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Vegetable Variety Trials, 1972

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VEGETABLE VARIETY and breeding line[2] trials were conducted 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. Recommended fertilizer rates and applications were applied to give the best results at each location. Disease and insect control measures were applied on a regular schedule throughout the growing season and irrigation was applied as needed. Summaries of results from these trials are reported in this publication.

RESULTS

Bell Pepper (at Cullman). Seed were planted in the greenhouse at Auburn March 17 and the seedlings transplanted into the field May 15. Plants were spaced 2 feet in the drill on 44-inch rows. Cool weather retarded early growth and fruit set, delaying the first harvest until July 17. Yields were low for all varieties. Pod size was largest for Miss Belle, Table 1. Those varieties with pods that averaged approximately four per pound are acceptable for fresh market. Varieties with smaller pods are not regarded as likely fresh market types. Keystone Resistant Giant No. 3, Delaware Belle, Emerald Giant, Yolo Select Pack, and Twilley's Big Pack had the most desirable pod types. Others were either too pointed, rough or misshapen.

TABLE 1. BELL PEPPER VARIETY TRIAL, CULLMAN, 1972[1]

Variety	Marketable yield/acre	Mean pod wt.	Wall thickness
	Cwt.	*Lb.*	*Mm*
Pick-A-Peck	49.16	.17	4.98
Canape	48.17	.16	4.28
Twilley's Big Pack	45.84	.25	6.38
Yolo Wonder L	45.51	.25	5.98
Yolo Select Pack	45.37	.24	6.33
Keystone Resistant Giant No. 3	45.36	.24	6.35
Emerald Giant	44.60	.19	5.55
World Beater	44.46	.17	4.43
Delaware Belle	43.08	.24	5.88
California Wonder	41.99	.25	6.03
Hybrid No. 19	39.81	.20	4.83
Early Bountiful	38.33	.16	4.60
Titan	31.73	.19	5.65
Burpee's Bellringer	22.87	.23	5.98
Miss Belle	13.73[2]	.27	6.05

[1] Soil test p = 200 (Very high); k = 110 (high); pH = 5.9. 1 ton of limestone applied per acre.
[2] Seed of Miss Belle were started later than the other entries and did not receive the full growing season.

Fresh Market Cucumbers (at Cullman). Varieties were seeded on May 15 and thinned to 6 inches in the drill on 44-inch rows. Harvesting began on July 14. Nine harvests were made. Yields were low for all varieties, Table 2. Crackerlee and Poinsett produced the highest yields of marketable fruit. Seed cavity was smallest for Saticoy, Marketer and Palomar. Fruit shape was best for Crackerlee and poorest for Palomar. Crackerlee and Marketer had some carpel separation in the larger fruits. Fruit lengths were good for all entries.

Fresh Market Tomatoes (at Fairhope and Cullman). Seed were started on February 21 for the Fairhope trial and the seedlings transplanted to the field April 14. All varieties were staked and pruned to a two-leader system. Plants were spaced 15 inches in the drill on 5-foot rows. Fourteen harvests were made beginning on June 1 and ending July 14. Marketable yields ranged from 538 cwt. for the highest yielding variety, Terrific VFN, to 263 cwt. for the lowest yielding entry, Table 3. AU-4 and Tropic produced the highest yields of 5 x 6 size tomatoes. Traveler was the smoothest fruit of all varieties in the trial. Terrific VFN, AU-1 and AU-2 produced the highest yields of cracked fruits.

Seed for the Cullman trial were planted on March 26 and the seedlings were transplanted to the field May 2. Plants were spaced 15 inches in the drill on rows 5 feet apart. A split plot arrangement was

[1] Research Associate and Field Superintendent, Department of Horticulture.
[2] Seed and seed stocks of breeding lines are not available for planting until named and released.

