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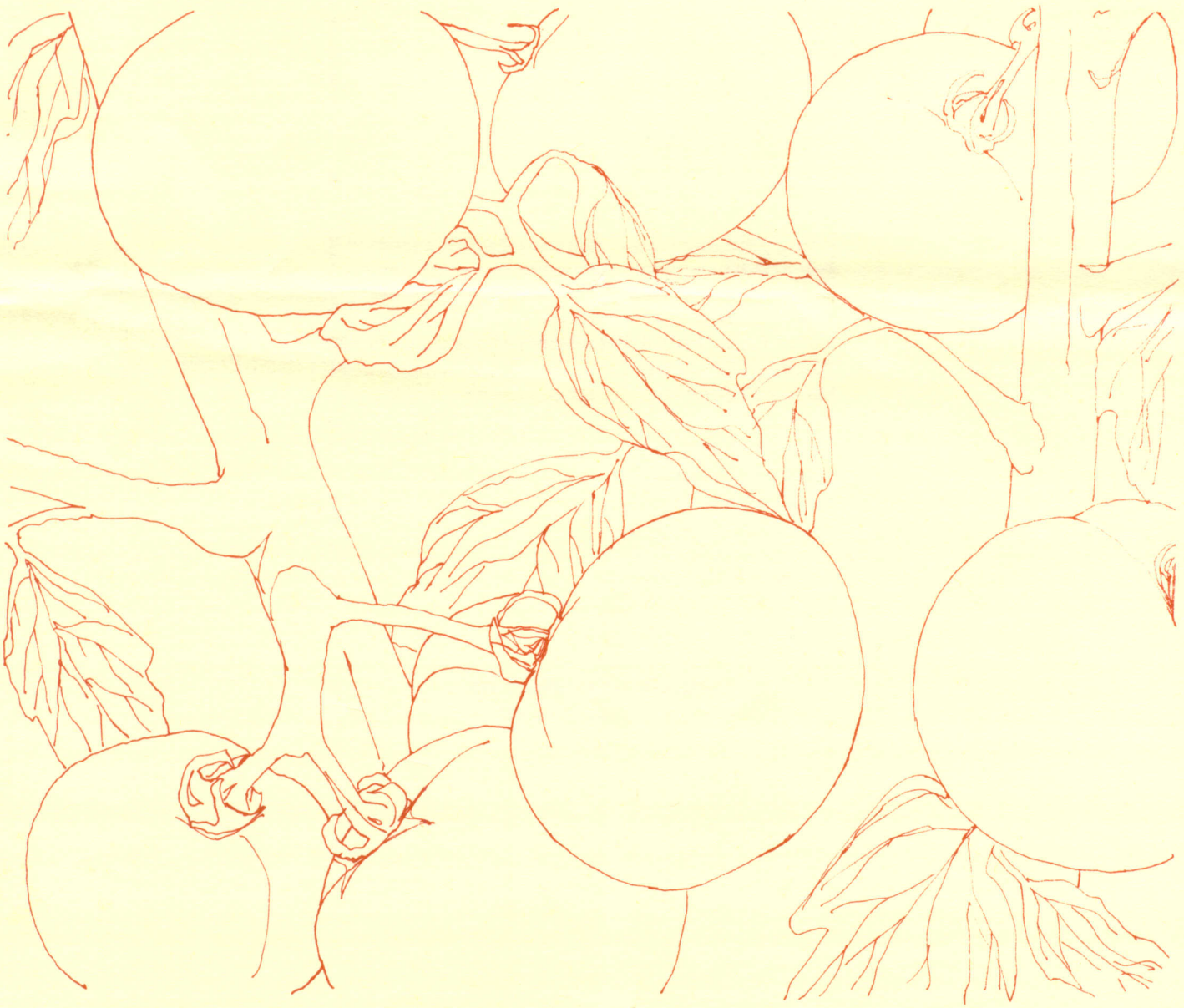
Vegetable Variety Trials, 1976



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Vegetable Variety Trials, 1976[1]

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Vegetable variety and breeding line[3] trials were conducted during 1976 at the Gulf Coast Substation, Fairhope; the Chilton Area Horticulture Substation, Clanton; the North Alabama Horticulture Substation, Cullman; the Sand Mountain Substation, Crossville; and the Main Station at Auburn. All trials were conducted in randomized replicated plots with recommended fertilizer rates and applications for each crop and location. Non-replicated observational plantings were also made of selected lines of snap beans, pickling cucumbers, staked fresh market tomatoes, and sweet potatoes. Insect and disease control measures were applied on a regular schedule throughout the growing season with irrigation applied when needed. Summaries of results are reported in this publication.

RESULTS

Snap Beans (Clanton). Seed were planted April 13 and spaced approximately 2 inches apart in 44-inch rows. Harvest dates varied by varieties with varieties harvested once over to simulate machine harvesting. Yield was highest for observational lines XP-B40 and E 5201, Table 1. White Seeded Provider was the highest yielding in the replicated trial. Sieve size distribution for all varieties was good with a high percent falling in the 3 and 4 sizes.

Bell Pepper (Cullman). Seed were planted in the greenhouse at Auburn March 18 and transplanted May 12. Plants were spaced 2 feet apart in 44-inch rows. Four harvests were made beginning July 12 and ending September 21. Green Boy produced the highest yield of marketable fruit, Table 2. Fruit size was generally smaller this year than in 1975. Miss Belle, Titan, Early Set, and Yolo Select were the largest fruited varieties and Pick-a-Peck was the smallest. Twilley's Big Pack, Early Set, Delaware Belle, Mercury, and California Wonder were rated highest for eye appeal. NCX 4008 produced the longest pod and Yolo Select L had the largest pod diameter. Pod wall thickness ranged from 6 to 8 mm for all varieties.

Cabbage (Auburn). Seed were planted January 13 and transplanted February 26. Plants were spaced 15 inches apart in 40-inch rows. Head splitting was a serious problem this year, Table 3. Several varieties produced above 25 percent split heads. NCX 907 produced the highest yield per acre but also produced the highest percent split heads. Rio Verde produced the highest yield of marketable heads. Stonehead had the most uniform size heads and NCX 907 had the most variable size heads. In past years many of these varieties have been harvested once over. This year only 8 varieties were harvested once over. This lack of uniformity in harvesting could account for some of the undesirable head splitting that occurred. Head Start, Ferry Round Dutch, Jet-Pak, XP-1058, Tastie, and Stonehead were the earliest maturing varieties. Several varieties were late maturing this year.

Sweet Corn (Cullman). Seed were planted April 20 and spaced approximately 9 inches apart with 2 plants per hill in 44-inch rows. Golden Security for the past 3 years has been one of the highest yielding varieties, Table 4. White Delight was the highest yielding white variety. Merit produced the largest ear and G-80 the smallest. Pencil Cob is not a sweet corn but its small size cob is desirable. Tendersweet produced the longest ear, Merit produced the largest ear diameter and Silver Star-80 produced the smallest cob diameter excluding Pencil Cob. Row shape was consistent for all varieties. Ear set height varied from 11 inches for XP 72-1707 to 43 inches for Pencil Cob. Tip cover was best for Pencil Cob, Golden Queen, Capitan, and Golden Security. Ear filling was best for NCX 243. Several varieties rated above 4 for ear filling. This characteristic is very important for high quality market corn. Tendersweet was rated highest for eye appeal and XP 72-1707 was rated lowest. XP 64-2160 was rated highest for ease of snapping and Pencil Cob the lowest, Table 5. Lower than normal temperatures during May almost erased any differences in maturity dates. XP 72-1651 and XP 72-1707 were the only varieties that matured early. Most of the varieties matured between 90 and 92 days.

Pickling Cucumbers (Auburn). Seed were planted

[1]Data presented in this publication are a true evaluation of each entry. Variety, company, and chemical names are used for identification and do not imply endorsement of one over the other.

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[3]Seed of breeding lines are not available for planting until named and released.

April 20 for the spring crop and August 20 for the fall crop and spaced 6 inches apart in 40-inch rows. Nine harvests were made for the spring crop beginning June 11 and ending July 9. Six harvests were made for the fall crop beginning September 27 and ending October 15. Tally, a black spine cucumber, produced the highest total marketable yield for the spring trial, Table 6. When black spine cucumbers are grown during hot weather at Auburn they produce fruits that have a high degree of yellow rather than white skin. When grown in the fall, with cool nights, black spine cucumbers develop skin color very similar to white spine varieties. NCSU 76-G31 is a very promising line for our area. Calypso and Carolina are still performing well and account for approximately 80 to 90 percent of our commercial acreage. AUH-4, an Alabama Agricultural Experiment Station entry, produced average yields with good fruit and vine characteristics. Fall yields are generally reduced by low night temperatures that begin in late September and October. Carolina was the highest yielding variety in the fall trial. NCSU 76-G31 produced the highest length to diameter ratio for the spring crop and Sampson for the fall crop. Most varieties had good to excellent internal features except EX 808 for the fall crop.

