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W. E. Ayres

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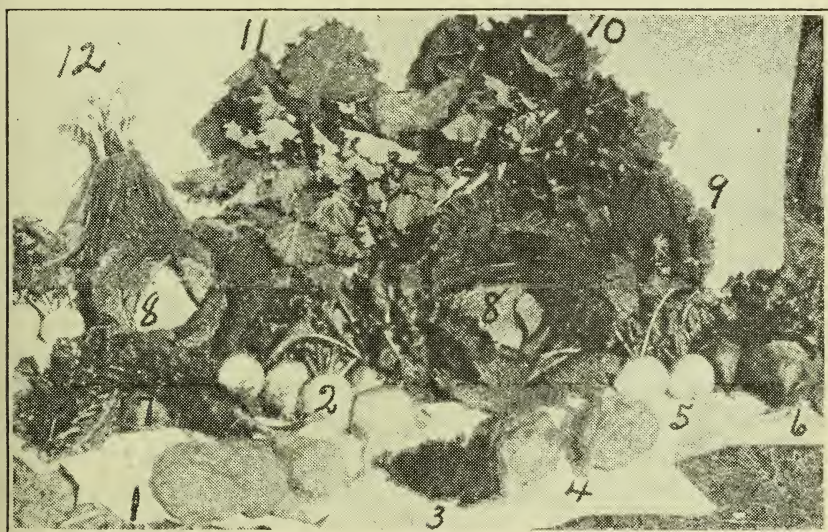
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Vegetables and Truck for Home Use

DELTA BRANCH STATION

W. E. Ayres



Home-Grown Vegetables—Photographed Jan. 15, 1921.

1.—Porto Rica Sweet Potatoes. 2.—Amber Globe Turnips. 3.—Moss Curled Parsley. 4.—Nancy Hall Sweet Potatoes. 5.—Purple Top Globe Turnips. 6.—Detroit Dark Red Beet. 7.—Kelways Perfect Model Beet. 8.—Savoy Cabbage. 9.—Green Curled Kale. 10.—Blue Collard. 11.—White Collard. 12.—White Multiplier Onions.

All were grown outside in winter except the potatoes—and they were kept in an ordinary "kilm" and were fresh Jan. 15.

LET THE DELTA LIVE AT HOME.

MISSISSIPPI AGRICULTURAL EXPERIMENT STATION

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*In cooperation Bureau of Animal Industry, U. S. Department of Agriculture.

Vegetables and Truck for Home Use

DELTA BRANCH STATION

by

W. E. Ayres

THE COST OF LIVING question must be met by every householder. Two years ago the trouble was high prices. Now it is the lack of money. The South's greatest trouble is that too much food is bought at high prices that could and should be grown at home at practically no money cost.

An expensive if not an extravagant distributing system is responsible for most of the "High Cost of Living" of Delta farmers and villagers. Store-bought vegetables are raised by well paid gardeners on high priced land; picked, crated, pickled, dried, canned, or packed by high priced labor; transported across counties and states at high freight and express rates; distributed by jobbers, wholesalers, and retailers who must have very wide margins of profits; and so forth and so on to the table at exhortant prices as compared with the cost of producing the same things at home.

The all-cotton farmer or planter is usually between two fires. When bad seasons bring good prices there is not enough cotton to sell to obtain cash to meet needs. When there is a good crop low prices cut the cash. For farmers to continue to produce cotton with which to buy all food, as well as feed, is inviting disaster not only to themselves but to their town and village neighbors, because such a practice causes high prices on the things that are to be bought and low prices on the salable commodity.

It is high time to give the home garden and truck patches first consideration. Gardens and truck patches should be the richest and best worked areas on the farm, and should grow something twelve months in the year. A garden properly planned to meet the family needs and thoroughly worked and having a good succession of crops, will cut the grocery bill at least in half. The dream of easy money is a past sensation. Outsiders' profits must be reduced if those of the farmer are to be increased. HOME GROWN food yields profits to no one save the home owner, therefore, the home garden is most economical. It is an easy matter to produce on half an acre for \$50.00 to \$100.00, vegetables and truck which, if bought from the retail grocer, would cost \$500.00 to \$2,000.00. Spending cotton money for vegetables regularly is simple extravagance for any farmer.

Besides being the most economical food, vegetables are both appetizing and nourishing. They supply practically all food materials needed for full and complete nourishment of the body. Meats may be omitted from the diet without sacrificing either the mental or physical vigor of any member of the family but not so with vegetables. They are absolutely essential.

Vegetables give variety to the diet like no other foods can, furnish water soluble vitamins and mineral matter not abundant in other foods. They furnish fibrous material which acts as a roughage and keep the food from being too concentrated. They thereby prevent constipation and other digestive troubles. Scurvey and other diseases caused by a diet of meat and dried foods give absolutely no trouble in homes using fresh and canned vegetables as a substantial part of the diet the year round. The health of any family will be materially improved by such use of vegetables. "Medicated Spring Tonics" are not used in homes where there has been sufficient green and canned vegetables in the diet through the winter months.

To meet the need for information on the various phases of home gardening, an experimental garden was begun at the Delta Station in 1920. Experiments and close observations under Delta conditions should simplify gardening operations in this section and aid in reducing living costs.

