
Evaluation of Asparagus Cultivars for North Florida

Robert C. Hochmuth, Lei Lani L. Davis, and Wanda L. Laughlin¹

Asparagus is not widely grown in Florida due to traditionally low yields, short longevity of plantings, and poor adaptability of most cultivars. However, demand for fresh locally grown vegetables in Florida is high. This increase in demand is even more visible today with many new local market venues in Florida. If asparagus could be more dependably grown in Florida, local demand would be high.

Previous asparagus cultivar trials conducted in Florida were originally reported in the UF Department of Horticultural Sciences, Vegetarian Newsletters 91-05 (<http://nfrec-sv.ifas.ufl.edu/Reports%20PDF/Asparagus-vegetarian91-05.pdf>) and 97-03 (<http://nfrec-sv.ifas.ufl.edu/Reports%20PDF/Asparagus-Vegetarian97-03.pdf>). Both of these trials reported yields of 1500 lbs/acre or less. These yields, at the most, are about one-half of the expected yields in asparagus producing states like California, Washington, or New Jersey.

This trial was established to evaluate a few new cultivars for their adaptability to North Florida. Observational (non-replicated) plots were established in the spring of 2003 at the North Florida Education Center- Suwannee Valley near Live Oak, FL. Plug transplants of eleven cultivars (Tables 1&2) were planted in 40-ft long plots on June 26, 2003.

Beds on 5-ft spacing were fertilized with 450 lbs per acre of 13-4-13 (N-P₂O₅-K₂O). Fertilizer was rototilled into the beds to a depth of 8 inches. A trench 8 inches deep and 4 inches wide was formed prior to planting. Plug transplants were planted 12 inches apart in the bottom of the trench and were covered with soil just above the top of the plug media.

Drip tape was placed in the trench 2 inches to the side of the transplants. The trench was periodically filled with soil as the transplants grew until the trench was filled. The crop was irrigated and fertilized as needed via drip irrigation system until 2007, after which fertilizer was applied by hand to the soil surface and irrigation only via the drip tape. Weeds were managed with mechanical cultivation each winter and herbicides as needed.

Harvest began in 2006 from mid February until mid April and continued in March and April of 2007, although not all cultivars were harvested on each harvest date. Harvested spears were graded according to USDA Standards for Grades of Fresh Asparagus (USDA, Agricultural Marketing Service, April 1, 1966) and spears in each grade were counted and weighed.

¹ Robert C. Hochmuth, Multi County Extension Agent; Lei Lani L. Davis, Farm Manager; Wanda L. Laughlin, Sr. Agricultural Assistant, North Florida Research and Education Center - Suwannee Valley, University of Florida/IFAS, Live Oak, FL 32060

Table 1. Asparagus cultivar yields for the 2006 season from an observational (non-replicated) trial planted in 2003 at Live Oak, FL.

Harvest Season	Cultivar	Seed Source ^z	Total Marketable Spears ^y (lbs/A)	USDA No. 1 Spears (lbs/A)	USDA No. 2 Spears (lbs/A)	Cull Spears (lbs/A)	First Harvest Date	Final Harvest Date
2006	Apollo	C.A.S.T.	699	429	270	91	8 Feb	23 Mar
2006	Atlas	C.A.S.T.	669	488	181	207	8 Feb	23 Mar
2006	Dulce Verde	C.A.S.T.	164	24	140	153	14 Mar	19 Apr
2006	Grande	C.A.S.T.	1579	1345	234	129	8 Feb	23 Mar
2006	Purple Passion	C.A.S.T.	1051	775	276	406	3 Mar	19 Apr
2006	UC 157 F ₁	C.A.S.T.	532	349	183	53	8 Feb	23 Mar
2006	Jersey Deluxe	J.A.F.	518	220	298	121	24 Feb	30 Mar
2006	Jersey Giant	J.A.F.	1265	752	513	121	8 Feb	23 Mar
2006	Jersey King	J.A.F.	604	353	251	156	8 Feb	23 Mar
2006	Jersey Knight	J.A.F.	601	411	190	125	24 Feb	7 Apr
2006	Jersey Supreme	J.A.F.	507	299	208	95	24 Feb	23 Mar

^zC.A.S.T. = California Asparagus Seed and Transplants, Inc., Davis, CA; J.A.F = Jersey Asparagus Farms, Pittsgrove, NJ.

^yTotal marketable category is USDA No. 1 plus USDA No. 2

Table 2. Asparagus cultivar yields for the 2007 season from an observational (non-replicated) trial planted in 2003 at Live Oak, FL.

Harvest Season	Cultivar	Seed Source ^z	Total Marketable Spears ^y (lbs/A)	USDA No. 1 Spears (lbs/A)	USDA No. 2 Spears (lbs/A)	Cull Spears (lbs/A)	First Harvest Date	Final Harvest Date
2007	Apollo	C.A.S.T.	343	166	177	261	7 Mar	20 Apr
2007	Atlas	C.A.S.T.	216	121	95	169	1 Mar	20 Apr
2007	Dulce Verde	C.A.S.T.	266	168	98	40	14 Mar	20 Apr
2007	Grande	C.A.S.T.	892	730	162	206	2 Mar	20 Apr
2007	Purple Passion	C.A.S.T.	637	515	122	142	14 Mar	20 Apr
2007	UC 157 F ₁	C.A.S.T.	107	70	37	106	7 Mar	20 Apr
2007	Jersey Deluxe	J.A.F.	136	35	101	212	10 Mar	20 Apr
2007	Jersey Giant	J.A.F.	1045	494	551	485	10 Mar	20 Apr
2007	Jersey King	J.A.F.	698	303	395	331	10 Mar	20 Apr
2007	Jersey Knight	J.A.F.	467	257	210	243	14 Mar	20 Apr
2007	Jersey Supreme	J.A.F.	136	137	99	214	10 Mar	20 Apr

^zC.A.S.T. = California Asparagus Seed and Transplants, Inc., Davis, CA.; J.A.F = Jersey Asparagus Farms, Pittsgrove, NJ.

^y Total marketable category is USDA No. 1 plus USDA No.