

Midseason fruit, first year production from summer planting at Torrey Pines, San Diego County. Top row—Fresno; bottom row—Torrey.



growth habit, can be distinguished readily by the deeply incised, rather irregular leaflet lobes lending a somewhat wrinkled appearance to the leaf blades.

Torrey has essentially the same cultural characteristics as the Fresno: vigor, high runner production, tolerance to warm winters, susceptibility to Verticillium wilt, fair tolerance to salinity, and a similar virus reaction.

The fruits of Torrey are darker in color than the Fresno—about like Lassen—and they tend to be wedge-shaped much more than the Fresno.

Variety Torrey has performed consistently well in tests at the Torrey Pines experimental plots and significantly better than Fresno, although somewhat inferior to Lassen. In summer plantings in southern California, Torrey comes into production earlier than either Lassen or Fresno. However, in summer plantings elsewhere in the state, Fresno has performed better than Torrey. Both varieties have compared favorably with Lassen.

Variety Wiltguard, tested as Cal 52.16-7, was selected at Davis from a progeny originating from a cross between Cal 39.117-4 and Cal 39.96-18. Cal 39.117-4, a sister of variety Cupertino, was the female parent. Cal 39.96-18

New strawberry varieties

Fresno, Torrey, Wiltguard

for California growing areas

R. S. BRINGHURST and VICTOR VOTH

Released for unrestricted propagation in the spring of 1960, three new strawberry varieties are available for trial in all California growing areas.

Variety Fresno, tested as Cal 53.9-10, was selected at Torrey Pines, San Diego County, in 1955 from a progeny originating from a cross between variety Lassen as the female parent and variety Cal 42.8-16. Cal 42.8-16 originated from a cross between Sierra and Cal 39.40-23, which had as progenitors: Blakemore, Narcissa, Nich Ohmer, N.Y. 4626, U.S. 543, and U.S. 634.

Fresno plants closely resemble Lassen in leaf type and growth habit, but tend to be more vigorous. Runner production equals or exceeds that of Lassen. Fresno grows well after warm winters in southern California and is at least as tolerant of salinity as Lassen.

Fresno is highly susceptible to Verticillium wilt and is more susceptible to virus than Lassen, as a crinkle type virus symptom is manifested following infection of Fresno with a virus complex that causes no apparent symptoms in Lassen.

Fresno fruit is generally attractive in appearance, resembling that of Lassen, and is long-conic in shape with a tend-

ency to be wedge-shaped at certain times. Average fruit size exceeds that of Lassen. The skin is quite tough and generally lighter in color than that of Lassen, and Fresno fruit does not darken so readily as the Lassen. The cap separates from the Fresno fruit very easily. The fruit is much less subject to catfacing than Lassen, particularly in summer plantings. The achenes—seeds—are yellow, medium in size and spacing, and generally positioned flush with the surface of the fruit. The flesh is firmer than that of Lassen. In dessert quality, Fresno is superior to Lassen.

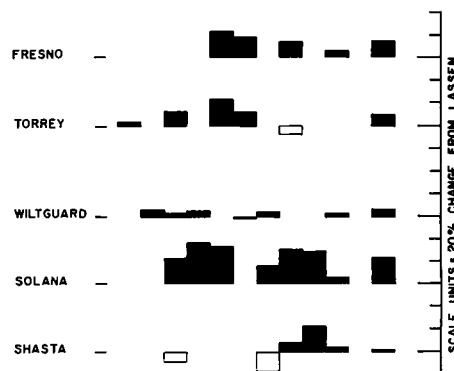
On summer plantings in southern California, Fresno comes into production about the same time as Lassen.

The Fresno variety has been outstanding in growers' tests at Fresno and has shown promise in similar tests in southern California and near Santa Maria.

Torrey and Wiltguard

Variety Torrey, tested as Cal 53.9-9, was selected at the same time and place as Fresno, and is of the same parentage.

Torrey plants, though generally similar to Lassen and Fresno in leaf type and



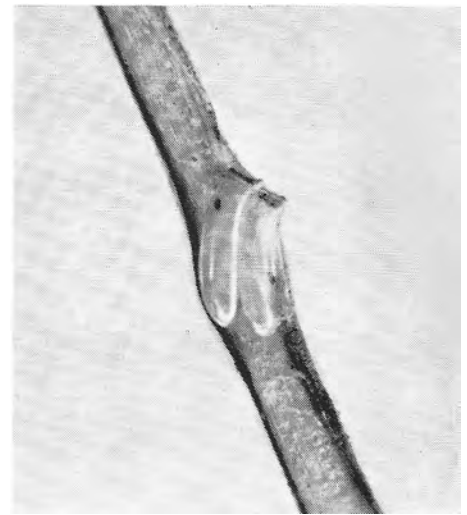
PLANTING AREA	W.	SUMMER 2	S.	2	S.	AV.
LOCATION	T.P.	S.C.	T.P.	S.C.	DAVIS	S.J.
HARVEST YR.	1959	60	59	60	1960	

Average fruit weight of Fresno, Torrey, Wiltguard, Solana, and Shasta strawberry varieties in 1959-60 performance tests at Torrey Pines and Santa Ana (SC) in southern California, at Davis in the Sacramento Valley, and at San Jose in the central coast area, comparing first year fruit from winter and summer plantings and second year fruit. Black indicates an increase and clear indicates a decrease in weight relative to that of Lassen.