SOILS: The ideal garden soil contains an abundant supply of plant food and water and is porous enough to admit of air and circulation. The well drained loam soils are the Delta's best garden and truck areas but profitable gardens can be produced on any well drained rich soil.

SEED BED: Garden seeds are very small, hence the necessity of a well prepared, thoroughly fined seed bed. The land should be plowed, disked and harrowed twice or three times depending upon its condition. Preparation should not be stopped until the soil is mellow and the particles fine.

FERTILIZATION: It is imperative that garden and truck patches be very fertile. Stable or barn yard manure should be used in the fall at the rate of 15 to 20 tons per acre every two years. If such crops as cabbage do not grow off rapidly use nitrate of soda at the rate of 200 to 400 pounds per acre around the plants. On lands thought to be deficient in potash or phosphorus use a mixture of 650 lbs. acid phosphate, 400 lbs. of nitrate of soda, and 250 lbs. of sulphate of potash per acre. Don't be "stingy" with fertilizer and manure on truck garden crops.

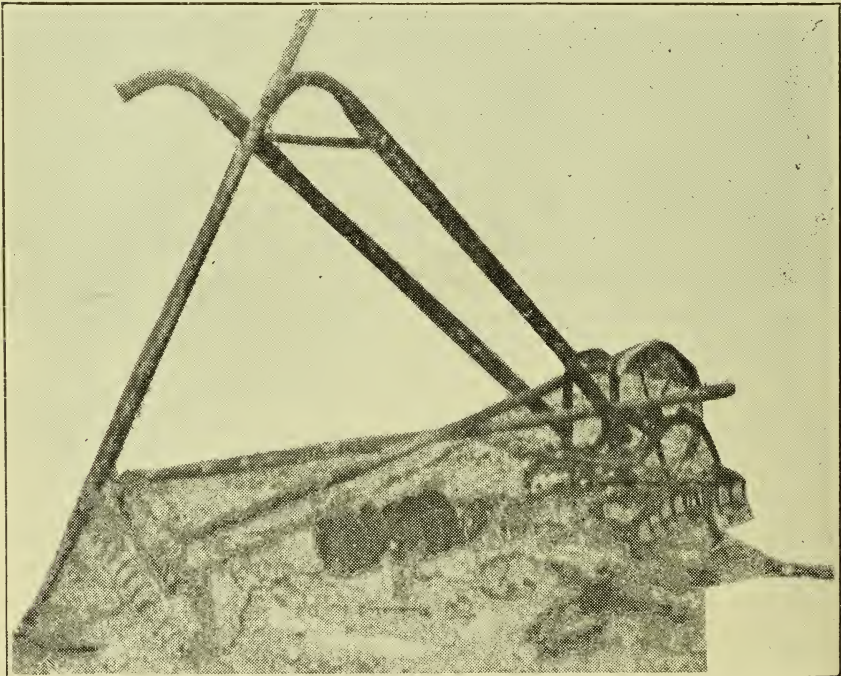


Fig. I.—Implements used to supplement horse-drawn tools in cultivating the Delta Station garden.

CULTIVATION: Garden and truck crops should be thoroughly cultivated every week or ten days and oftener if rains are frequent. No crust should be permitted, much less weeds and grass. A mule and harrow, sweep, or cultivator are very economical to use, when properly supplemented. Figure 1 shows tools used at the Delta Station to supplement the plow. In facilitate cultivation with horse drawn implements the garden should be long and narrow and should include 1-5 to 1-3 of an acre. It is desirable to have the length three times the width.

VEGETABLES AND TRUCK TO GROW: The size and likes and dislikes of the family have much to do with what should be grown but most gardens and truck patches should contain turnips, mustard, radish, spinach, lettuce, beets, cabbage, collards, asparagus, beans, peas, Irish potatoes, onions, tomatoes, egg plant, strawberries, sweet corn, watermelon, cantaloupe, cucumbers, squash, okra, and pepper. Parsley, kale, carrots, cauliflower, Swiss chard, kohl rabi, Brussels sprouts, endive, corn salad, Chinese cabbage, etc., may be grown by those who care for them.

GREENS AND SALAD PLANTS: Mustard is easily and quickly grown and furnishes an abundance of greens. It does well after February 15 until June and from Sept. 1 until Dec. 30. In mild winters it does well throughout the winter. Southern Curled yields about as much and a better quality of greens than any other variety tested.

TURNIPS furnish both greens and roots, are hardier, and are better liked by most people than mustard. Seven Top is strictly a greens variety and will stand the severest weather common to the cotton states. For fall and spring greens and for turnips other varieties must be used.

TABLE I. TURNIP VARIETY TEST, PLANTED APRIL 22, 1920.