Slicing Cucumbers (Cullman and Auburn). Seed were planted May 25 at Cullman and August 20 at Auburn. Seed were spaced 12 inches apart in 60-inch rows at Cullman and 6 inches apart in 40-inch rows at Auburn. Nine harvests were made at Cullman beginning July 8 and ending July 30. Six harvests were made at Auburn beginning September 28 and ending October 15. At Cullman 2 varieties were grown on a trellis, Table 7. Sprint, trellised, was the highest yielding variety, producing 148 more bushels on the trellis than on the ground. Victory also produced higher marketable yields when trellised. Average fruit size was larger at Auburn in the fall than at Cullman. Most varieties at Cullman had only fair color and shape. Victory and Sprint, trellis grown, were rated highest for fruit color. Victory, trellis grown, was rated highest for eye appeal. All the entries from Taiwan were rated very poor for eye appeal. The low rating was due to their poor shape. XP 871 was rated highest for uniformity , eye appeal, and color at Auburn. SC-4 was rated highest for fruit shape.

Eggplant (Cullman). Seed were planted in the greenhouse at Auburn March 18 and transplanted May 10. Plants were spaced 2 feet apart in 5-foot rows. Five harvests were made beginning July 8 and ending September 23. Midnite Hybrid produced the highest yield of marketable fruit, Table 8. Mission Belle and Superhybrid also produced well. Peerless Hybrid produced the highest number of marketable fruit per plant, Black Jack Hybrid and Pompano Pride produced the largest fruits and Long Purple and Blacknite Hybrid produced the smallest fruits. Jersey King Hybrid and Blacknite Hybrid were rated highest for eye appeal and Black Magic Hybrid, Hybrid No. 19, Black Beauty, and Albino were rated lowest. Long Purple was rated highest for having few to no spines. Peerless Hybrid, Jersey King Hybrid, Pompano Pride, and Blacknite Hybrid were rated as having the most spines.

Potatoes (Fairhope and Crossville). Seed potatoes were obtained from Frito-Lay Company, Baldwin County, Alabama; USDA, Beltsville, Maryland; University of Wisconsin; Rhinelander, Starks Farms, Starks, Wisconsin; and from two local seed dealers in Alabama. Seed were brought to Auburn and stored at 40°F. until planting time. Seed pieces were cut to approximately 1½ ounces each, dipped for rot control in a solution of 1 pound of 60 percent Mertect WP in 50 gallons of water for 1 minute, air dried, calloused and presprouted at 55°F. for approximately 2 weeks. Seed were planted February 17 at Fairhope and March 2 at Crossville. Plots were harvested May 26 at Fairhope and June 29 at Crossville. At Fairhope, Atlantic (B6987-56) was the highest yielding variety and also had the highest specific gravity, Table 9. This variety was named this year by the USDA and has been tested for the past 3 years in Alabama. Atlantic has shown a high level of performance for marketable yield and specific gravity. This variety has the potential for replacing many of the white varieties presently grown in the State. Seed stocks are not plentiful at this time but should become more available by 1978. Red La Soda and La Rouge were the highest yielding red varieties and FL-162 was the highest yielding entry from Frito-Lay. Atlantic and FL-162 are high yielding and high solids potatoes in Baldwin County. Wisconsin 726 was the highest yielding entry from the University of Wisconsin. Yields for La Chipper, Norchip, and Superior varied depending upon the seed source. All varieties had good to excellent stands except B7679-9.

At Crossville, Red La Soda and La Rouge were the highest yielding varieties, Table 10. FL-795 and FL-750 were the two highest yielding white varieites. Wisconsin 715 was the highest yielding variety from the University of Wisconsin. Atlantic (B6987-56) did not yield as well this year as in the past but was rated highest for specific gravity. La Chipper, Norchip, and Superior yields were variable for the different seed sources. B7608-2 was the lowest yielding entry.

Sweet Potatoes (Auburn, Clanton, and Cullman). Varieties and breeding lines were obtained from breeders in February and stored at 55°F. until bedding. Seed were presprouted at 85°F. and approximately 90 percent humidity for 2 weeks; treated with 8 ounces of Mertect 340-F plus 1 pound of Botran in 7.5 gallons of water for 1 minute and placed in electric heated beds. Roots of new introductions are limited, therefore, plant production was not sufficient for an adequate number of plants for planting at all locations.

Plants were set at Auburn May 17 and harvested October 26, at Clanton June 1 and harvested October 6, and at Cullman May 21 and harvested October 13. Plants were spaced 12 inches apart in 44-inch rows at all locations.

Yields were highly variable for the same variety at the different locations, Table 11. L1-207 at Auburn was the highest yielding. Jasper,LO-323 and Ti-1885 were also high yielding. Along with high yields,L1-207 and LO-323 produced the highest yields of jumbo roots. Yields at Clanton were considerably below what they were a year ago. Ti-1885 was the highest yielding. Yields at Cullman were also below a year ago but were acceptable for most varieties except M3-702. NC-320 at Auburn, L1-207 at Clanton, and NC-311 at Cullman produced the highest percent of U.S. No. 1 roots for each location. Several varieties produced above 60 percent U.S. No. 1 roots at Auburn. All varieties had good to excellent skin color except VP1-63 and M3-702. Yellow skin roots tend to distract from overall eye appeal.

Fresh Market Tomatoes (Fairhope, Clanton, and Cullman). Seed were planted in the greenhouse February 24 for Fairhope and Clanton and March 25 for Cullman. Plants were transplanted April 6 at Fairhope, April 8 at Clanton, and May 10 at Cullman. Plants were spaced 15 inches apart in 5-foot rows at Fairhope and Cullman. At Clanton, rows were spaced 8-feet. Plants were pruned and staked to a 2-leader system at Fairhope and the binder twine trellis method was used for staking at Clanton and Cullman.

At Fairhope, Terrific VFN was the highest yielding variety, Table 12. Better Boy VFN produced the highest yield of 5X6 fruits and AU-75-6 (F_6) produced the highest yeild of 6X7 fruits in the replicated trial. Traveler 76 was not any earlier than Traveler at Fairhope. Both are pink fruited and very similar in fruit characteristics. Traveler is the smoothest tomato in the trial and produced the lowest yield of cull fruits. Saturn is small fruited with only fair yields but is resistant to Southern Bacterial Wilt and can be grown in home gardens where bacterial wilt is a problem. Catfacing and small size fruits accounted for most of the culls this year. Some cracking did occur in some varieties. AU-76-33 (F_4), Monte Carlo and Tropic produced the highest yields of cull fruits. XP 802 was the highest yielding entry in the observational trial. Pink Delight also yielded well and has early maturity. XP 271 had a very poor plant type and is not adapted to Baldwin County.

At Clanton, Terrific VFN was the highest yielding variety, Table 13. Traveler and AU-76-6 (F_6) also produced good yields. Saturn was the lowest yielding variety. Cull yields were excessive for all varieties. Tropic produced the highest yield of culls and Traveler the lowest. Traveler and Bonnie Nematode Resistant were the earliest maturing.

At Cullman, Better Boy VFN was the highest yielding, Table 14. Terrific VFN and Monte Carlo VFN also produced good yields. AU-76-33 (F_4) produced the lowest yield of marketable fruits and the highest yield of cull fruits. Traveler 76 and Traveler produced the lowest yields of culls. Catfacing was responsible for a high percent of culls. Bonus VFN, Hybrid 980 and Super Red Hybrid were the highest yielding in the observational trial. Super Red Hybrid produced the highest yield of 5X6 fruits, Bonus VFN produced the highest yield of 6X6 fruits and Hybrid 980 produced the highest yield of 6X7 fruits. XP 271 had a poor plant type and appeared poorly adapted at Cullman.