TABLE 2. FRESH MARKET CUCUMBER TRIAL, CULLMAN, 1972[1]

Variety	Marketable yield/acre	Fruit size	Length	Seed cavity[2]	Diameter	Shape[3]	Color[4]	Eye appeal[3]
	Cwt.	*Lb.*	*In.*		*In.*			
Crackerlee	100.52	.45	7.25	3	1⅞	5	DG	5
Poinsett	99.33	.38	8.00	3.5	2¼	4	DG	4
Early Marketer	82.88	.64	7.25	3	2¼	3	G	3
Triumph	81.46	.49	8.50	2.5	2¼	4	DG	4
Saticoy	68.64	.48	8.00	4	2¼	3	G	3
Marketer	65.73	.45	7.75	4	2	3	LG	2
Early Surecrop	39.13	.56	7.25	3	2	3	LG	2
Palomar	32.91	.41	8.25	4	1¾	2	G	3

[1] Soil test p = 150 (high); k = 90 (medium); pH = 5.7. 1 ton of limestone applied per acre.
[2] 1 = large; 5 = small.
[3] 5 = excellent; 4 = good; 3 = fair; 2 = poor; 1 = very poor.
[4] G = green; LG = light green; DG = dark green.

TABLE 3. STAKED FRESH MARKET TOMATO TRIAL, FAIRHOPE, 1972[1]

Variety	Marketable yield per acre				Culls		Others[2]
	5 x 6	6 x 6	6 x 7	Total	Cracks	Catface	
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
Terrific VFN	382	93	63	538	138	41	73
Tropic	424	35	30	499	34	63	92
Floradel	297	84	117	498	25	15	76
AU-4	435	25	25	485	73	37	108
Bonnie Nematode Resistant	307	84	82	473	58	65	82
Creole	299	72	97	468	50	33	105
Homestead Elite	331	71	61	463	27	14	78
Traveler	237	100	117	454	32	0	56
Homestead 500	266	86	90	442	19	9	82
Homestead 61	284	77	75	436	29	8	99
Homestead 24	251	87	76	414	39	10	88
Campbell 28	146	115	135	396	50	33	105
Sunburst	150	98	145	393	14	11	103
Walter	242	73	78	393	31	20	68
Chico Granade	38	120	162	320	8	3	144
AU-3	250	18	30	298	92	60	88
AU-2	255	25	14	294	147	33	83
AU-1	187	47	29	263	112	36	178

[1] Soil test P = 70 (Medium); K = 90 (Medium); pH = 6.9.
[2] Others were mostly tomatoes too small to be marketable in the above grades. Some were from rots and insect damage.

used to permit the staking of one-half of each plot. Plants were staked and supported by the binder twine trellis method. The other half was left to lie on the ground. Marketable yields in general were higher for the staked tomatoes than for the unstaked, Table 4. Cracks and culls were highest for the unstaked tomatoes. Homestead 500 and Tropic produced the highest yield of marketable tomatoes on stakes with Sunburst and Traveler producing the highest yield of marketable fruit unstaked. Tropic produced the highest yield of 5 x 6 size tomatoes staked and Floradel produced the highest yield of 5 x 6 size unstaked. Chico Grande was the most crack resistant variety in the trial.

Lima Beans (at Auburn and Cullman). Seed were planted April 21 at Auburn and May 22 at Cullman. Seed were spaced 2 inches in the drill on 40-inch rows at Auburn and 44-inch rows at Cullman. A once over harvest was made to simulate machine harvesting as each variety reached maturity. Results of the trial are presented in Table 5. Fordhook 242, Jackson Wonder, and Fordhook 861 produced the highest in pod yields at Auburn. Jackson Wonder produced the highest shellout percentage. Allgreen had a higher per cent of dry pods at harvest than is