Variety	Harvest Record					
	55 Days From Planting			Total Yield		
	No. of Turnips	Weight—Lbs.		No. of Turnips	Weight—Lbs.	
Purple Top White Globe	4	1.7	1.1	63	31.1	13.5
Red Top Globe	16	11.5	5.5	89	57.5	31.4
Purple Top Strap Leaved	36	17.7	9.1	92	36.1	20.5
Early Red or						
Purple Top Strap Leaved	30	18.4	9.0	78	39.0	20.2
Early Snowball	20	19.9	9.0	76	57.7	31.6
Seven Top		Strictly a greens variety for winter.				
Late Test Planted Aug. 16, 1920.						
Early Red or						
Purple Top Strap Leaved	16	9.4	4.3	32	15.6	7.0
Extra Early Milan	33	14.4	7.5	59	22.2	12.5
Purple or Red Top Globe	2	1.9	0.8	33	-----	11.9
Early Snowball	0	0	0	26	-----	8.3
Yellow or Amber Globe	0	0	0	32	-----	12.9

One row of each variety. Rows in early test were 30 ft. long and contained 90 plants. In late test rows were 20 ft. long and had 60 plants.

Table 1 shows results of spring and fall variety tests in 1920. For early use Milan and Purple Top Strap Leaved are desirable. Amber Globe, Red Top Globe, Purple Top Globe, and Snowball are better for fall and early winter turnips and for late spring use. Fig. 2 shows products of some of the latter varieties harvested January 15, 1921, from Sept. 25, 1920 planting. Seed were sown Oct. 1, 1921 and turnips were available until Feb. 20, 1922.

To be able to have fresh tender greens at all times mustard and turnips should be sown every two weeks from Feb. 15 to April 15 and from Aug. 15 to Nov. 1.

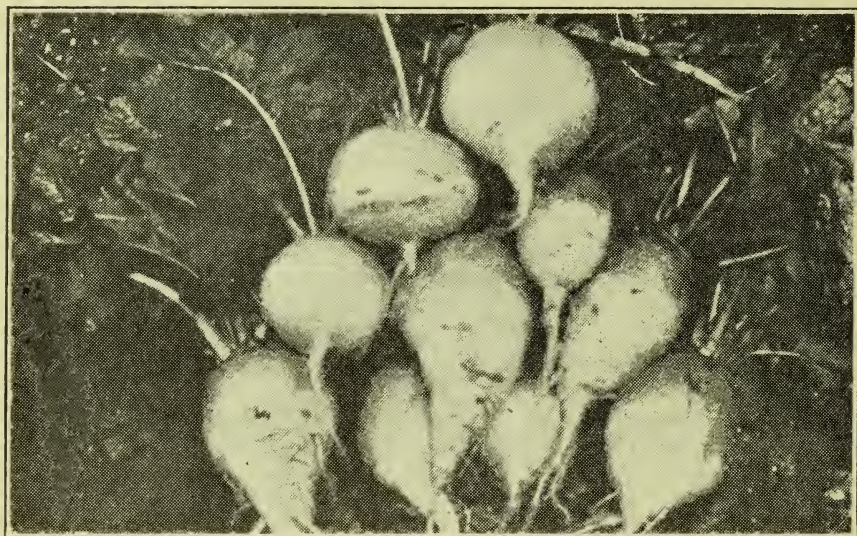


Fig. 2.—Amber Globe, Purple Top Globe, and Snow Ball turnips harvested Jan. 15 from Sept. 25 planting. A good, cheap, and easily grown vegetable.

SAVOY SPINACH may be grown as recommended above for turnips. New Zealand spinach is a summer variety which, if planted April 1, will furnish greens until frost.

COLLARDS AND KALE are very hardy and will stand the ordinary Southern winter. Planted either in May or August they have done well in the Delta experimental garden and have furnished greens at times when little else was available.

LETTUCE is rather hardy and may be raised in both fall and spring. Seed sown in hot beds, cold frames, or boxes in the living room window in January produce plants for early March setting. Seed sown in the open Sept. 1 will furnish the table in fall and early winter.

Variety tests in 1920 and 1921 were rather unsatisfactory but tend to indicate that Hubbard Market, Big Boston, and Just-In-Head are good.

CABBAGE may be grown in the open the year round, with the exception of July, August and September. For winter use, Savoy is the variety safest to use although the ordinary varieties withstand mild winters. For early spring use Jersey Wakefield is the best while Charleston Wakefield and Flat Dutch are better for later use. Plants should be set by Feb. 20 to March 1 and every two weeks until April 15.

GREENS and SALADS are very refreshing besides being valuable for the variety they give to the diet and the cellulose and minerals they yield. Enough should be planted, plantings made often enough, and enough varieties used to insure a succession throughout the open season. These vegetables are used while young and tender. The more rapid the growth the tenderer they are, hence the necessity of high fertilization and proper cultivation.

VEGETABLE FRUITS: This group includes tomatoes, egg plant, okra, pepper, etc. These are amongst the most useful vegetables. This group does well on buckshot soil.

TOMATOES are attractive and refreshing when served alone or in combination. When properly canned they keep well. A generous supply of canned tomatoes is valuable at all times but is especially so in winter when the variety of fresh vegetables is limited.

TABLE II. TOMATO VARIETY TESTS.