Table 1: Snap Bean Variety Trial, Clanton, 1976[1]

Variety	Marketable yield/acre	Growing days	Color[2]	Shape	Straightness[3]	Bean length	Sieve sizes[4] 1	2	3	4	5
	Bu.	No.				In.	%	%	%	%	%
Replicated											
W.S. Provider	157	62	LG	Heart	S	4.70	0	10	15	45	30
GP 71-135	153	65	G	Heart	S	4.20	20	15	20	45	0
XI 68-2990	137	65	G	Heart	S	4.10	20	10	50	20	0
Torrent	130	62	G	Heart	SC	5.30	0	0	45	25	30
BBL Supreme	129	67	G	Round	SC	5.25	25	40	0	35	0
Code 112	122	65	DG	Round	S	4.30	5	10	40	35	10
Greenpak	117	63	DG	Round	SC	4.80	5	5	35	35	20
Exp. 113-70	115	67	LG	Round	SC	4.60	20	20	25	30	5
E. Gallatin	111	65	G	Heart	SC	4.20	0	10	70	20	0
XI 68-2988	101	65	G	Oval	S	4.25	0	15	25	55	5
Observational											
XP B40	254	66	G	Heart	VC	6.00	0	25	45	25	5
E 5201	254	66	G	Round	SC	5.50	0	5	50	45	0
NCX 8008	206	66	G	Heart	SC	5.00	0	5	5	50	40
BBL GV 109	182	66	G	Round	SC	4.75	22	5	30	45	0
Blue Crop	175	64	DG	Round	SC	5.75	15	15	15	35	20
Lake Largo	175	66	G	Oval	SC	6.25	5	5	35	50	5
BBL 53	167	68	G	Heart	SC	3.75	20	40	15	25	0
XP B74	151	66	G	Round	SC	5.50	5	15	40	35	5
NCX 8010	151	67	G	Heart	S	5.25	20	10	50	20	0
Exp. 160	151	66	G	Oval	SC	5.25	0	10	55	35	0
Raider	143	67	G	Heart	SC	5.00	0	20	50	30	0
GP 72-122	143	68	G	Heart	SC	4.25	0	25	40	7	0
Grand Canyon	135	66	G	Round	VC	5.00	0	30	50	20	0
Sungold	127	68	Y	Heart	SC	4.75	0	40	50	10	0
Exp. 163-B170	127	66	G	Heart	VC	5.00	0	0	45	55	0
Tidal Wave	127	65	LG	Heart	SC	4.75	0	15	60	25	0
GP 73-107	127	66	G	Round	VC	5.50	20	35	40	5	0
GP 73-102	111	66	G	Heart	SC	4.75	35	50	15	0	0
E 4207	103	62	G	Heart	SC	5.50	0	0	5	50	45
E. Gallatin	79	66	G	Heart	SC	4.25	5	45	45	5	0
Lake Seneca	71	69	G	Round	S	4.50	40	20	25	15	0

[1]Soil test p = 290 (VH); k = 200 (H); pH = 5.9.
[2]G = green; LG = light green; DG = dark green; Y = yellow.
[3]S = straight; SC = slightly curved; VC = very curved.
[4]Sieve size was determined from a 100 pod sample taken at random from the four replications. Sieve denotes canning size grades with size 1 having the smaller diameter and 5 having the larger.

Table 2: Bell Pepper Variety Trial, Cullman, 1976[1]

Variety	Seed source	Yield/ acre	Marketable pods per plant	Pod weight	Fruit color[2]	Lobes[3]	Eye appeal[4]	Pod length	Pod diameter	Wall thickness
		Cwt.	No.	Lb.				In.	In.	mm
Green Boy	Agway	316	24.9	.21	G	3	3.5	3.21	2.94	6
Twilley's Big Pack	Twilley	265	16.4	.27	G	3-4	4.5	3.19	3.08	8
Canape	T. Sakata	259	22.8	.19	DG[5]	2-3	2.0	2.92	2.31	7
Hybrid No. 19	T. Sakata	259	18.3	.24	LG[5]	3-4	2.0	3.63	2.83	7
Yolo Select L	Keystone	249	17.1	.25	G	3-4	3.5	3.48	3.15	7
NCX 4007	Niagara	248	21.8	.19	G	1-2	2.0	4.52	2.65	6
Miss Belle	MAFES	248	15.2	.28	DG	3-4	3.0	3.38	3.00	8
NCX 4010	Niagara	245	16.0	.26	G	3-4	4.0	3.23	3.13	7
Belaire	Niagara	233	14.6	.27	LG	3	3.5	3.21	2.83	7
Pick-a-Peck	T. Sakata	230	23.4	.17	LG[5]	1-2	2.0	3.63	2.04	6
NCX 4008	Niagara	228	16.5	.23	DG	2-3	2.0	3.75	2.50	6
Emerald Giant	Twilley	228	14.9	.26	DG	3-4	4.0	3.10	2.96	8
Titan	Twilley	220	13.2	.28	G	3-4	2.0	3.56	3.06	8
Early Set	Twilley	219	13.4	.28	LG	3-4	4.5	2.98	2.85	8
Yolo Select	Ferry-Morse	211	12.8	.28	DG	3-4	3.5	3.33	2.81	7
NCX 4002	Niagara	205	13.5	.26	G	3-4	3.5	2.94	2.90	7
Early Bountiful	T. Sakata	202	18.2	.19	LG[5]	3-4	3.0	2.85	2.75	7
Keystone Resistant Giant	Keystone	201	13.6	.25	G	3-4	3.0	3.44	2.92	8
Midway	Petoseed	195	12.6	.26	G	3-4	3.5	3.13	2.83	7
Delaware Belle	Letherman's	192	13.7	.24	LG	3	4.5	3.10	3.00	8
World Beater	Ferry-Morse	189	13.6	.23	G	3-4	2.0	3.67	2.58	7
Staddon's Select	Agway	186	13.1	.24	G	3-4	3.5	3.35	2.90	7
California Wonder 300	Petoseed	175	11.1	.27	DG	3-4	4.0	2.81	2.98	7
Mercury	Petoseed	171	11.8	.24	DG	3-4	4.5	2.90	3.04	7
California Wonder	Keystone	143	9.6	.25	G	3-4	4.5	2.73	2.88	7

[1]Soil test p = 340 (VH); k = 50 (H); pH = 5.9.
[2]LG = light green; G = green; DG = dark green.
[3]Numbers in this column occurred most often for each variety.
[4]Rating index: 5 = excellent; 4 = good; 3 = fair; 2 = poor; 1 = very poor.
[5]Turns red early.

Table 3: Cabbage Variety Trial, Auburn, Spring, 1976[1]

Variety	Seed source	Acre yield	Mean head weight	Uniformity of heads[2]	Growing days	Season[3]	Color[4]	Harvest	Head diameter	Split heads	Firmness[5]	Shape[6]	Core size[7]
		Cwt.	Lb.	Lb.	No.			No.	In.	%			
NCX 907	Niagrara	423.45	4.05	± 1.37	83	L	BG	2	6.21	40.0	L-M	R-F	M
Rio Verde	NK	422.67	4.04	± .82	83	L	BG	2	6.81	0.	L-M	R-F	S-M
Savoy King	Twilley	411.31	3.93	± 1.11	78	M	DG	1	7.58	0.	L-M	R-F	M
Green Boy	NK	410.15	3.92	± 1.04	78	M	BG	1	6.28	8.1	M	R	M
Hercules	NK	408.76	3.91	± .88	83	L	BG	2	6.81	2.5	L-M	R-F	S-M
Market Topper	Harris	395.82	3.79	± .78	83	L	LG	3	5.90	15.4	M	R	M-L
Prime Pak	Ferry-Morse	395.49	3.79	± .78	78	M	BG	1	5.99	2.6	M	R	M
Sanibel	NK	394.89	3.78	± 1.07	78	M	BG	1	6.44	29.7	M	R	S-M
Roundup	Twilley	386.13	3.69	± 1.18	83	L	DG	1	5.96	27.5	L-M	R-O	M-L
Wisconsin All-Season	Keystone	365.85	3.50	± .96	86	L	BG	1	6.64	2.6	VL-M	P-F	M
Golden Acre	NK	355.04	3.40	± .84	83	L	BG	2	5.95	35.9	M	R	M
Green Back	Keystone	347.47	3.32	± .90	83	L	DG	2	5.86	25.0	L-M	R-O	M
NCX 903	Niagara	347.14	3.32	± .71	78	M	DG	1	5.53	30.8	L-M	R	M-L
Little Rock	Twilley	345.26	3.30	± .71	86	L	BG	2	5.71	0.	M-F	R-O	M
Headstart	Asgrow	343.80	3.29	± .70	68	E	LG	2	6.66	25.0	L	R	M
Market Prize	Harris	343.62	3.29	± .95	83	L	LG	3	6.11	17.1	M	R-F	M-L
Headmaster	Ferry-Morse	341.65	3.27	± .86	86	L	DG	3	6.31	5.0	L-M	R	M
Jackpot	Niagara	332.17	3.18	± .79	78	M	LG	2	5.84	7.9	L-M	R	M
Ferry Round Dutch	Ferry-Morse	328.73	3.14	± .74	72	E	LG	2	5.99	2.8	L-M	R-F	M
Express	Asgrow	324.82	3.11	± .70	83	L	LG	3	5.85	17.5	M	R	M
King Cole	Harris	320.22	3.06	± .86	78	M	LG	3	6.24	2.5	L-M	R	M
Market Victor	Harris	302.65	2.90	± .63	78	M	LG	2	6.09	5.0	L-M	R	M
Jet-pak	NK	292.23	2.80	± .71	72	E	LG	2	5.73	11.8	M	R	M
XP 1058	Asgrow	289.06	2.77	± .72	72	E	LG	2	5.78	19.4	L-M	R	M
Tastie	NK	266.47	2.55	± .57	72	E	DG	2	5.39	22.2	M-F	R	S-M
Stonehead	NK	214.51	2.05	± .48	68	E	DG	1	5.06	8.1	M	R	M

[1]Soil test p = 380 (VH); k = 80 (M); pH = 5.9.
[2]Standard deviation.
[3]E = early; M = medium; L = late.
[4]G = green; BG = bluegreen; LG = light green; DG = dark green.
[5]VL = very loose; L = loose; M = medium firmness; F = firm.
[6]R = round; F = flat; O = oval; P = pointed.
[7]S = small; M = medium; L = large.