TABLE 4. STAKED AND UNSTAKED FRESH MARKET TOMATO TRIAL, CULLMAN, 1972

Variety	Staked and trellised						Unstaked					
	Marketable yield per acre				Cracks	Culls[1]	Marketable yield per acre				Cracks	Culls[1]
	5 x 6	6 x 6	6 x 7	Total			5 x 6	6 x 6	6 x 7	Total		
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
Homestead 500	113.01	232.65	32.65	378.31	34.30	97.62	109.14	159.36	24.88	293.38	50.70	152.08
Tropic	208.46	137.79	25.94	372.19	8.42	131.83	123.03	125.68	6.32	255.03	14.43	226.14
Sunburst	34.20	224.19	84.77	343.16	16.43	166.09	54.42	221.65	68.00	344.07	27.32	167.85
Bonnie Nematode Resistant	117.12	192.66	22.02	331.80	25.95	147.05	112.72	171.43	21.67	305.82	82.58	223.56
Traveler	52.45	197.10	70.20	319.75	6.12	146.85	52.41	206.39	63.58	322.38	5.02	120.38
Homestead 24	118.83	172.01	28.78	319.62	47.53	116.38	101.00	139.79	14.58	255.37	68.12	152.73
Supermarket	76.58	190.24	50.08	316.90	62.20	105.91	80.12	170.49	49.59	300.20	65.20	138.54
Floradel	103.90	159.43	53.39	316.72	3.37	164.96	131.76	148.71	35.35	315.82	4.29	210.36
Homestead Elite	136.52	157.34	20.87	314.73	3.86	124.85	124.00	128.12	22.72	274.84	69.59	141.29
Homestead 61	114.44	159.20	31.05	304.69	35.60	83.07	110.85	166.80	31.64	309.29	67.73	137.52
Terrific VFN	107.75	158.68	35.44	301.87	57.03	115.78	97.87	98.36	22.04	218.27	78.93	153.23
Walter	55.76	200.08	41.66	297.50	7.73	146.93	37.83	171.77	43.79	253.39	14.73	230.70
Tropi-Red	83.90	167.81	45.37	297.08	14.78	169.91	68.98	153.54	42.13	264.65	11.43	217.53
TAMU Monte Grande	72.50	127.54	39.90	239.94	10.85	144.11	81.30	167.93	21.68	270.91	16.79	174.79
Creole	81.42	118.03	29.41	228.86	2.69	131.84	59.40	112.05	41.94	213.39	10.88	206.71
Chico Grande	1.88	29.10	99.46	130.44	0	246.24	2.37	34.08	85.22	121.67	0	260.91

Soil test p = 120 (high); K = 100 (medium); pH 5.9. 1 ton of limestone applied per acre.
[1] Culls included tomatoes that were too small for marketable grade, catfaced, rots, insect damage, deformed fruits and any other disorder that would make a fruit unmarketable.

TABLE 9. SNAPBEAN VARIETY TRIAL, AUBURN, 1972[1]

Variety	Yield per acre	Growing days	Sieve size[2]				
			1	2	3	4	5
	Bu.		*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
Spring							
Falcon	409	56	6	10	15	54	15
Maestro	397	53	6	9	13	53	19
Early Gallatin	384	53	5	10	15	45	25
Astro	375	54	6	11	17	45	21
Classic	358	54	5	10	10	55	20
Avalanche	349	54	6	9	18	52	15
Eagle	329	55	9	6	12	56	17
Pirol	304	56	6	13	17	52	12
Fall							
Avalanche	230	54	1	5	11	64	19
Maestro	226	53	5	10	7	48	30
Early Gallatin	208	55	10	10	15	50	15
Falcon	186	54	10	8	22	45	15
Eagle	177	54	10	10	8	47	25
Pirol	176	54	1	8	20	52	19
Classic	165	55	5	5	10	45	35
Astro	135	56	12	11	12	41	24

[1] Spring: Soil test p = 70 (medium); k = 60 (low; pH = 5.8; 1 ton of limestone applied per acre.
Fall: Soil test p = 200 (high); k = 0 (very low); pH = 5.9.
[2] 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.

Cullman. Yields were somewhat better for Cullman than Auburn, Table 10. Seneca Zucchini produced the highest yield at Cullman. Dixie produced the highest yield of the Crookneck types. At Auburn, yields were not good this year. Dixie and Slendergold produced the highest yields of the Crookneck types.