Variety	Yield 1st 3 Pickings			Total Yield		
	No. Fruits	Total Lbs.	Lbs. per Fruit	No. Fruits	Total Lbs.	Lbs. per Fruit
	Plants set May 15, 1920 (1).					
Stone -----	25	8.7	0.345	290	77.7	0.267
Early Acme -----	4	1.6	0.400	380	90.8	0.239
Early Detroit -----	13	3.8	0.267	309	85.5	0.278
Ponderosa -----	0	0	0	231	59.4	0.257
Red Rock -----	24	8.2	0.340	266	73.9	0.278
	Seed planted June 18, 1920—Not Transplanted (2).					
Improved Purple Acme -----	24	9.1	0.380	116	26.2	0.226
Chalk's Early Jewel -----	9	3.8	0.418	104	20.5	0.197
Redfield Beauty -----	18	6.1	0.341	---	13.9	---
Early Acme -----	13	4.1	0.315	61	15.1	0.248
Early Detroit -----	19	8.9	0.478	77	19.3	0.247
Ponderosa -----	9	3.4	0.379	56	18.6	0.332
Stone -----	22	8.4	0.384	97	20.3	0.210
Bonnie Best -----	52	14.2	0.273	---	20.8	---
Livingstone's Globe -----	16	5.1	0.321	96	21.0	0.219
Red Sunrise -----	30	6.6	0.220	99	18.9	0.191
Red Pear -----	0	0	0	303	11.0	0.017
Yellow Pear -----	0	0	0	358	17.4	0.022
	Seed planted March 10—Plants set Apr. 5, 1921 (1).					
Stone -----	37	11.4	0.309	243	56.8	0.243
Ponderosa -----	3	0.8	0.267	59	27.2	0.461
Bonnie Best -----	37	14.2	0.384	167	78.0	0.467
Chalk's Jewell -----	43	12.4	0.290	380	76.7	0.202
Early Detroit -----	33	12.0	0.361	210	67.0	0.319
Red Sunrise -----	57	20.6	0.344	503	141.8	0.282
	Average three Tests.					
Early Detroit -----	22	8.2	0.369	199	57.3	0.281
Stone -----	28	9.5	0.346	210	51.6	0.240
Ponderosa -----	4	1.4	0.215	115	35.1	0.353

(1) Plots consisted of 2 rows 36 feet long each containing 12 plants. (2) One-row plots—11 plants.

Variety tests were made in both 1920 and 1921. The results of these tests are shown in table 2. In the early test in 1920 Acme, Early Detroit, and Stone were leaders in the order named. Acme, Livingstone Globe, and Bonnie Best were the leaders in the late test in 1920, while Red Sunrise, Bonnie Best, and Chalk's Early Jewell led in the 1921 test.

Considering the weights and notes made during the two seasons Red Sunrise, Bonnie Best, Early Detroit, and Stone are probably the most dependable varieties. Early Detroit is a nice pink variety. The others are red.

Plants should be ready to set by April 15. Set 3 ft. apart at this time, and cared for they will ripen fruit by the first of July and continuously thereafter until frost. Since the old plants do not fruit rapidly after Sept. 1 it is well to cut a part of them back severely about Aug. 15, or set new plants obtained by rooting branches of the old plants by covering same with soil in July.

Five different methods of training or caring for the plants were tested. Table III shows results and figures 3 to 5 illustrate the various methods used. The method shown in figure 3 gave the best yields and is the least trouble and expensive—in the long run. Staking and tying the plants up produced practically as good yields but is more trouble. Results indicate that pruning is both unnecessary and undesirable.

TABLE III. METHODS OF TRAINING TOMATOES.

Method of Training	Yield 1st 3 Pickings			Total Yield		
	No. Fruits	Total Lbs.	Lbs. per Fruit	No. Fruits	Total Lbs.	Lbs. per Fruit
Plants set May 15, 1920.						
Natural Growth—Not Staked-----	8	2.6	0.325	282	79.4	0.282
Natural Growth—Staked & Tied Up	19	7.6	0.381	539	168.6	0.313
Staked and Pruned to 2 Stems----	9	3.9	0.443	303	98.7	0.326
Staked to Hog Wire Between Rows	23	7.6	0.332	410	153.7	0.375
Grown on Hog Wire Over Rows----	17	6.2	0.360	542	170.4	0.314
Natural Growth—Not Staked-----	25	8.7	0.345	290	77.7	0.267
Plants set April 5, 1921.						
Natural Growth—Staked & Tied Up	59	17.8	0.302	309	75.6	0.245
Natural Growth—Not Staked-----	33	11.2	0.339	177	41.1	0.233
Staked and Pruned to 2 Stems----	33	9.2	0.279	187	52.5	0.281
Staked to Hog Wire Between Rows	41	13.2	0.322	248	78.8	0.318
Natural Growth—Not Staked-----	29	8.2	0.283	170	40.1	0.236
Grown on Hog Wire Over Rows----	35	11.0	0.315	405	85.5	0.211
Average 1920 and 1921.						
Grown on Hog Wire Over Rows----	26	8.6	0.338	474	127.9	0.262
Natural Growth—Staked & Tied Up	39	12.7	0.342	424	122.1	0.304
Staked to Hog Wire Between Rows	32	10.4	0.327	329	116.2	0.347
Staked and Pruned to 2 Stems----	21	6.6	0.361	245	75.6	0.304
Natural Growth—Not Staked-----	24	7.7	0.323	230	59.6	0.205

Plots consisted of 2 rows 36 feet long, or 24 plants.