Table 4: Sweet Corn Variety Trial, Cullman, 1976[1]

Variety	Source	Ears/ acre	Ear wt.	Color[2]	Ear length	Ear diam-eter	Cob diam-eter	Kernel rows	Row shape[3]	Ear set ht.	Tip cover[4]	Ear fill-ing[4]	Eye appeal[4]
		Doz.	Lb.		In.	In.	In.	No.		In.			
XP 70-2428	Rogers	2,574	.57	Y	7.35	1.70	.84	16-18	S-SC	25	3.90	3.00	3.50
Golden Security	Asgrow	2,566	.56	Y	7.24	1.63	.77	14-16	S-SC	28	4.73	3.75	3.63
White Delight	McNair	2,516	.57	Wh	8.16	1.54	.68	14-16	S-SC	36	4.50	3.50	4.23
Buttersweet	Local	2,508	.59	Y	7.55	1.73	.90	14-18	S-SC	33	3.90	2.88	3.33
Hybrid Seneca Chief	Robson	2,467	.52	Y	7.71	1.46	.67	12-14	S-SC	19	4.32	3.00	3.40
Commander	Asgrow	2,450	.68	Y	7.85	1.68	.83	14-18	S-SC	31	4.00	3.00	3.53
Calumet	Asgrow	2,426	.64	Y	8.33	1.53	.71	12-14	S-SC	28	4.13	3.38	3.65
G-80	Le Se Co	2,384	.48	Wh	6.28	1.65	.74	14-16	S-SC	23	4.03	3.00	3.48
Golden Queen	Rogers	2,376	.65	Y	7.65	1.53	.80	14-16	S-SC	29	4.80	3.00	3.65
Wintergreen	Asgrow	2,343	.64	Y	7.38	1.63	.80	14-16	S-SC	22	4.25	4.00	4.00
Triumphant II	Niagara	2,310	.71	Y	8.20	1.88	.98	16-18	S-SC	30	4.05	3.75	4.10
XP 64-2160	Rogers	2,294	.55	Y	7.98	1.63	.79	14-16	S-SC	18	4.15	3.50	3.23
Capitan	Asgrow	2,269	.72	Y	8.23	1.58	.80	14-16	S-SC	31	4.75	3.50	3.70
Apache	Asgrow	2,261	.65	Y	7.20	1.73	.85	14-16	S-SC	28	4.50	4.00	4.38
XP 1331	Asgrow	2,261	.60	Y	7.48	1.58	.72	12-14	S-SC	23	4.60	4.00	3.93
XP 27786	Le Se Co	2,244	.49	Wh	6.03	1.67	.75	14-16	S-SC	23	4.40	3.00	3.95
Goldenrod	Niagara	2,236	.70	Y	8.80	1.60	.83	14-16	S-SC	36	4.28	3.25	3.75
XP 72-1651	Rogers	2,228	.53	Y	7.48	1.43	.77	14-16	S-SC	14	4.50	2.50	2.38
XP 362	Asgrow	2,211	.69	Y	7.36	1.73	.96	14-16	S-SC	26	4.54	3.00	3.38
Sweet Star-76	Willstar	2,211	.53	Y	7.04	1.56	.78	12-14	S-SC	25	4.15	3.50	4.08
XP 71-2291	Rogers	2,195	.57	Y	7.23	1.83	.95	14-18	S-SC	24	4.00	3.00	3.40
XP 72-1707	Rogers	2,186	.60	Y	6.80	1.58	.88	14-16	S-SC	11	4.40	2.13	2.00
Silverliner	Keystone	2,170	.64	Wh	7.98	1.70	.82	12-14	S-SC	30	4.03	2.75	3.33
NCX 2008	Niagara	2,162	.65	Y	8.15	1.85	.92	16-18	S-SC	31	3.85	3.00	3.33
NCX 243	Niagara	2,153	.72	Y	8.23	1.98	1.03	16-18	S-SC	34	4.28	4.25	3.95
XP 185 A	Robson	2,153	.64	Y	7.65	1.58	.77	14-16	S-SC	24	4.13	3.00	3.65
Aztec	Asgrow	2,145	.50	Y	6.78	1.65	.86	14	S-SC	22	2.95	2.50	3.00
Hybrid Seneca Scout	Robson	2,145	.59	Y	7.13	1.55	.82	14-16	S-SC	27	4.35	3.50	3.83
Midway	Asgrow	2,137	.71	Y	8.01	1.71	.79	14-18	S-SC	28	3.55	4.00	4.20
Sweet Star-80	Willstar	2,129	.66	Y	7.35	1.68	.82	14-18	S-SC	28	4.00	2.75	3.00
Pencil Cob[5]	Dr. Isbell	2,120	.31	Y	4.78	1.07	.27	8-10	S-SC	43	5.00	3.00	2.83
XP 194	Robson	2,104	.64	Y	8.05	1.73	.86	16-18	S-SC	32	4.10	2.75	3.08
Hybrid Seneca Feather	Robson	2,096	.52	Y	7.53	1.60	.77	12-14	S-SC	21	4.08	4.25	4.28
Silver Star-80	Willstar	2,096	.60	Wh	8.36	1.52	.64	12-14	S-SC	33	4.53	3.50	4.15
Bicolor Silver Queen	Rogers	2,087	.58	Wh	7.26	1.65	.77	14-16	S-SC	31	4.40	3.00	3.55
Merit	Asgrow	2,087	.78	Y	7.95	2.03	1.02	16-18	S-SC	33	3.93	3.75	4.00
XP 27787	Le Se Co	2,087	.55	Wh	6.48	1.65	.78	12-14	S-SC	25	4.18	3.25	4.03
Fanfare	Rogers	2,079	.56	Y	7.51	1.81	.94	16-18	S-SC	21	3.85	3.75	3.43
Tendersweet	Asgrow	2,063	.58	Y	9.40	1.54	.70	14-16	S-SC	25	4.55	4.00	4.63
Silver Queen	Rogers	2,054	.67	Wh	7.59	1.63	.74	14-16	S-SC	32	4.63	3.75	4.10
Comet	Asgrow	2,030	.60	Wh	7.61	1.78	.88	14-16	S-SC	24	4.35	3.50	4.23
Salute	Asgrow	2,021	.63	Y	7.20	1.74	.87	16-18	S-SC	25	4.00	3.00	3.65
Bonanza	Ferry-Morse	1,980	.71	Y	8.33	1.78	.93	16-18	S-SC	26	4.53	3.50	3.63
Comanche	Asgrow	1,980	.58	Y	7.15	1.65	.81	12-14	S-SC	20	4.00	4.00	3.73
Table Joy	McNair	1,922	.63	Y	7.21	1.73	.88	14-16	S-SC	28	4.13	3.00	3.18

[1]Soil test p = 230 (VH); k = 100 (M); pH = 5.5. One ton limestone applied per acre.
[2]Y = yellow; Wh = white.
[3]S = straight; SC = slightly curved.
[4]Rating index: 5 = excellent; 4 = good; 3 = fair; 2 = poor; 1 = very poor.
[5]Not a sweet corn.

Table 5: Plant Characteristics of Sweet Corn Varieties, Cullman, 1976[1]