Sweetpotatoes (at Auburn, Cullman, and Clanton). Land for the sweetpotato trials was treated with 60 lb. of Mocap per acre for nematode control. Plants were transplanted May 15. Yields of sweetpotatoes at Auburn this season were outstanding, Table 11. Jewel produced the highest yield with

TABLE 11. SWEETPOTATO VARIETY TRIALS, AUBURN, CULLMAN AND CLANTON, 1972[1]

Variety	Marketable yield per acre				Total Solids
	U.S. No. 1[2]	Canners[3]	Jumbo[4]	Total	
	Bu.	*Bu.*	*Bu.*	*Bu.*	*Pct.*
Auburn					
Centennial	313	69	205	587	23.92
Jewel	577	79	178	834	22.96
Red Jewel	574	104	103	781	19.61
Georgia Red	239	43	36	318	22.64
L7-177	444	104	196	744	17.06
L7-182	306	57	120	483	21.74
L4-73	464	105	150	719	20.72
L9-163	160	245	9	414	23.85
L9-190	414	105	84	604	20.80
Georgia 2	140	17	195	352	23.00
M7-21	218	163	69	451	24.50
N.C.-288	186	37	118	341	24.25
N.C.-289	338	45	119	502	24.40
N.C.-304	312	69	115	496	21.60
Cullman					
Centennial	192	113	64	369	
Jewel	163	95	46	304	
Red Jewel	163	73	26	262	
Georgia Red	53	40	6	99	
L7-177	127	51	32	210	
Clanton					
Centennial	----	----	----	105	
Jewel	----	----	----	269	
Red Jewel	----	----	----	178	
Georgia Red	----	----	----	86	
L7-177	----	----	----	159	
L7-182	----	----	----	80	
L4-73	----	----	----	194	
M7-21	----	----	----	174	
N.C. 288	----	----	----	188	
N.C. 289	----	----	----	102	

[1] Auburn: Soil test p = 140 (high); k = 0 (very low); pH = 6.5.
Cullman: Soil test p = 250 (very high); k = 120 (medium); pH = 6.2.
Clanton: No soil test made.
[2] U.S. No. 1 roots were 2 to 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 of the above two grades but are of marketable quality.

TABLE 10. SUMMER SQUASH TRIALS, CULLMAN AND AUBURN, 1972[1]

Variety	Cullman					Auburn					Color	Type
	Marketable yield			Fruit size		Marketable yield			Fruit size			
	No. 1	No. 2	Total	No. 1	No. 2	No. 1	No. 2	Total	No. 1	No. 2		
	Cwt.	*Cwt.*	*Cwt.*	*Lb.*	*Lb.*	*Cwt.*	*Cwt.*	*Cwt.*	*Lb.*	*Lb.*		
Dixie	139.21	72.42	211.63	.19	.42	63.90	84.43	148.33	.15	.37	Yellow	Crookneck
Early Prolific Straightneck	149.78	69.80	219.58	.24	.51	46.11	70.70	116.81	.20	.43	Yellow	Straightneck
Early Summer Crookneck	86.24	47.34	133.58	.18	.38	52.91	65.01	117.92	.17	.30	Yellow	Crookneck
Goldbar Hybrid	135.07	62.43	197.50	.22	.58	54.67	78.35	133.03	.21	.45	Yellow	Straightneck
Golden Summer Crookneck	93.67	44.76	138.43	.18	.36	60.69	58.27	118.96	.15	.32	Yellow	Crookneck
Goldneck	----	----	----	----	----	37.41	44.47	81.88	.19	.42	Yellow	Crookneck
Hyrific	152.62	65.76	218.38	.24	.57	42.44	60.17	102.61	.18	.39	Yellow	Straightneck
Seneca Butterbar	185.49	77.40	262.89	.27	.61	73.18	109.94	183.12	.24	.47	Yellow	Straightneck
Seneca Prolific	160.75	86.46	247.21	.23	.50	93.91	95.94	189.85	.21	.45	Yellow	Straightneck
Slendergold	----	----	----	----	----	56.18	88.49	144.67	.19	.42	Yellow	Crookneck
Yellow Summer (C.N. Improved)	78.62	37.12	115.74	.17	.36	52.39	60.17	112.56	.15	.29	Yellow	Crookneck
Seneca Zucchini	585.02	34.44	619.46	.98	1.16	67.95	14.89	82.84	.46	.95	Green/ gray spot	Straightneck

[1] Cullman: Soil test p = 220 (very high); k = 90 (medium); Mg (low); pH = 5.9. 25 lb. Mg. applied per acre.
Auburn: Soil test p = 210 (very high); k = 60 (low); pH = 5.7. 1 ton limestone applied per acre.

separation was highest for Galaxy and Mariner. This condition is highly undesirable for brining type pickles. Vine Vigor was good to excellent for both the spring and fall plantings.