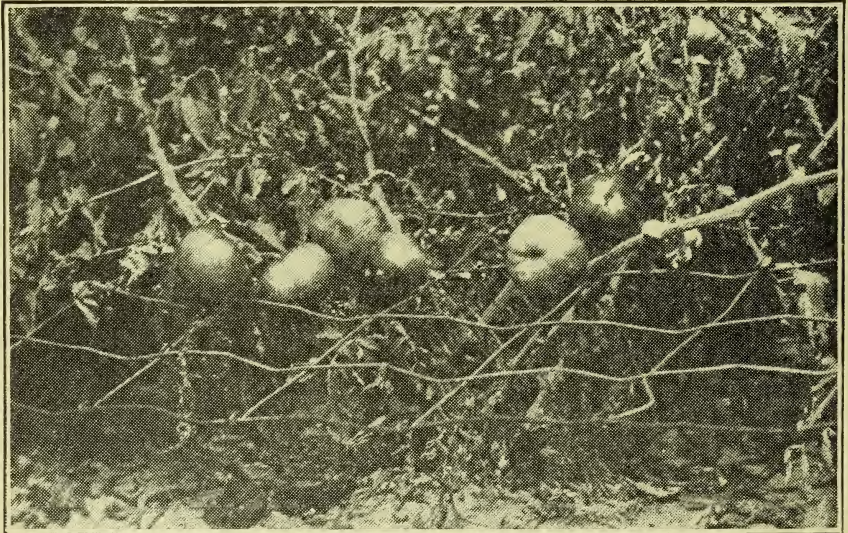


Fig. 3.—Tomatoes on hog wire stretched over the rows 12 inches from the ground. Rows two feet apart, wire placed when plants are 14 to 16 inches high. A desirable support.

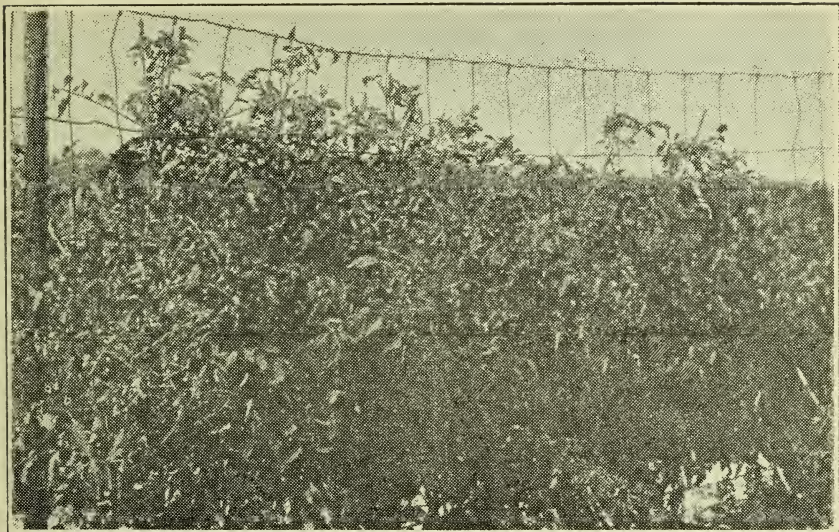


Fig. 4.—Tomatoes staked to hog wire set between 2 narrow rows. Not desirable since it is as much trouble as the method shown at the right in figure 4 and is more expensive.

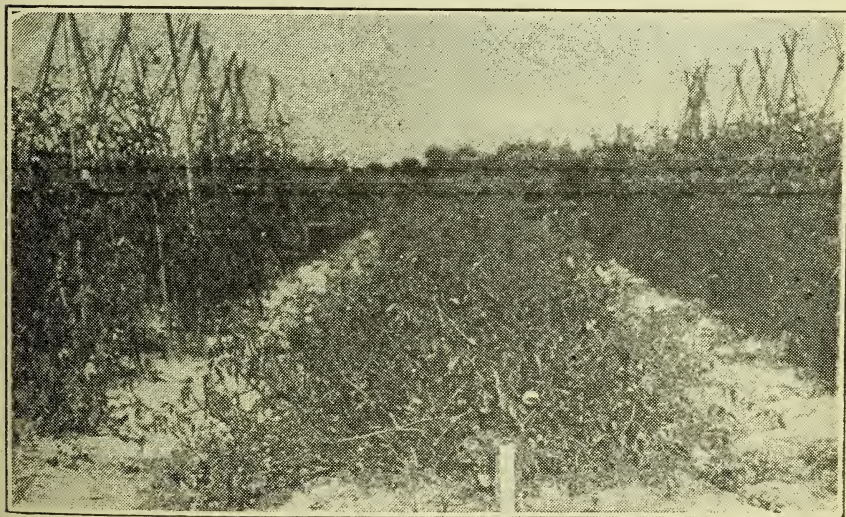


Fig. 5.—Centre—Tomatoes growing naturally. Left—staked, tied up, and pruned to two stems. Right—Staked and tied up, not pruned. The latter is preferable to any except that shown in figure 3 and is more desirable than that when there are plenty of stakes and no wire.

EGG PLANT is easily grown after the plants get a start but the young plants are very tender and require careful handling. No special tests were made.

OKRA variety tests were attempted both years but seed were so badly mixed that results are worth very little. It is evident, however, that a dozen plants of any good variety will furnish any ordinary family. Plant April 20 to May 1.

