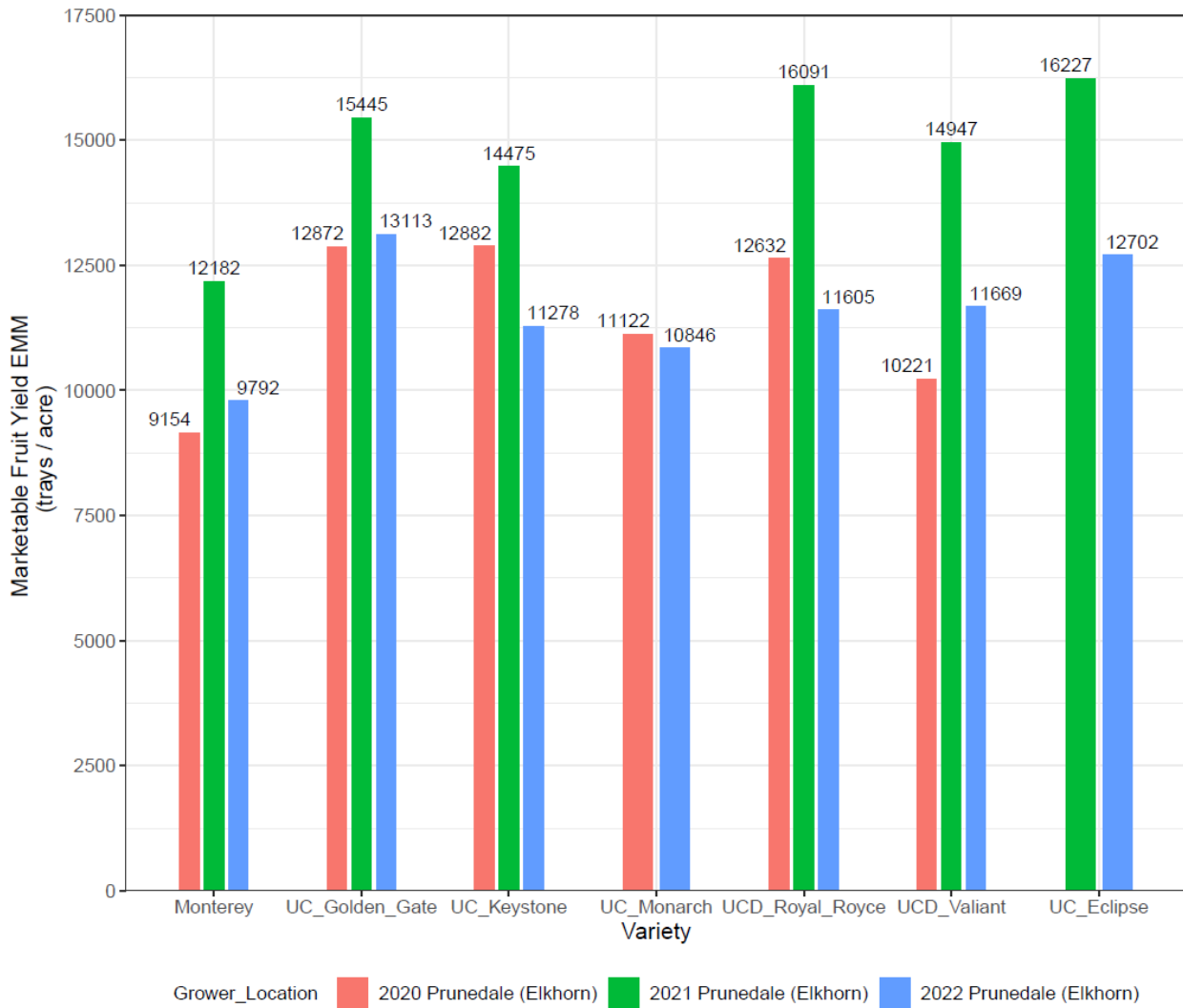
- ✚ **High-yielding day neutral cultivar**, comparable or higher yields to UCD Valiant and UCD Royal Royce. Yield increase 15-41% over Monterey observed in 2020-2022
- ✚ UC Keystone is later yielding like UC Royal Royce, while UC Golden Gate produces more fruit earlier. This enables growers to diversify production.
- ✚ **Resistant to fusarium** and moderately resistant to phytophthora and verticillium

## UC ECLIPSE (17C242P023)



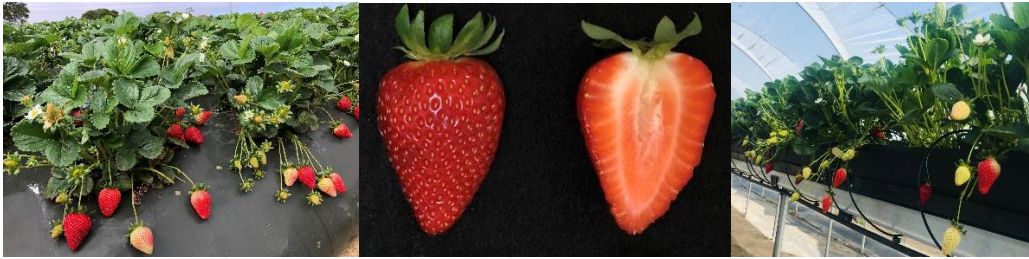
**FIGURE 4.** Marketable yields in trays/acre of UC Eclipse compared to Monterey, UCD Royal Royce, UCD Valiant in Prunedale, CA during the fall plant harvest seasons of 2021 and 2022 (April to August).

- ✚ **High-yielding extreme day-neutral cultivar** that adapts and performs very well in both, fall and summer plant production
- ✚ In 2021 and 2022 fall plant seasons UC Eclipse had a yield increase of 30-33% over Monterey
- ✚ Fruit size and firmness stay consistent throughout the growing season
- ✚ **Resistant to fusarium** and moderately resistant to phytophthora and verticillium



**FIGURE 5.** End of season cumulative yield (trays/acre) of UC Golden Gate, UC Keystone, UC Monarch and UC Eclipse compared to Monterey, UCD Valiant, UCD Royal Royce tested in Prunedale, CA during the harvesting season April-August of 2020-2022.

**UC MONARCH**



**UC GOLDEN GATE**



**UC KEYSTONE**



**UC ECLIPSE**



Cultivar	Fusarium Resistance	Verticillium Resistance	Phytophthora Resistance	Macrophomina Resistance	Firm. (gf)	Brix (%)	Brix/Acid	Fruit Size (g)
UC Keystone	1	2	2	3	238	7.8	9.9	29
UC Golden Gate	1	2	2	3	333	8.0	9.1	31
UC Eclipse	1	2	2	4	253	7.0	8.5	36
UC Monarch	1	2	2	3	362	7.0	9.4	28
Monterey	4	3	3	4	233	8.3	10.9	31
UCD Royal Royce	4	3	2	3	340	7.0	8.6	31
UCD Valiant	4	2	2	3	278	7.0	9.0	36

For additional information about UC released cultivars visit: <https://www.calstrawberry.com/en-us/>

**TABLE 2.** Disease resistance scores were collected from annual disease trials performed at the Cal Poly Strawberry Center and UC Davis. Fruit quality traits were measured in the 2020-2022 harvest seasons in Prunedale, CA. Evaluations were made in peak (May-June) and late (July-August) seasons.