Potatoes (at Crossville). Seed for the variety trial were collected and brought to Auburn during December, 1971. A 40 degree F. storage was maintained through February after which seed pieces were cut to approximately 1½ to 2 ounces each and treated with Captan. Seed pieces were planted March 13 and potatoes harvested July 1. Seed pieces were spaced 12 inches in the drill on 44-inch rows. Yields were better than in 1971. Yield data is presented in Table 8. USDA line B 6987-56 produced the highest yield of marketable potatoes. Three other entries B6569-5, Wis 709 and Wis 710, also produced above 200 cwt. per acre. Red skin entries B-6967-8, B6967-9, B7005-3 and B6515-14 produced good yields that were higher than Red La Soda. Skin type varied on these new entries from pink to red. Eye appeal was generally fair for these new skin types. Some of the new lines show russett skin having a high degree of eye appeal for fresh market.

Snapbeans (at Auburn). Seed were planted April 7 for the spring crop and August 10 for the fall crop. Seed were spaced 2 inches in the drill with 40-inch rows. Yields from the spring grown crop were very good at Auburn this year. Yield data are presented in Table 9. Falcon was the highest yielding variety in the spring trial and Avalanche was the highest in the Fall planting. Falcon has a round slightly curved bean that averages approximately 5 inches in length. It is dark green and slightly rough in appearance. Avalanche is heart shaped and a little longer than Falcon. Its color is medium green with smooth pods. Plants of Avalanche lodged slightly. Astro, Eagle, and Maestro were good beans with characteristics very similar to Falcon and Avalanche.

Summer Squash (at Auburn and Cullman). Seed were planted on April 21 at Auburn and May 22 at

TABLE 8. POTATO VARIETY TRIAL, CROSSVILLE, 1972[1]

Variety	Yield per acre			Eye depth[2]	Eye size[3]	Skin color[4]	Shape	Eye appeal[5]
	No. 1	No. 2	Total					
	Cwt.	*Cwt.*	*Cwt.*					
Superior	124.78	30.87	155.65	D	M	Wh	Rd./flat	4
Kennebec	154.33	21.07	175.40	S	S	Wh	Rd./long	4
Norchip	76.82	37.79	114.61	M	S	Wh	Round	4
La Chipper	102.40	36.55	138.95	S	S	Wh	Round	4
Red La Soda	118.65	27.68	146.33	D	L	Red	Round	4
Frito Lay—162	107.84	36.31	144.15	S	S	Wh/SR	Round	5
Frito Lay—282 (Seminole)	124.63	15.55	140.18	S	S	Wh	Round	3
Frito Lay—96	144.31	33.98	178.29	S	S	Wh	Round	3.5
L22-110	149.05	26.90	175.95	M	S	Wh	Rd./flat	4
L22-111	102.48	22.86	125.34	M	M	Dark red	Round	3.5
Wis 664	149.51	31.26	180.77	D	M	Wh	Rd./flat	2.5
Wis 623	109.94	45.64	155.58	S	S	Wh	Round	4
Wis 629	94.00	48.99	142.99	S	S	Wh	Round	3
Wis 708	138.47	27.21	165.68	D	M	Wh	Rd./long	4
Wis 709	182.87	24.42	207.29	S	S	Wh/SR	Rd./long	4.5
Wis 710	173.38	31.80	205.18	S	S	Wh	Rd./long	5
B5665-7	90.74	30.79	121.53	S	M	Wh	Long	3.5
B5698-8	91.28	28.69	119.97	S	S	Wh	Round	4
B6495-12	148.03	41.60	189.63	S	M	Wh	Long/flat	4
B6503-5	108.85	15.48	124.33	S	S	Wh	Long	4
B6516-3	102.16	24.42	126.58	S	S	Wh	Round	3.5
B6567-12	179.84	18.97	198.81	D	M	Wh	Long	3.5
B6595-5	193.68	23.56	217.24	S	M	Wh	Round	3.0
B6603-6	138.63	23.79	162.42	D	L	Purple	Round	1
B6603-12	85.22	68.97	154.19	M	M	Wh	Long	3
B6967-8	153.64	24.65	178.29	M	L	Pink	Round	3
B6967-9	115.93	39.65	155.58	M	M	Rose	Round	3
B6987-22	106.36	28.30	134.66	S	S	Wh/SR	Round	4
B6987-37	117.79	21.07	138.86	S	S	Wh	Rd./flat	4
B6987-54	137.46	17.65	155.11	S	S	Wh/SR	Long	4
B7005-3	116.62	22.94	189.56	S	S	Pink	Round	3
B7024-4	119.81	27.60	147.41	M	S	Wh	Round	3.5
B7024-6	137.55	30.71	168.26	S	S	Wh	Long	4
B6516-26	131.16	25.04	156.20	S	S	Wh/SR	Long	4
B6532-4	159.00	22.16	181.16	S	S	Wh	Rd./flat	3.5
B6562-14	127.43	34.60	162.03	S	S	Wh/SR	Rd./flat	4
B6515-14	169.73	29.39	199.12	M	M	Red	Round	3
B6987-56	186.29	28.69	214.98	M	S	Wh/SR	Round	4.5