PEPPER variety tests have been worth very little except as observation tests but Bell or Bull Nose and Pimento seem as desirable as any edible varieties and Cayenne is a good hot pepper. Set plants about April 20 and have pepper until frost.

Plants of all this group (except okra) may be grown as outlined for lettuce, the seed being sown Feb. 20 to March 1.

ROOTS and TUBERS: Potatoes, turnips, beets, radishes, carrots, etc., make up this group. To have a succession of these it is necessary to plant all except potatoes at intervals of 7 to 14 days.

IRISH POTATOES are commonly grown. They are very starchy and should have an important place in the diet of every farm family. The crop is easily grown, requiring much less attention than the same area of vegetables.

Variety tests conducted in 1920-21, data for which are shown in table IV, indicate that Irish Cobbler, Early Ohio, and Peerless are as good as any for home use.

TABLE IV. IRISH POTATO VARIETY TESTS.

Variety	Bushels per Acre		
	Marketable	Edible	Total
1920 Results.			
Irish Cobbler -----	37.2	103.5	120.0
Triumph -----	23.7	80.1	91.2
Early Rose -----	19.5	63.9	74.1
Peerless -----	11.5	51.3	65.1
1921 Results.			
Early Ohio -----	55.6	84.0	87.0
Peerless -----	32.0	95.6	100.8
Early Rose -----	26.4	64.6	65.2
Irish Cobbler -----	28.0	51.8	55.6
Triumph -----	7.2	25.4	28.4
Average Results 1920 and 1921.			
Irish Cobbler -----	32.6	77.7	87.8
Peerless -----	21.8	73.5	83.0
Early Rose -----	23.0	64.3	69.7
Triumph -----	15.5	52.8	59.8
Early Ohio -----	Tested only one year.		

1920 tests planted April 12. 1921 test planted March 8.

Potatoes should be planted Feb. 15 to March 1. The seed should be treated for scab by soaking for 1½ to 2 hours in a solution of 1 pint of formalin in 30 gallons of water or 4 ounces of corrosive sublimate (mercuric chloride) in the same amount of water. The seed should be treated before they sprout and be dried at once. It is preferable to cut and plant, soon after treatment, 15 inches apart in 3 or 3½ foot rows.

A second crop may be planted July 10 to Aug. 10 and good results obtained when cold storage seed can be obtained, and the summer and early fall are not too dry.

SWEET POTATOES, being especially adapted to the South, should be grown on every Southern farm in sufficient quantities to supply the family table at least eight months in the year. Potatoes should be bedded March 10 to 20, the seed being soaked in either of the disinfectant solutions mentioned above for five to ten minutes. (Note difference in the period of treatment as compared with the period for Irish potatoes.) Half a bushel of seed potatoes will produce "slips" sufficient for a family of two or three persons.

TABLE V. SWEET POTATO VARIETY TEST 1920.

Variety	Bushels per Acre		Rank Based on	
	Market-able	Total Yield	Market-able	Total Yield
Triumph -----	412.1	546.8	1	1
Nancy Hall -----	315.1	439.0	3	2
Dooley -----	321.6	371.6	2	3
Gold Coin -----	308.0	343.9	4	4
Porto Rico -----	293.3	335.0	5	5
Bunch Yam -----	137.6	199.5	6	6

The variety tests reported in Table V for only one year should not be considered as being conclusive but it is rather common knowledge that Nancy Hall is one of the most desirable for table use and for Southern markets and that Triumph is a heavy yielder.

Loam or sandy loam soil is most desirable for sweet potatoes.

Turnips were discussed and results of tests given above under "Salads and Greens."

The BEET is a very useful vegetable. It can be grown in the open the entire year when the winters are not severe. In both 1920 and 1921 beets planted in April remained in the open until March and were edible at all times although not as good when old as when young and tender. Successive plantings at intervals of 10 to 20 days are desirable from April 1 to October 1.

TABLE VI. BEET VARIETY TEST, 1920

Variety	Lbs. of Roots		Rank Based on	
	Best Ten	Total	Size	Total Yield
Kelway's Perfect Model-----	15.4	40.7	2	1
Detroit Dark Red-----	15.7	38.9	1	2
Improved Early Blood Turnip-----	15.2	36.1	3	3
Crosby's Egyptian -----	14.1	35.8	4	4

Planted April 22.

Table VI shows results of the 1920 variety test. There was very little difference between yield and quality of the varieties. All those tested were good while young and tender and yielded satisfactorily.

RADISHES are hardy but the quality is not good through the summer. They may be grown in the open from Feb. 10 to June 10 and from Aug. 15 to Dec. 1. The quality is so much better when they are young that successive plantings should be made every ten days to insure fresh tender roots at all times. Scarlet and White Turnip and Long White Icicle are good varieties.

BEANS AND PEAS: This group is very rich in protein and will replace much of the meat of the diet at a saving in cost and to the advantage of the family.

BEANS are divided into two general classes: Limas and string beans. Each of these is divided into bush and pole sorts. Variety tests have been conducted with all of them but no results worthy of publication have been obtained with any except the bush string varieties. These results are given in Table VII. Rust Proof Golden Wax, Webber Wax, Bountiful, and Stringless Green Pod have been the best varieties tested considering both quality and quantity.

