Fall Planted Strawberry Plants

experiments indicate freshly dug mature plants will give satisfactory production the following year in certain areas

- Victor Voth, R. S. Bringhurst, David Van Hook, and E. L. Kendall

Strawberry plants of the Lassen variety dug from nursery beds in Tehama County in late November 1954 have yielded two thirds of a full crop during 1955 in San Diego plantings.

Experiments, completed at Torrey Pines, San Diego County—a frost-free location—and at Davis, compared plantings of freshly dug plants harvested at different dates with plants that had been stored and then planted. Stored plants were packed firmly in wooden boxes and held at 28F until planted.

Plots of the November dug plants yielded significantly more fruit than plots of the October dug plants. The difference in yield among all the plots involving plants dug in the fall was due to the difference in stand. Many of the October dug plants were small and apparently immature. The October plants set after three weeks cold storage treatment gave only a 60% stand and consequently the lowest yield of any of the

Stand Counts and Yields in 12-Pint Crates per Acre at Torrey Pines

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Variety	Dates dug	Storage	Dates planted	Stand	1955 yleld
Lassen	Oct. 28, 1954	None	Nov. 5, 1954	85%	3,264 crates
"	"	3 wks.	Nov. 29, 1954	60%	2,221 "
"	Nov. 26, 1954	None	Dec. 1, 1954	95%	3,526 "
"	\boldsymbol{n}	3 wks.	Dec. 23, 1954	96%	3,602 "
**	**	8 wks.	Feb. 1, 1955	95%	396 "
"	Feb. 3, 1955	7 wks.	Mar. 25, 1955	95%	195 "
"	Dec. 1953	7 mos.	Aug. 1, 1954	*	5,452 "
Shasta	11	**	n'	•	1,320 "
Lassen	Second Year Pr	oduction,	1953 plants	*	4,594 "

^{*} Stand filled out with runner plants.

fall planted plots. Regardless of the planting date, all plots began their spring growth at the same time, with the November dug plants showing slightly more vigor than the October dug plants.

Three weeks cold storage did not affect the stand or production of plants dug in November. The upper line graph illustrates that the distribution of the production from the December plantings of the

November dug plants was the same throughout the harvest season. There was a tendency for a few of the plants that had received the three weeks cold storage treatment to cease fruit production and go to runners earlier than those that had not been stored.

Plants that were dug November 26 and planted February 1 produced very little fruit. This was due to the fact that February 1

June 4, 1955, runnering condition of plants dug on November 26, 1954, stored eight weeks at 28F, and set on February 1, 1955, compared with fruiting condition of plants dug on the same date but stored only three weeks and set on December 23, 1954.



Stand Counts for the Various Davis Plantings

Variety	Date dug	Storage	Date planted	5tand
Shasta	Oct. 28, 1954	None	Nov. 1, 1954	96%
Lassen	"	#	11	93%
Shasta	"	3 wks.	Nov. 29, 1954	13%
Lassen	**	"	"	86%
Shasta	Nov. 22, 1954	"	Dec. 15, 1954	78%
Lassen	Nov. 26, 1954	"	"	77%
Shasta	Nov. 22, 1954	4 wks.	Dec. 22, 1954	50%
Lassen	Nov. 26, 1954	u	23	85%
Shasta	Feb. 3, 1955	4 mos.	June 2, 1955	97%

ruary set plants ceased to form fruit buds and began to develop runners before much fruit was produced, as shown in the photograph. Plants dug in February and planted in March were very similar to the February planting.

The production distribution of fruit from the three types of plantings under comparison at Torrey Pines is illustrated in the broken-line graphs. April planting refers to 1955 production from plants set in 1953, August planting refers to plants that were dug in December 1953, stored for approximately seven months at 28F, and then planted the first of August 1954. December planting refers to the average production of the December 1st and the December 23rd 1954 plantings.

August plantings produce a large crop of high quality fruit early in the season when the market price is very good.

December plantings produce a small early crop of good quality fruit, but do not reach substantial production until late in June. During June the December planting yields a small amount of very large fruit which can be sold as stems.

April plantings produce a good crop of good quality fruit with production more or less continuous from April until November.

Both August and December plantings go out of production earlier than the April plantings. The Shasta variety will not grow satisfactorily at Torrey Pines, San Diego County, after it has gone through the winter, even though plants are stored for seven months at 28F and then set in August. Prior to being subjected to the warm winter at Torrey Pines, Shasta grows as well as Lassen when both are planted in April. This is also true of Donner, Tahoe, Sierra, and Cupertino. The Campbell variety will grow quite well during the harvest season but fails to produce a satisfactory crop.

At Davis, fall dug Shasta or Lassen plants set in November and December do not produce sufficient fruit during the following season to make fall planting profitable. The plants are similar in appearance to those that were planted later.

Short storage periods affected the livability of early dug Shasta plants more than that of Lassen. This was probably due to the fact that the Lassen

plants were more mature at harvest than the Shasta.

Previous planting experiments at Davis have indicated that a full crop may be obtained during the following harvest season with either the Shasta or Lassen variety if stored plants are set by about July 15. A fair crop can be obtained if plants are set by approximately August 15.

The importance of harvesting mature plants should be stressed, particularly if the plants are to be held in storage before planting. The exact time that plants of a given variety may be safely dug at a certain location will probably vary from year to year.

Victor Voth is Assistant Specialist in Pomology, University of California, Davis.

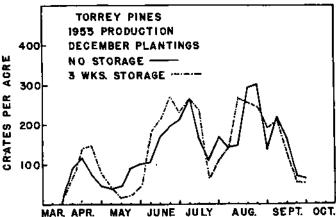
R. S. Bringhurst is Assistant Professor of Pomology, University of California, Davis.

David Van Hook is Senior Laboratory Technician, University of California, Davis.

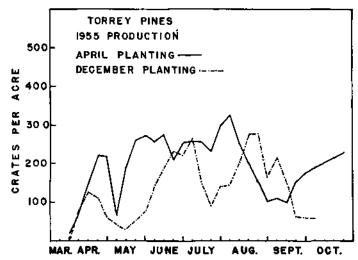
E. L. Kendall is Senior Laboratory Technician, University of California, Davis.

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1955 production from plants dug November 26, 1954, set without storage December 1, 1954, compared with that from plants dug the same date, stored at 28F for three weeks, set December 23, 1954.



1955 production from plants dug November 26, 1954, set in December 1954, compared with second-year production from plants set in 1953.



1955 production from plants dug November 26, 1954, set December 1954, compared with that of plants dug December 1953, stored at 28F for seven months, set August 1, 1954.