Variety	Plant ht.	Ease of snaping[2]	Shank length	Flag leaves[3]	Growing days	Harvest season
	In.		In.		No.	
XP 70-2428	79	2.50	2.68	2.00	91	M
Golden Security	95	2.50	3.66	2.67	91	M
White Delight	97	3.50	2.51	3.00	92	M.
Buttersweet	93	3.00	2.93	2.25	91	M
Hybrid Seneca Chief	74	2.25	2.71	3.33	91	M
Commander	94	2.50	2.50	2.75	91	M
Calumet	99	2.75	2.75	2.75	90	M
G-80	80	2.00	2.48	2.50	91	M
Golden Queen	90	3.25	2.76	3.50	91	M
Wintergreen	81	2.75	3.13	2.50	91	M
Triumphant II	90	3.75	2.78	1.50	91	M
XP 64-2160	72	5.00	1.98	3.00	86	M
Capitan	94	2.50	2.68	2.50	90	M
Apache	91	3.00	2.40	3.00	90	M
XP 1331	83	2.75	2.63	2.75	90	M
XP 27786	77	3.25	2.38	2.50	92	M
Goldenrod	97	3.00	2.83	2.00	91	M
XP 72-1651	67	4.38	2.60	2.75	79	E
XP 362	83	3.00	2.75	2.00	91	M
Sweet Star-76	85	2.50	2.25	3.00	91	M
XP 71-2291	80	3.00	2.65	1.75	90	M
XP 72-1707	59	3.75	2.68	2.50	79	E
Silverliner	86	3.25	2.25	2.25	92	M
NCX 2008	94	2.50	2.53	1.75	91	M
NCX 243	93	3.25	2.50	1.88	90	M
XP 185 A	82	3.25	3.03	3.25	91	M
Aztec	83	3.00	2.75	2.00	91	M
Hybrid Seneca Scout	81	3.67	2.43	3.75.	91	M
Midway	93	3.25	2.21	3.00	92	M
Sweet Star-80	87	2.75	2.50	2.25	91	M
Pencil Cob[4]	94	1.00	2.32	.67	101	L
XP 194	90	2.75	2.78	3.50	90	M
Hybrid Seneca Feather	73	3.00	2.95	2.75	91	M
Silver Star-80	90	3.00	2.49	3.50	92	M
Bicolor Silver Queen	91	3.00	2.60	3.00	91	M
Merit	91	3.25	3.53	2.25	90	M
XP 27787	82	3.25	2.28	2.50	91	M
Fanfare	78	3.75	2.19	3.25	86	M
Tendersweet	86	2.75	2.79	2.75	92	M
Silver Queen	93	3.25	2.68	3.25	92	M
Comet	83	2.50	3.31	3.50	91	M
Salute	81	2.34	3.03	1.75	91	M
Bonanza	87	2.75	2.43	2.50	90	M
Comanche	75	3.00	2.15	2.25	90	M
Table Joy	85	2.75	2.39	2.33	91	M

[1]Soil test p = 230 (VH); k = 100 (M); pH = 5.5. One ton limestone applied per acre.
[2]Rating index: 5 = very easy; 4 = easy; 3= average difficulty; 2= difficult; 1 = very difficult.
[3]Rating index: 5 = long; 3 = medium length; 1 = short.
[4]Not a sweet corn.

Table 6: Pickling Cucumber Variety Trials, Auburn, 1976[1]

Variety	Source	Marketable yield per acre Sizes[2] No. 1	No. 2	No. 3	No. 4	Total	Harvest season[3]	L/D ratio	Color[4]	Fruit shape	Spine color[5]	Vine vigor	Carpel separation[6] No. 3's	No. 4's
		Cwt.	Cwt.	Cwt.	Cwt.	Cwt.							%	%
							Spring							
Tally	Asgrow	31.68	104.54	180.97	38.94	356.13	M	2.73	Uns	Good	Blk	Good	3	0
Trispear	NK	34.06	111.67	161.83	40.13	347.69	M	3.05	LG	Fair	Wh	Good	0	9
11M11	Harris	25.08	105.34	170.40	42.50	343.32	E	2.92	LG	Fair	Wh	Good	0	0
Score	Asgrow	25.34	98.41	144.80	32.87	301.42	L	2.76	G	Fair	Wh	Good	0	0
EX 808	NK	22.18	92.27	154.18	28.12	296.75	L	2.97	G	Fair	Wh	Good	0	0
NCSU 76-G31	NCSU	30.36	104.02	132.92	19.14	286.44	M	3.31	G	Good	Wh	Good	0	0
38M11	Harris	22.18	90.95	144.00	25.20	282.33	E	2.92	LG	Good	Wh	Good	0	0
Green Spear	NK	24.35	85.87	122.43	20.13	252.78	L	3.16	G	Good	Wh	Good	0	0
FX 3875	Ferry-Morse	14.39	68.11	111.54	46.73	240.77	M	2.78	LG	Good	Wh	Good	0	0
AR 74-118	UAR	19.40	85.54	108.50	25.48	238.92	L	2.47	G	Good	Wh	Good	0	0
Calypso	NCSU	20.06	83.49	118.99	16.24	238.78	L	2.90	DG	Good	Wh	Good	0	0
Lucky Strike	Petoseed	25.48	77.22	119.99	10.96	233.65	M	2.61	G	Fair	Wh	Good	0	0
Carolina	Asgrow	21.78	80.19	116.95	13.92	232.84	E	2.78	G	Fair	Wh	Good	0	0
Sampson	Petoseed	19.67	91.41	99.53	20.53	231.14	L	2.81	DG	Good	Wh	Good	3	0
Triple Cross	Harris	26.86	77.48	106.13	19.14	229.61	M	2.90	G	Good	Wh	Good	0	0
AUH-4	Auburn	20.72	81.84	103.10	22.18	227.84	E	2.74	G	Good	Wh	Good	0	0
Panorama	Ferry-Morse	17.82	70.36	113.59	20.66	222.43	M	2.71	LG	Good	Wh	Good	2	0
Explorer	Asgrow	19.47	82.30	107.20	12.87	221.84	M	2.16	LG	Good	Wh	Good	0	0
Addis	NCSU	22.11	88.37	93.46	14.32	218.26	L	3.16	DG	Good	Wh	Good	0	0
Premier	Asgrow	18.08	77.62	96.82	22.97	215.49	M	2.72	LG	Good	Wh	Good	0	0
Triple Mech	Petoseed	24.29	71.15	101.24	15.84	212.52	L	2.86	LG	Fair	Wh	Good	0	0
NCSU 76-G27	NCSU	20.46	60.72	110.22	16.76	208.16	M	2.91	G	Good	Wh	Good	0	0
AR 74-122	UAR	13.60	71.15	88.18	20.33	193.26	L	2.16	DG	Good	Wh	Good	0	0
							Fall							
Carolina	Asgrow	20.27	61.87	44.08	21.39	147.61	E	3.07	LG	Excel.	Wh	Good	2	0
NCSU 76-G31	NCSU	20.34	58.27	48.46	7.91	134.98	E	2.61	G	Good	Wh	Excel.	0	0
NCSU 76-G27	NCSU	14.13	53.56	36.30	30.48	134.47	E	3.15	DG	Good	Wh	Excel.	0	0
11M11	Harris	10.60	34.27	50.16	38.39	133.42	E	3.04	G	Fair	Wh	Good	0	0
Panorama	Ferry-Morse	16.28	53.17	39.44	22.43	131.32	E	2.96	LG	Good	Wh	Excel.	2	0
Score	Asgrow	18.18	60.95	34.86	16.81	130.80	M	3.15	G	Good	Wh	Excel.	5	5
Calypso	NCSU	15.50	47.02	43.88	23.94	130.34	M	2.83	DG	Good	Wh	Good	0	0
Triple Cross	Harris	14.00	47.68	44.73	23.54	129.95	E	3.23	LG	Excel.	Wh	Good	0	4
Sampson	NCSU	14.19	64.16	45.65	4.19	128.19	E	3.38	LG	Excel.	Wh	Excel.	2	0
Premier	Asgrow	18.44	51.34	38.72	19.55	128.05	E	2.82	LG	Excel.	Wh	Excel.	0	0
Addis	NCSU	17.79	58.73	30.67	10.20	117.39	M	3.23	LG	Excel.	Wh	Excel.	0	0
Lucky Strike	Petoseed	15.50	45.71	44.28	7.72	113.21	E	2.96	G	Good	Wh	Excel.	0	0
Explorer	Asgrow	12.88	45.00	38.13	16.68	112.69	E	2.71	G	Good	Wh	Good	0	0
38M11	Harris	11.97	41.53	25.24	17.66	96.40	M	3.00	LG	Fair	Wh	Good	0	0
Triple Mech	Petoseed	15.50	37.08	35.19	7.52	95.29	E	2.96	G	Fair	Wh	Good	0	0
Green Spear	NK	15.30	44.47	26.68	8.44	94.89	M	3.12	LG	Good	Wh	Excel.	6	50
AUH-4	Auburn	12.95	41.92	29.36	9.55	93.78	E	2.86	G	Good	Wh	Excel.	0	0
Tally	Asgrow	18.84	36.17	18.05	12.56	85.62	M	3.04	LG	Excel.	Blk	Excel.	0	0
AR 74-112	UAR	10.53	42.64	24.46	1.18	78.81	M	2.68	DG	Good	Wh	Excel.	0	0
FX 3875	Ferry-Morse	8.18	31.72	17.40	11.05	68.35	M	2.93	LG	Good	Wh	Good	0	0
EX 808	NK	11.38	28.51	13.41	12.30	65.60	E	3.27	G	Fair	Wh	Excel.	40	0
AR 74-118	UAR	9.83	24.53	23.74	6.61	64.76	M	2.69	DG	Good	Wh	Excel.	0	0
Trispear	NK	6.80	12.56	3.86	1.83	25.05	M	2.89	G	Fair	Wh	Good	0	0

[1]Spring: Soil test p = 530 (EH); k = 80 (medium); pH = 6.2.
Fall: Soil test p = 350 (VH); k = 80 (medium); pH = 5.9.

[2] No. 1 size ranged up to 1-1/16 inch in diameter; No. 2 size ranged from 1-1/16 to 1½ inches in diameter; No 3 grade ranged from 1½ to 2 inches in diameter; No. 4 grade ranged from 2 to 2¼ inches in diameter.

