
Observational Trial of Strawberry Cultivars and Advanced Selections for Production in North Florida 98-05

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Introduction

The strawberry industry in Florida had shifted over the last 20 years and the majority of the 6,000 acres is now concentrated in the Dover and Plant City area. The focus used to be in North Florida in Bradford County with Starke as the hub. There are still strawberries grown in Bradford and several other counties in North Florida, but only on a relatively small acreage. The emphasis in North Florida now is on local sales of high quality fruit directly to the consumer, including U-pick operations. An estimated 30-40 acres of strawberries are grown in North Florida currently.

Production practices are very similar to those used in Plant City. Growers cover 23-30" wide beds with black polyethylene mulch. Most growers use overhead sprinklers to irrigate the crop for establishment in October and during the season. Overhead sprinklers are also for frost protection as well. A few North Florida growers have adopted the use of drip irrigation to provide efficient delivery of water and nutrients to the crop. When drip irrigation is used, frost protection can be provided by the use of row covers or a separate sprinkler system.

Since there is a high likelihood that freezing temperatures will occur during the fruiting season in North Florida, growers need to plan for frost protection. Row covers made of polypropylene or polyester can be pulled over the crop on nights when risk of frost is great. The covers can be left on the crop for a few days if cold temperatures are to persist each night.

The most popular cultivar in North Florida has been and continues to be 'Chandler'. 'Camarosa' and 'Sweet Charlie' have gained acreage in the past few years. 'Camarosa' is similar to 'Chandler' but has been somewhat earlier. 'Sweet Charlie' has very sweet berries and is very early, however, has not produced as consistent high yields as 'Camarosa' or 'Chandler' in North Florida. This trial was conducted to evaluate several

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commercial cultivars and other advanced selections from the University of Florida breeding program.

Materials and Methods

Plots were established in a Lakeland fine sand at the North Florida Research and Education Center - Suwannee Valley near Live Oak, FL. Preplant soil tests (Mehlich-1 extract) showed 108 ppm P, 14 ppm K, 18 ppm Mg, and 439 ppm Ca. Soil pH was 6.3 using a 1:2 soil:water solution. The soil was fertilized prior to planting by incorporating 500 lbs per acre of 13-4-13 (N-P₂O₅-K₂O) in the beds on 3 October 1997. The crop also received an additional 90 lbs per acre of N and K₂O via weekly fertigations from January through April. Beds were formed on 5 ft. centers and fumigated with a mixture of methyl bromide and chloropicrin (98:2) at a broadcast rate of 400 lbs per acre on 3 October 1997. Drip irrigation tube was laid in a one inch deep groove in the center of the bed and was covered with black plastic mulch. Final beds were six inches high and 24 inches wide.

A single observational plot of 50 plants per plot of each strawberry entry was planted on 17 October 1997. Plants were established in two rows per bed at a 12 inch spacing in each row. Since both bare-root and plug plants were planted in the plot, all plants received sprinkler irrigations twice daily for ten days to assist the bare-root plants in establishment. Water was applied to maintain soil moisture at -8 to -12 centibars at a 12 inch depth. Insects, diseases, and mites were managed in accordance with a recommended spray program. Fruit was harvested twice a week and weighed.

Results and Discussion

Entries with total yields of 1800 flats or higher included: 'FL 95-41' (plug), 'Camarosa' (bare-root), 'Camarosa' (plug), and 'Chandler' (plug). High early yield (Dec & Jan) was found in 'FL 93-100', and 'Sweet Charlie' and 'Camarosa' (bare-root and plug).

Suggested Reading

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Table 1. Observational yield of several cultivars and advanced selections during the 1997-1998 season at Live Oak, FL.

Entry	Plant Type	Plant Source	Dec	Jan	Feb	Mar	Apr	May	Total Yield	
			----- Flats ^z Per Acre -----							
92-92	Plug	FL	0	221	251	401	102	146	1120	
93-113	Plug	FL	7	105	373	360	166	98	1110	
93-100	Bare-root	MA	3	356	244	139	445	81	1270	
95-41	Plug	FL	3	268	367	594	553	156	1942	
95-131	Plug	FL	7	85	85	448	112	78	815	
95-184	Plug	FL	3	194	194	329	272	81	1073	
95-197	Plug	FL	65	261	329	428	143	85	1311	
Sweet Charlie	Plug	NC	17	309	323	190	204	58	1100	
Camarosa	Bare-root	Canada	0	275	343	781	387	149	1935	
Camarosa	Plug	NC	10	268	411	611	540	136	1976	
Chandler	Plug	NC	0	81	433	470	561	262	1806	
^z One flat = 10.25 lbs.										