[1] Soil test p = 210 (very high); K = 80 (medium); Mg (low); pH = 5.2. 25 pounds of Mg applied per acre as a side dressing.
[2] S = Shallow, M = medium depth, D = deep.
[3] S = small, M = medium, L = large.
[4] Wh = White, SR = Some Russet.
[5] 5 = excellent, 4 = good, 3 = fair, 2 = poor and 1 = very poor.

TABLE 5. LIMA BEAN VARIETY TRIAL, CULLMAN AND AUBURN, 1972[1]

Variety	Cullman				Auburn						
	Yield per acre		Shell-out	Growing days	Yield per acre		Shell-out	Growing days	Condition of pods at harvest		
	In pod	Shelled			In pod	Shelled			Dry	Yellow	Green
	Bu.	*Lb.*	*Pct.*	*No.*	*Bu.*	*Lb.*	*Pct.*	*No.*	*Pct.*	*Pct.*	*Pct.*
Allgreen	187	2,300	41	89	297	3,917	44	84	12	9	79
Fordhook 242	93	1,367	49	85	399	5,264	44	81	2	6	92
Green Fordhook 861	75	923	41	85	380	4,214	37	81	0	1	99
Henderson Bush	128	1,613	42	83	297	4,091	46	81	7	14	79
Jackson Wonder	154	2,171	47	80	394	5,680	48	81	4	6	90
Thaxter	63	680	36	85	296	3,281	37	81	2	1	97
Thorogreen	----	----	----	----	155	1,767	38	71	6	1	93

[1] Cullman: Soil test p = 210 (Very high); k = 120 (high); pH = 6.1.
Auburn: Soil test p = 140 (high); k = 0 (Very low); pH = 6.5.

desirable. Green Fordhook 861 was harvested a few days too early for optimum shellout. Yields at Cullman were very low for all entries.

Okra (at Auburn). Seed were planted May 3 and thinned 4 weeks later to 6 inches in the drill. Rows were spaced 40 inches apart. Yield results are presented in Table 6. Clemson Spineless produced the highest yield and Louisiana Green Velvet produced the lowest.

TABLE 6. OKRA VARIETY TRIAL, AUBURN, 1972[1]

Variety	Yield per acre[2]
	Tons
Clemson Spineless	13.50
Perfected Perkins Long Pod	10.50
Dwarf Green Long Pod	9.15
Emerald	8.73
Emerald Green Velvet	8.35
Perkins	8.29
Louisiana Green Velvet	7.11

[1] Soil test p = 210 (Very high); k = 60 (low); pH 6.5.
[2] 30 harvests were made beginning July 5 and ending October 10.