[3]E = early; M = mid-season; L = late.

[4]G = green; LG = light green; DG = dark green; Uns = Unsatisfactory.

[5]Wh = white; Blk = black.

[6]Carpel separation was based on the percent of fruits cut that had open or air spaces in the middle.

Table 7: Slicing Cucumber Variety Trials, Cullman and Auburn, 1976[1]

Variety	Source	Market-able yield/ acre[2]	Fruit size	Length	Diam-eter	Color[3]	Shape[3]	Vine vigor[3]	Uni-formity[3]	Eye appeal[3]	Harvest season[4]
		Bu.	Lb.	In.	In.						
					Cullman-Spring						
Slice Master	Petoseed	637	.45	6.34	1.51	2.	2.5	4	3	3.0	M
SC-4	Robins	626	.38	7.12	1.84	3.	2.	4	3	3.5	L
Coolgreen	Robins	624	.38	5.81	1.69	1.	1.	3	1	1.0	L
FX 3910	Ferry-Morse	618	.38	6.70	1.71	3.	1.5	4	2	2.0	L
XP 871	NK	614	.40	6.64	1.59	3.5	2.	4	3	2.5	M
XP 80	Agway	614	.39	7.25	1.66	2.	2.	4	2	2.5	M
Sprint	Robins	560	.34	6.28	1.50	3.	2.	4	3	3.0	E
Belle Aire	Agway	558	.35	6.37	1.67	2.	2.5	4	2	2.5	E-M
New Market #2 Hybrid	Taiwan	502	.47	8.23	1.89	3.	1.5	4	2	1.0	L
Castle X-2001	Castle	500	.33	6.55	1.63	2.5	2.	4	3	3.0	E
Victory	Petoseed	482	.35	5.94	1.55	2.	2.	4	2	3.0	M
Poinsett	Robins	474	.32	5.70	1.41	2.	2.5	4	3	3.5	E
New Market #3 Hybrid	Taiwan	470	.55	7.97	1.41	2.5	2.5	4	2	1.0	M
High Mark II	Asgrow	452	.34	6.43	1.65	2.5	2.5	4	2	2.5	M
Swallow Hybrid	Taiwan	420	.47	8.36	1.24	3.5	1.	4	2	1.0	M
Fengshan Green	Taiwan	396	.49	8.45	1.38	1.	1.	4	1	1.0	M
Green Bowl Hybrid	Taiwan	394	.52	7.36	1.74	3.	1.5	4	2	1.0	M
New Market #1 Hybrid	Taiwan	380	.48	9.05	1.50	3.	1.5	4	2	1.0	L
Sprint Trellised[5]	Asgrow	708	.31	6.07	1.48	4.	3.5	4	4	4.0	E
Victory Trellised[5]	Petoseed	588	.31	6.04	1.57	4.	4.	4	5	5.0	M-L
					Auburn - Fall						
XP 871	NK	436	.60	7.65	1.82	4.5	4.	5	5	4.0	M
Castle X-2001	Castle	424	.53	7.23	1.74	3.	3.	4	3	3.0	E
Sprint	Robins	414	.50	6.90	1.78	3.5	4.	5	4	3.5	E
Victory	Petoseed	404	.50	6.76	1.67	3.5	4.	5	4	3.0	E
FX 3910	Ferry-Morse	366	.54	7.59	1.73	4.	2.	4	3	2.5	E
Poinsett	Robins	342	.59	7.23	1.75	3.5	3.5	5	3	3.5	L
Slice Master	Petoseed	338	.50	6.90	1.72	3.	3.	5	4	3.0	M
SC-4	Robins	332	.56	6.61	2.00	3.5	4.5	5	4	3.0	L
Coolgreen	Robins	246	.46	6.24	1.87	2.5	2.5	2	2	2.5	L

[1]Cullman: Soil test p = 410 (EH); k = 160 (H); pH = 5.8.
Auburn: Soil test p = 200 (H); k = 80 (M); pH = 5.6.
1 ton limestone applied per acre.
[2]Bushel = 50 pounds.
[3]Rating index: 5 = excellent, 4 = good; 3 = fair; 2 = poor; 1 = very poor.
[4]E = early; M = mid-season; L = late.
[5]Trellis material was a commercial nylon net hung between a bottom and top wire approximately 5 to 6 feet apart. Vines were trained on to the trellis and required several corrective treatments to get established.

Table 8: Eggplant Variety Trial, Cullman, 1976[1]

Variety	Seed source	Yield/ acre	Marketable fruit per plant	Fruit size	Fruit color[2]	Eye appeal[3]	Shape[4]	Spines[5]	Season[6]
		Cwt.	No.	Lb.					
Midnite Hybrid	Petoseed	597	12.8	1.07	P	3.0	O	3.0	L
Mission Bell	Letherman's	554	12.7	1.00	LP	2.5	R	2.5	E
Superhybrid	Agway	513	11.0	1.07	DP	3.0	O	3.0	E
Black Jack Hybrid	Agway	493	9.5	1.19	DP	4.5	E	3.0	E
Peerless Hybrid	Twilley	489	13.9	.81	DP	4.0	E	1.0	E
Black Magic Hybrid	Harris	466	9.4	1.14	P	2.0	R	2.5	M
Hybrid No. 29	T. Sakata	458	10.0	1.07	P	2.0	R	4.0	M
Jersey King Hybrid	Burpee	450	12.2	.85	DP	5.0	E	1.0	E
Blackoval Hybrid	Harris	445	10.4	.98	P	3.0	E	4.0	M
Florida Highbush	Burpee	442	9.1	1.11	LP	4.0	O	3.0	M
Pompano Pride	Niagara	387	7.5	1.19	P	3.0	O	1.0	M
Florida Market	Ferry-Morse	351	7.2	1.13	LP	3.5	O	2.0	L
Black Beauty	Burpee	315	6.4	1.13	LP	2.0	R	4.0	M
Blacknite Hybrid	Petoseed	287	9.4	.70	B	5.0	E	1.0	E
Albino	Twilley	254	6.3	.91	Wh	2.0	R	2.0	M
Long Purple	Letherman's	249	8.5	.67	LP	3.0	E	5.0	E

[1]Soil test p = 600 (EH); k = 150 (H); pH = 6.0.
[2]P = purple, B = very dark purple that could be considered black; DP = dark purple; LP = light purple; Wh = white.
[3]Rating index: 5 = excellent; 4 = good; 3 = fair; 2= poor; 1 = very poor.
[4]R = round; E = elongated; O = oval.
[5]1 = many; 5 = few to none.
[6]E = early; M = mid-season; L = late.

Table 9: Potato Variety Trial, Fairhope, 1976[1]

Variety	Source	Marketable Yield/Acre Total	Size A[2]	Size B	Specific gravity	Stand at harvest	Eye depth[3]	Eye Size[4]	Skin color[5]	Shape	Eye appeal[6]	Harvest season[7]
		cwt.	cwt.	cwt.		%						
Atlantic (B6987-56)	USDA	294	280	14	1.085	93	M	S	Wh-SR	R-Flat	4.5	L
Red La Soda	Johnson, N. D.	288	277	11	.067	100	D	L	Red	Round	4.0	M
Red La Soda	Starks Farms	285	273	12	.065	97	D	L	Red	Round	4.0	M
B7802-2	USDA	265	252	13	.075	91	M	S	Clear	R-Flat	3.0	M
FL-162	Frito-Lay	264	247	17	.073	99	S	S	Wh-SR	Round	4.5	L
Red La Soda	Tibert, N.D.	261	250	11	.065	99	D	L	Red	Round	4.0	M
La Rouge	USDA	258	233	25	.069	98	M	M	Red	Round	3.5	M
Wisconsin 726	U. Wisconsin	257	247	10	.077	98	S	S	Wh	R-Long	4.0	L
B6987-29	USDA	256	246	10	.074	92	M	S	Wh-SR	R-Flat	4.0	L
FL-657	Frito-Lay	244	232	12	.071	89	D	S	Wh	Round	3.5	L
La Chipper	USDA	244	222	22	.073	94	M	M	Wh	Round	3.5	M
FL-750	Frito-Lay	243	217	26	.078	91	M	S	Wh	Round	3.5	L
FL-795	Frito-Lay	238	231	7	.078	92	S	S	Wh	R-Flat	4.0	L
Wisconsin 718	U. Wisconsin	238	219	19	.074	100	S	S	Wh	Round	4.0	M-L
Wisconsin 715	U. Wisconsin	235	210	25	.074	91	S	S	Wh	R-Long	3.5	M-L
Wisconsin 623	U. Wisconsin	232	198	34	.077	91	S	S	Wh	Round	3.5	M
B8101-3	USDA	229	205	24	.069	93	M	M	Wh-SR	Round	4.0	L
Norchip	Starks Farms	221	201	20	.078	96	M	M	Wh	Round	3.0	L
B7595-3	USDA	221	191	30	.075	96	M	M	Pink	Round	3.0	M
La Chipper	Starks Farms	217	198	19	.074	89	M	M	Wh	Round	3.5	M
Superior	Starks Farms	210	195	15	.077	91	S	S	Wh-SR	Round	4.5	M
Wisconsin 732R	U. Wisconsin	210	194	15	.067	94	M	S	Dp.-Red	Round	3.0	M
Norchip	USDA	205	182	23	.078	96	S	M	Wh	Round	3.5	L
Wisconsin 737	U. Wisconsin	203	154	49	.073	100	S	S	Wh-SR	Round	4.0	E
Red La Soda	Larkin, S.D.	201	187	14	.065	92	D	L	Red	Round	4.0	M
Seminole	Frito-Lay	200	184	16	.082	99	S	S	Wh	Round	3.5	E
B7768-4	USDA	197	189	8	.078	94	M	S	Wh-SR	Round	4.0	M
FL-723	Frito-Lay	186	176	10	.069	93	D	L	Clear	R-Flat	3.5	E
Wischip	U. Wisconsin	185	145	40	.072	96	S	S	Wh-SR	Round	4.0	M
Wisconsin 721	U. Wisconsin	183	164	19	.074	96	S	S	Wh	Round	3.5	M
B6969-2	USDA	172	160	12	.068	87	M	S	Wh-SR	Round	4.5	E
B7608-2	USDA	169	132	37	.067	94	M	S	Russet	Round	4.5	E
Superior	USDA	167	148	19	.076	97	M	S	Wh	R-Flat	3.5	M
B7679-9	USDA	149	137	12	.074	78	M	S	Russet	R-Long	4.5	M