Since bush beans do not have to be "stuck" they are more desirable for the average garden than the pole varieties. Bush beans planted every two weeks from April 10 to June 20 and on August 1 and 15 will provide fresh beans the greater part of the summer.

TABLE VII. BUSH BEAN VARIETY TEST

Variety	Days to Edible Beans	Lbs. Strings Beans	Size of Plant
Green Podded Varieties—1920, Planted April 22.			
Bountiful -----	45	39.1	Large to Very Large
Giant Stringless -----	49	30.4	Medium
Stringless -----	44	34.8	Medium
Early Red Valentine -----	51	34.8	Small
Earliest Red Valentine -----	51	28.0	Small
Wax Varieties—1920, Planted April 22			
Golden Improved -----	45	20.3	Very Small
Rust Proof Golden -----	49	38.6	Very Small
Currie's Rust Proof -----	44	34.5	Large
Webber -----	44	37.6	Small
Black German -----	49	31.7	Medium to Large
Late Test 1920—Planted Aug. 16			
Valentine Wax -----	45	17.2	
Davis White Wax -----	45	22.4	
Sure Crop Stringless Wax -----	54	8.0	
Stringless Green Pod -----	45	19.7	
Bountiful -----	42	18.5	

String Beans weigh 3-4 pound per quart and should be bought by weight rather than by measure.



Fig. 6.—Section of variety test of bush beans 1921.

Pole beans are desirable for planting in the new ground corn fields and are somewhat safer for midsummer even in the garden. Where there is plenty of cane or straight "sprouts" the sticking process is very much simplified by their use. Figure 7 shows their use for pole lima beans. This same sort of frame has been used to good advantage with tomatoes as shown in previous cuts.

Variety tests in 1920 and 1921 indicate that Dutch Case Knife and Kentucky Wonder are good varieties. The latter gives better quality snaps but the former is a week earlier and a little better yielder. Lazy Wife was



Fig. 7.—Sweet corn and lima bean test 1921. Note use of 6 ft. canes for sticking beans.

later than either of the above and produced less than one tenth as many beans as the others.

LIMA BEANS, both bush and pole, yielded very poorly both years. For this reason little information was obtained on varieties. Large White was the best of the pole varieties and Burpee's the best of the bush kinds.

Lima beans and pole snaps should be planted about the first of May.

GARDEN PEAS may be grown in the early spring and again in the fall. Spring plantings should be made every ten days from March 10 to April 20 and the fall planting about August 10.

In the variety tests in 1921 Thomas Laxton produced 37 quarts on 30 feet of row, Telephone 26 quarts, and Pioneer 23 quarts. Telephone is a late variety. The other two are early.

SWEET CORN: In the roasting ear stage sweet corn is generally liked. By making successive plantings every two weeks from March 20 to June 20 sweet corn will be available for the table most of the time from June 10 to the last of August. After this date field corn is a safer dependence if roasting ears are desired.

TABLE VIII. SWEET CORN VARIETY TEST.

Variety	No. of Ears		Lbs. of Ears		Av. Lbs. per Ear
	Before July 10	Total	Before July 10	Total	
1920 Results.					
Stowell's Evergreen -----	10	80	3.9	29.0	0.37
Country Gentleman -----	12	105	3.9	31.4	0.30
Bantam Evergreen -----	58	133	20.3	38.7	0.30
Early Minnesota -----	101	142	20.7	25.4	0.18
Golden Bantam -----	83	119	15.1	20.7	0.17
Golden Sugar -----	70	117	10.4	15.7	0.13
1921 Results.					
Stowell's Evergreen -----	0				
Country Gentleman -----	0				
Bantam Evergreen -----	16				
Early Minnesota -----	81				
Golden Sugar -----	12				

1920 Test Planted April 22. 1921 Test Planted April 24.

Table VIII gives results of variety tests in 1920 and partially in 1921. Stowells Evergreen, Bantam Evergreen, and Early Minnesota will serve for the home garden and give a succession. If limited to two varieties Stowell's Evergreen and Early Minnesota are to be advised, the former for the main crop and the latter for very early use.

THE VINE GROUP: Cucumbers, squash, cantaloupe, water-melon, citron, and gherkin all have a place in the garden and truck scheme of the farm. These should be planted every two weeks from April 15 to June 15.

CUCUMBERS make excellent pickles and 6 to 10 hills will furnish an ordinary family. The variety test reported in Table IX indicates that White Spine is as good as any. Records show it to have better quality than some others.

TABLE IX. CUCUMBER AND SQUASH VARIETY TEST—1920

Variety	No. Edible Fruits		
	To July First	Total	Rank
Cucumbers			
Arlington White Spine-----	106	944	1
Early White Spine-----	102	908	2
Snow Pickling-----	95	871	3
Lavis Perfect-----	78	696	4
Squash			
Early White Bush Scallop-----	31	179	1
Summer Crookneck-----	25	150	2

Nine hills of each variety planted April 22.

All fruits were picked when 1½ to 3 inches long or at the proper stage for pickles. The gherkin makes good pickles and is very prolific from spring until frost. Successive plantings of cucumbers are desirable.

SQUASH is relished by many and is easily grown. White Scallop is more prolific than Crookneck but the latter is golden yellow and makes a beautiful dish.