Lygus Bug Damage

to table beet seed plants

ELMER C. CARLSON



Lygus bug eggs on twig

Damage to seed crops by lygus bugs—*Lygus hesperus* Knight—has occurred in alfalfa, beans and other legumes, carrots and other umbelliferous seed plants, and in sugar beets. The damage may be plant deformation, die-back, and reduction of seed yield and seed viability. Degree of damage varies considerably depending on type of damage, the crop involved, and the numbers of bugs.

bugs in relation to weight and viability of table beet seeds indicate that 2-4 bugs per sweep constitute a potentially damaging infestation. This relationship is important, because table beet seed fields are often sampled with a standard sweep net, which samples about one-sixth of 1-2 plants per sweep.

The data presented on numbers of

Possible effects on quantity and quality of developing table beet seeds were investigated by artificially infesting

caged portions of field plants with lygus bugs. Bolting plants were exposed to male lygus bugs, with levels of infesta-

originated from a cross between Cal 35.107-2 and Cal 36.48-1, with progenitors: Blakemore, Nich Ohmer, Redheart, Ruby, B.H. 14, N.Y. 4626, U.S. 543, and U.S. 634.

Plants of Wiltguard are vigorous semi-dense in growth habit, and they runner prolifically. The leaves are medium in size and dark green with short obovate, upcupped leaflets.

Wiltguard is fairly resistant to Verticillium wilt, although it is less resistant than the Sierra variety. It has performed well in back yard culture where tomatoes had been grown.

The fruit of Wiltguard is essentially of the Cupertino type, borne on low to medium high branching stems, and with some of the undesirable as well as the desirable characteristics of the Cupertino. Fruits are blunt-conic to conic in shape with exceptionally attractive color, both inside and out, that does not darken. The seeds are bright yellow, flush with the skin surface, medium spaced, and small sized. The fruit is highly flavored. Wiltguard tends to produce quite a number of button-type split fruits, particularly toward the end of the crop season.

On summer plantings, Wiltguard usually commences production earlier than any of the other University released varieties, especially in the central valleys and at San Jose. It has yielded consistently well.

Limited testing of the three new varieties, under the various cultural systems and particularly summer planting, should be made in all growing areas for

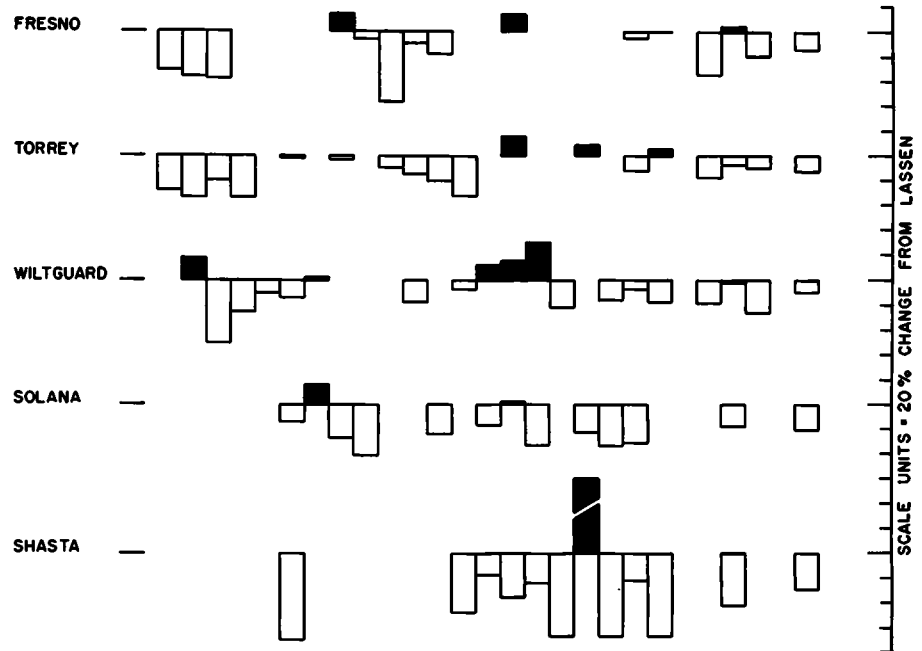
evaluation of each variety under commercial conditions.

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Salinity tolerance of variety Fresno was shown in comparative tests made by C. F. Ehlig at the Regional Salinity Laboratories in Riverside.

Information concerning planting stock of the new strawberry varieties may be obtained from nurserymen or from the Foundation Plant Materials Service, University of California, Davis.



PLANTING AREA	WINTER		SUMMER				2 nd YR.		S.	2	W.	S.	2	W. S. 2	Grd. Av.	
	T.P.S.A.	T.P.	S.A.T.P.	S.A.	S.B.T.P.	S.A.T.P.	DAVIS	Salin.								S. JOSE
HARVEST YEAR	56	57	58	1959	60	57	58	59	57	59	60	59	60	59	60	59

Yield of Fresno, Torrey, Wiltguard, Solana, and Shasta strawberry varieties in performance tests from 1956 through 1960 at Torrey Pines, Santa Ana, San Bernardino, Davis, Salinas, and San Jose, comparing first year production under winter and summer planting systems and second year production. Black indicates an increase and clear indicates a decrease in relation to the yield of Lassen. The broken black column for the 1960 winter planting of Shasta at Salinas indicates 100% increase over Lassen.