[1]Soil test p = 130 (H); k = 80 (H); Mg = 250 (H); pH = 5.6.
[2]Size A = potatoes with 1⅞ inches diameter and larger. Size B = potatoes with 1½ to 1⅞ inches diameter.
[3]S = shallow; M = medium; D = deep.
[4]S = small; M = medium; L = large.
[5]Wh = white; SR = some russet.
[6]5 = excellent; 4 = good; 3 = fair; 2 = poor; 1 = very poor.
[7]E = 90; M = 95; L = 100 days from planting to harvest.

Table 10: Potato Variety Trials, Crossville, 1976[1]

Variety	Source	Marketable Yield/Acre			Specific gravity	Stand at harvest
		Total	Size A[2]	Size B		
			Cwt.	Cwt.	Cwt.	Pct.
Red La Soda	Johnson, N.D.	247	230	17	1.083	95
Red La Soda	Starks Farms	203	183	20	.082	95
La Rouge	USDA	201	180	21	.081	100
FL-795	Frito-Lay	199	189	10	.090	90
FL-750	Frito-Lay	199	181	18	.089	95
Red La Soda	Tibert, N.D.	199	172	9	.082	90
Wisconsin 715	U. Wisconsin	197	177	20	.088	95
Kennebec	USDA	185	167	18	.085	95
Wisconsin 623	U. Wisconsin	179	152	27	.088	95
Atlantic (B6987-56)	USDA	176	163	13	.097	95
B8101-3	USDA	176	157	19	.082	90
Wisconsin 726	U. Wisconsin	169	157	12	.090	100
B6987-29	USDA	168	160	8	.092	95
FL-162	Frito-Lay	158	145	13	.092	95
Norchip	Starks Farms	155	137	18	.094	100
FL-657	Frito-Lay	153	140	13	.085	90
Wisconsin 732R	U. Wisconsin	153	126	27	.081	95
Superior	Starks Farms	152	137	15	.087	95
B7768-4	USDA	150	141	6	.082	90
B7802-2	USDA	147	147	6	.082	90
La Chipper	USDA	146	130	16	.084	95
Superior	USDA	144	137	7	.083	100
Wisconsin 718	U. Wisconsin	142	129	13	.082	75
Norchip	USDA	138	125	13	.092	95
La Chipper	Starks Farms	128	114	14	.081	85
B7595-3	USDA	126	105	21	.081	95
FL-723	Frito-Lay	124	117	7	.082	95
Wisconsin 737	U. Wisconsin	121	98	23	.090	100
Wischip	U. Wisconsin	119	88	31	.081	100
B6969-2	USDA	103	94	9	.076	80
Seminole	Frito-Lay	96	89	7	.093	95
Wisconsin 721	U. Wisconsin	96	77	19	.090	95
Red La Soda	Larkin, S.D.	93	82	11	.073	90
B7679-9	USDA	86	66	20	.080	85
B7608-2	USDA	76	45	31	.082	95

[1]Soil test p = 105 (H); k = 170 (M); mg = 26 (L); pH = 5.6.
[2]Size A = potatoes with 1 7/8 inches diameter and larger.
Size B = potatoes with 1 1/2-1 7/8 inches diameter.

Table 11: Sweet Potato Variety Trials, Auburn, Clanton and Cullman, 1976[1]

Variety	Source	Marketable yield/acre U.S. No. 1[2]	Canners[3]	Jumbo[4]	Total	U.S. No. 1	Skin color
		Bu.[5]	Bu.	Bu.	Bu.	Pct.	
			Auburn				
L1-207	LSU Chase	432	50	267	749	58	Copper to rose
Jasper	Auburn	446	51	191	688	65	Copper to rose
LO-323	LSU Chase	365	27	292	684	53	Copper
Ti-1885	Tuskegee Inst.	400	97	107	604	66	Rose
Jewel	Auburn	325	43	179	547	59	Copper
Red Jewel	UGA Tifton	297	41	141	479	62	Rose
Centennial	Auburn	295	36	139	470	63	Copper
Ti-1896	Tuskegee Inst.	302	45	109	456	66	Rose
Ti-1895	Tuskegee Inst.	250	110	86	446	56	Rose
L3-186	LSU Chase	249	82	110	441	56	Copper
NC-320	NCSU	299	73	64	436	69	Copper to rose
NC-311	NCSU	196	35	176	407	48	Copper
NC-345	NCSU	213	45	128	386	55	Copper
VP1-63	VPI	224	24	97	345	65	Yellow to copper
M3-702	MAFES	185	20	128	333	56	Yellow to copper
			Clanton				
Ti-1885		86	142	14	242	36	
Centennial		59	163	14	236	25	
M3-702		52	130	23	205	25	
L1-207		85	100	9	194	44	
NC-320		42	147	0	189	22	
Jewel		15	134	36	185	8	
NC-311		37	120	22	179	21	
			Cullman				
Centennial		310	103	152	565	55	
Jewel		234	128	57	419	56	
Ti-1885		181	135	62	378	48	
Red Jewel		224	108	34	366	61	
NC-311		211	66	60	337	63	
NC-320		120	182	26	328	37	
M3-702		119	56	34	209	57	

[1]Auburn: Soil test p = 490 (EH); k = 90 (medium); pH = 6.5.
Clanton: Soil test p = 290 (VH); k = 200 (H); pH = 5.9.
Cullman: Soil test p = 150 (H); k = 100 (M); pH = 5.5. 1½ tons limestone applied per acre.
[2]U.S. No. 1 roots were to 2 3½ inches in diameter, 3 to 9 inches in length, well shaped and free of defects.
[3]Canners were 1 to 2 inches in diameter and 2 to 7 inches in length.
[4]Jumbo roots exceeded the diameter, length and weight requirements for the No. 1 grade but are of marketable quality.
[5]Bushel = 55 pounds.

Table 12: Staked Fresh Market Tomato Trial, Fairhope, 1976[1]