Pickling Cucumbers (at Auburn). Seed were planted April 4, and August 4. Harvesting began on June 2 for the spring crop and September 12 for the fall crop. Marketable yields of pickling Cucumbers are shown in Table 7. Spring yields were generally higher than the Fall. Carolina is a very promising new dark green cucumber with excellent pickling characteristics. Yields for Carolina were excellent in the Fall thus making it a dual season variety. Explorer, the present standard for the Alabama pickle industry, performed well for both seasons. Promising breeding lines are 72-G2 (NC) and 817A (SC). Both of these lines performed well at Auburn. Carpel

TABLE 7. PICKLING CUCUMBER TRIAL, AUBURN, 1972[1]

Variety	Marketable yield per acre, Grades[2]					Harvest season	Skin color[3]	Fruit shape	Spine color[4]	Vine vigor	Carpel separation[5]	
	No. 1	No. 2	No. 3	No. 4	Total						No. 3's	No. 4's
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*						*Pct.*	*Pct.*
Spring												
Explorer	17.99	98.49	164.51	29.17	310.16	Early	LG	Good	Wh	Excellent	0	0
Galaxy	17.20	127.98	120.86	30.48	296.52	Medium	LG	Fair	Wh	Excellent	2	26
Mariner	18.64	92.80	157.74	48.13	317.31	Medium	DG	Fair	Wh	Good	0	17
Carolina	14.32	86.52	98.75	21.65	221.24	Early	DG	Good	Wh	Excellent	1	0
72-G4(NC)	14.06	77.50	157.74	20.60	269.90	Medium	G	Good	Wh	Excellent	1	0
Perfecto Verde	15.96	81.55	130.02	30.80	258.33	Late	LG	Good	Wh	Excellent	0	17
Earlipik	20.60	101.70	171.68	42.71	336.69	Early	DG	Good	Wh	Excellent	3	0
72-G2(NC)	25.31	111.70	158.66	38.72	334.79	Early	DG	Good	Wh	Excellent	3	0
817A (SC)	27.47	112.23	167.95	51.86	359.51	Medium	DG	Good	Wh	Excellent	0	0
Fall												
Explorer	16.15	96.40	134.46	32.70	279.71	Medium	G	Good	Wh	Excellent	0	0
Galaxy	20.40	82.93	116.02	24.13	243.48	Medium	G	Excellent	Wh	Excellent	0	0
Mariner	17.99	87.83	151.00	34.79	291.61	Early	G	Excellent	Wh	Excellent	1	25
Carolina	27.66	126.75	186.59	38.00	379.00	Early	G	Excellent	Wh	Excellent	2	0
72-G4(NC)	13.73	72.20	99.67	31.26	216.86	Medium	G	Fair	Wh	Excellent	0	0
Perfecto Verde	19.03	80.77	138.91	20.40	259.11	Medium	G	Fair	Wh	Excellent	0	--
Earlipik	19.16	99.34	155.19	32.44	273.69	Early	G	Good	Wh	Excellent	0	0
72-G2(NC)	17.53	113.01	148.46	39.76	318.76	Early	DG	Good	Wh	Excellent	0	8
817A (SC)	26.42	87.45	97.87	17.00	238.74	Late	DG	Good	Wh	Excellent	4	0

[1] Spring: Soil test p = 200 (high); k = 0 (very low); pH = 5.9.
Fall: Soil test p = 210 (very high); k = 60 (low); pH = 5.7 1 ton of limestone applied per acre.
[2] No. 1 grade ranged up to 1 1/16 inch in diameter; No. 2 grade 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] G = green, LG = light green, DG = dark green.
[4] Wh = White.
[5] Carpel separation was based on the per cent of fruits cut that had open or air spaces in the middle.

834 bushels of marketable roots per acre. It was followed by Red Jewel, L7-177 and L4-73 producing above 700 bushels per acre. Jewel and Red Jewel produced the highest yield of No. 1 roots. Of the red skin varieties, Georgia Red had the most attractive red skin. Total solids were low this year at Auburn. Yields at Cullman were low for those entries tested. At Clanton, yields reflect a late planting date and no comparisons should be made with the other two areas. Jewel was the highest yielding variety at Clanton.

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