THE WATERMELON is a summer staple throughout the South for between-meals and after-supper use. Melons are luscious, healthful, and nourishing. To have an abundance throughout the season a few hills should be planted April 10 and successive plantings made every three weeks until August 10. Plantings later than June 20 are not sure to produce but cost little and are worth while when they do "hit."

TABLE X. WATERMELON VARIETY TESTS

Variety	Total Yield		Weights Lbs.		Days from Planting to Ripe Melons
	No.	Lbs.	Largest Melon	Av. Melon	
1920 Results—Test Planted May 15th					
Kleckley Sweet-----	----	----	27.0	16.2	97
Georgia Rattlesnake-----	----	----	21.8	15.0	97
Tom Watson-----	----	----	20.2	16.3	104
Halbert Honey-----	----	----	24.0	17.0	101
1921 Results—Test Planted April 6					
Kleckley Sweet-----	53	745	----	14.1	76
Grey Monarch-----	45	649	----	14.4	76
Georgia Rattlesnake-----	50	839	----	16.8	76
Halbert Honey-----	41	679	----	16.6	69
Tom Watson-----	30	601	----	20.0	76

Ten hills each variety.

Variety tests reported in Table X show that Tom Watson produced the largest melons. It is a fair yielder and a good shipper. The quality of Kleckley sweet is better and it is a much better yielder. Because of their quality one-third to one-half of Georgia Rattlesnake and Grey Monarch were worthless. For home use successive plantings of Kleckley Sweet will produce a constant supply of melons of the best quality.



Fig. 8.—Delta grown Kleckley Sweets, averaging 20 pounds. Ten hills planted every three weeks from April 20 to Aug. 1 will yield an abundance of melons throughout the season if cultivated well. They will not grow wild.

The citron belongs to the same group as the watermelon and is excellent for preserves. Two or three hills planted April 20 will produce abundant supplies until frost and the melons will keep until Christmas if put where they will not freeze.

THE CANTALOUPE is one of the favorite fruits of the American table. Cantaloupes of good quality are hardly without a rival as a breakfast dessert, being delicious, nutritious, healthful, and cheap.

Successive plantings should be made as for the watermelons except that every two weeks is a better interval.

TABLE XI. CANTALOUPE VARIETY TEST—1920.

Variety	First 3 Harvests			Total Yield			Rank
	No. of Melons	Lbs. of Melons	Lbs. per Melon	No. of Melons	Lbs. of Melons	Lbs. per Melon	
Gold Lined Rockyford	4	7.0	1.75	78	140.4	1.81	1
Netted Gem	4	6.5	1.84	72	112.4	1.56	2
Banana	--	---	---	17	70.6	4.28	3
Extra Early Green							
Citron	10	25.0	2.50	27	60.6	2.24	4
Henderson's Bush	3	3.8	1.30	45	48.0	1.07	5

12 hills of each variety.

The variety test made in 1920 and reported in Table XI indicates that Gold Lined Rocky Ford is the best yielder. The fruit has better quality than that of any other variety. A few hills of Green Citron for early use and the main crop Rocky Ford is a good arrangement. Banana has some merit but is not equal to Rocky Ford in either quality or production.

THE ONION GROUP: Onions, shallots, leek, garlic, etc., compose the group. They are valued primarily for their flavors, although onions are relished and used as food by many. The skillful combination of several of these flavors accounts, in a large measure, for the popularity of many French and Italian dishes. Onions, shallots and leek may be grown the year round. Yellow Bermuda, White Silver Skin, and White Multiplier are good varieties of onion. Fall planting should be done about Sept. 20 and spring planting March 1.

BERRIES: No home garden is complete without several kinds of berries. Strawberries do well in the Delta and should be more universally grown where small areas free of cocoa or nut grass are available. Klondyke seems to be better able to withstand very hot dry weather than the other varieties



Fig. 9.—Strawberry variety test. 1.—Aroma. 2.—Klondyke. 3.—Missionary. 4.—Excelsior. The photograph was made Sept. 15. Note that the stand of most varieties has been materially reduced by the hot dry summer.

tested, as is shown in figure 9. Blackberries do well even on cocoa lands. Two or three rows 50-75 feet long will be well worth their trouble. Early Harvest and Mercereau are good varieties. The same is true of raspberries. Cuthbert and Cumberland are as good varieties as any. Owing to the decumbent habit of Dewberries they are hard to manage in cocoa land unless trellises are provided. Where they are grown Austin and Lucretia are good varieties.

GARDENS are not limited to the farm. There are few city and town lots on which a garden cannot be made. A Delta backyard garden 30 ft. square, if properly kept, can easily be made to produce 500 pounds of green vegetables worth more than \$200.00 annually at retail grocery prices. Every home, whether of white or colored, should have a garden if there are ten square feet of ground available. It will help materially to **KEEP DELTA COTTON DOLLARS AT HOME.**

VEGETABLES are not limited in their use to the period in which they are grown. There are very few which cannot be successfully canned at home and many should be pickled, dried, preserved, or salted away for winter use. 300 quarts of fruits and vegetables is not too much for the pantry of large families and will appreciably lower the living cost.

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Figure 8 is from a photograph made by the writer in the Arkansas Delta in 1918. It is used with the permission of the Arkansas Station.

Seed for most of the experiments were donated by the Wing Seed Company but some were furnished by Hastings.