Variety	Source	Marketable yield/acre[2] 5X6[3]	6X6	6X7	Total[4]	Culls Total	Of total yield	Cracks	Catface	Others[5]	Harvest Season[6]
		Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Pct.	Pct.	Pct.	Pct.	
				Replicated							
Terrific VFN	Petoseed	168.37	178.33	192.33	539.03	74.03	12	8	27	65	E
Monte Carlo VFN	Petoseed	188.11	175.04	154.43	517.58	115.50	18	8	46	46	E
Super Red	Agway	211.86	115.99	130.65	458.50	105.26	19	4	30	66	L
AU-76-6 (F_6)	Greenleaf	59.59	116.31	259.44	435.34	106.72	20	3	25	72	M
Better Boy VFN	Petoseed	265.00	92.35	69.49	426.84	80.97	16	7	41	52	M
Floradel	Keystone	125.07	122.79	173.82	421.68	96.53	19	3	24	73	M
Hybrid 980	Agway	133.83	125.01	130.92	389.76	98.57	20	2	30	68	M
Traveler 76	McFarren	49.99	84.23	238.80	373.02	84.00	18	0	4	96	M
Bonnie Nema. Resistant	Bonnie Farms	101.53	140.23	126.79	368.55	76.18	17	5	22	73	E
Tropic	Asgrow	157.83	112.09	96.25	366.17	112.98	24	4	54	42	L
Homestead Elite	Niagara	92.24	108.36	118.40	319.00	76.70	19	0	19	81	M
Homestead 500	Petoseed	67.36	108.71	142.70	318.77	62.55	16	0	13	87	M
Big Girl	Burpee	127.18	76.32	98.53	302.03	73.22	20	4	25	71	M
Traveler	Petoseed	28.99	82.33	185.43	296.75	59.71	17	0	2	98	M
Homestead 24	Petoseed	38.56	86.32	161.92	286.80	87.56	23	0	18	82	M
Saturn	Twilley	20.80	53.54	204.87	279.21	93.81	25	0	12	88	L
AU-76-33 (F_4)	Greenleaf	9.41	37.08	228.83	275.32	140.30	34	1	2	97	E
Walter	Asgrow	30.07	101.77	132.74	264.58	94.35	26	3	16	81	E
				Observational							
XP 802	Agway	68.76	148.89	275.35	493.00	99.40	17	0	35	65	M
Pink Delight	Lambeth	99.58	173.68	202.45	475.71	89.54	16	1	32	67	E
Wonder Boy VFN	Petoseed	192.20	148.10	112.38	452.68	64.49	12	3	38	59	L
Bonus VFN	Petoseed	138.17	148.37	121.45	407.99	81.67	17	6	33	61	E
31-st-6	Lambeth	83.77	112.49	194.92	391.18	119.65	23	0	46	54	L
XP 271	Asgrow	105.19	95.10	79.23	279.52	36.26	11	4	18	78	L

[1]Soil test p = 130 (high); k = 80 (medium); pH = 6.2.

[2]Size yields reported here are in accordance with the size standards established by the USDA for the Los Angeles type lug arrangements.
5X6 arrangement: minimum diameter 2-11/16 inches; maximum diameter 3-3/16 inches.
6X6 arrangement: minimum diameter 2-8/16 inches; maximum diameter 2-14/16 inches.
6X7 arrangement: minimum diameter 2-4/16 inches; maximum diameter 2-10/16 inches.

[3]Some fruits in this size arrangement were larger than standard sizes.

[4]While fruits were graded as carefully as possible under field conditions, no rigid effort was made to grade for a strict U.S. No. 1 grade. Fruits were separated for cull conditions as reported here.

[5]Others were mostly tomatoes too small to be marketed in the above sizes. Some were from rots, insect damage, mechanical damage and misshapen fruits.

[6]E = early; M = mid-season; L = late.

Table 13: Staked Fresh Market Tomato Trials, Clanton, 1976[1]

Variety	Source	Marketable yield/acre[2]				Culls					Harvest season[6]
		5x6[3]	6x6	6x7	Total[4]	Total	total yield	Cracks	Catface	Others[5]	
		Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Pct.	Pct.	Pct.	Pct.	
Teriffic VFN	Petoseed	355.23	61.31	49.01	465.55	254.61	35	17	44	39	M
Traveler	Asgrow	192.21	109.55	158.12	459.88	106.94	19	12	26	62	E
AU-75-6 (F^6)	Greenleaf	175.00	122.51	156.82	454.33	222.81	33	14	28	58	M-L
Tropic	Asgrow	319.08	61.96	29.73	410.77	365.14	47	16	62	22	L
Floradel	Keystone	261.47	77.10	72.09	410.66	334.11	45	16	46	38	L
Better Boy VFN	Petoseed	322.45	43.12	26.70	392.36	334.00	46	28	46	26	M
Walter	Asgrow	214.32	93.76	83.64	391.72	228.47	37	19	34	47	M
Bonnie Nema. Resistant	Bonnie Farms	260.71	72.09	48.68	381.48	309.28	45	13	31	56	E
Homestead 24	Niagara	231.74	81.78	63.82	377.34	242.74	39	21	42	37	M
Saturn	Twilley	75.14	90.50	129.26	294.90	204.30	41	11	34	55	M

[1]Soil test p = 290 (Vh); k = 200 (H); pH = 5.9.

[2]Size yields reported here are in accordance with the size standards established by the USDA for the Los Angeles type lug arrangements.
5x6 arrangement: minimum diameter 2-11/16 inches; maximum diameter 3-3/16 inches.
6x6 arrangement: minimum diameter 2-8/16 inches; maximum diameter 2-14/16 inches.
6x7 arrangement: minimum diameter 2-4/16 inches; maximum diameter 2-10/16 inches.

[3]Some fruits in this size arrangement were larger than standard sizes.

[4]While fruits were graded as carefully as possible under field conditions, no rigid effort was made to grade for a strict U.S. No. 1 grade.
Fruits were separated for cull conditions as reported here.

[5]Others were mostly tomatoes too small to be marketed in the above sizes. Some were from rots, insect damage, mechanical damage and misshapen fruits.

[6]E = early; M = mid-season; L = late.

Table 14: Staked Fresh Market Tomato Trial, Cullman, 1976[1]

Variety	Source	Marketable yield/acre[2] 5x6[3]	6x6	6x7	Total[4]	Culls Total	Of total yield	Cracks	Catface	Others[5]	Harvest season[6]
		Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Pct.	Pct.	Pct.	Pct.	
					Replicated						
Better Boy VFN	Petoseed	355.05	252.39	54.62	662.06	155.58	19	4	52	44	E-M
Terrific VFN	Petoseed	243.80	295.09	70.50	609.39	146.71	19	5	41	54	E-M
Monte Carlo VFN	Petoseed	278.23	262.09	67.57	607.89	191.82	24	3	55	42	E-M
Bonnie Nema. Resistant	Bonnie Farms	136.26	346.96	115.73	598.95	163.54	21	3	29	68	M
Traveler	Twilley	79.42	378.99	88.78	547.19	109.16	17	5	29	66	L-M
Big Girl	Burpee	265.02	236.88	41.29	543.19	143.33	21	8	52	40	M
Floradel	Keystone	211.51	240.19	73.60	525.30	189.36	26	6	38	56	L-M
Homestead 61	Petoseed	103.48	325.71	88.55	517.74	128.66	20	1	32	67	M
Traveler 76	McFarren	58.47	328.08	112.65	499.20	94.44	16	3	15	82	L
Homestead Elite.	Niagara	170.91	280.84	42.43	494.18	142.69	22	2	51	47	M
Tropic	Asgrow	174.12	260.37	56.87	491.36	184.36	27	7	52	39	M
AU-75-6 (F_6)	Greenleaf	33.12	311.80	139.71	484.63	201.32	29	3	36	61	M
Homestead 24	Niagara	65.51	309.96	104.60	480.07	138.89	22	4	26	70	M
Homestead 500	Petoseed	86.23	299.24	89.05	474.52	126.99	21	1	41	58	M
Supermarket	Asgrow	60.55	266.94	124.81	452.30	137.21	23	4	27	69	E-M
Walter	Asgrow	36.40	194.99	131.43	362.82	194.71	35	1	29	70	M
Saturn	Twilley	21.43	203.70	121.39	346.52	264.22	43	2	23	75	L
AU-76-33 (F_4)	Greenleaf	24.02	121.01	182.97	328.00	305.37	48	1	6	93	E
					Observational						
Bonus VFN	Petoseed	155.56	392.60	99.42	647.58	98.93	13	3	31	66	M
Hybrid 980	Agway	162.84	361.48	105.14	629.46	121.97	16	1	36	63	M
Super Red Hybrid	Agway	218.15	314.68	71.26	604.09	126.18	17	5	28	67	L
XP 802 Hybrid	Agway	120.16	346.91	100.92	567.99	190.44	25	1	39	60	E
XP 271	Asgrow	142.32	252.82	30.49	425.63	115.90	21	7	27	66	L
XP 2032 Hybrid	Asgrow	68.34	249.48	89.87	407.69	150.89	27	0	33	67	M
XP 160 Hybrid	Asgrow	152.70	194.17	58.75	405.62	92.80	19	4	38	58	E
Floramerica Hybrid	Petoseed	146.95	201.70	28.26	376.91	135.73	26	0	55	45	M

[1]Soin test p = 310 (VH); k = 140 (H); pH = 5.3. 1½ tons limestone applied per acre.

[2]Size yields reported here are in accordance with the size standards established by the USDA for the Los Angeles type lug arrangements.

5x6 arrangement: minimum diameter 2-11/16 inches; maximum diameter 3-3/16 inches.

6x6 arrangement: minimum diameter 2-8/16 inches; maximum diameter 2-14/16 inches.

6x7 arrangement: minimum diameter 2-4/16 inches; maximum diameter 2-10/16 inches.

[3]Some fruits in this size arrangement were larger than standard sizes.

[4]While fruits were graded as carefully as possible under field conditions, no rigid effort was made to grade for a strict U.S. No. 1 grade.

Fruits were separated for cull conditions as reported here.

[5]Others were mostly tomatoes too small to be marketed in the above sizes. Some were from rots, insect damage, mechanical damage and misshapen fruits.

[6]E = early; M = mid-season; L = late.

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