

Connecticut Agricultural Experiment Station
New Haven

TESTING VEGETABLES FOR CONNECTICUT

RESULTS FOR 1933

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Plant growth and crop production show differences from year to year according to the prevailing weather conditions. Consequently the best strain or variety of any kind of vegetable for any one year cannot be expected to be the most desirable or productive every year. Promising strains and varieties must, therefore, be grown for several years before their worth and adaptability can be determined.

The 1933 season at Windsor was characterized by a marked deficiency in rainfall during the principal growing months of May, June, July and August. During these same months there was also an increase in the mean temperature as compared to the averages over a period of years. The figures are given in Table 1. The rainfall for 1933 was obtained at Windsor, and the average rainfall and the temperature records from the Weather Bureau at Hartford.

Seasonal conditions for even a series of years may run above or below the average for rainfall, temperature, humidity, and wind velocity. Whatever results are obtained from growing crops must be interpreted in relation to the weather conditions prevailing during the seasons in which the crops were grown.

Considerable interest has been shown in the production of sweet potatoes. During the past several years this crop has made a good growth and has given satisfactory yields of marketable roots. However, growing conditions for this crop have been unusually favorable. The next few years may not be so advantageous to sweet potatoes, and satisfactory results may be difficult to obtain. Sweet potatoes have long been grown for home use in southern New England, but have seldom proved to be profitable as a market garden crop.

TABLE 1. WEATHER IN 1933

Month	Rainfall		Mean temperature	
	1933	Average	1933	Average
April	4.13	3.36	47.4	46.7
May	1.58	3.60	62.2	57.5
June	1.96	3.08	69.5	67.1
July	2.43	4.37	72.5	71.6
August	3.42	4.29	71.2	68.9
September	4.85	3.49	65.6	61.7

Beans

Considerable difficulty has been experienced by Connecticut growers in obtaining a satisfactory strain of Horticultural beans, particularly of the pole variety. Some of the common faults are that the plants fail to grow properly, the pods are not large enough, and the color markings are not distinct.

Several strains of climbing beans known as Worcester, Italian, and Cranberry were grown at Windsor, but all varieties were so badly infected with mosaic disease that no crop was obtained. There is a real need for beans of this type resistant to mosaic infection.

The dwarf varieties of Horticultural beans are apparently more immune to this trouble. Satisfactory crops were obtained, although the pods were not as large or as well colored as most growers prefer. The varieties grown were as follows.

French Dwarf Horticultural F. H. Woodruff and Sons
French Dwarf Horticultural Comstock-Ferre and Co.

Both lots practically identical, pods large, well filled, brightly colored. Latest to mature. Yields ranged from 515 to 711 pounds of dry shelled beans per acre.

Ruby Dwarf F. H. Woodruff and Sons
Horticultural F. S. Platt Seed Co.

Both lots practically identical, small, well filled pods, very little color on pods. First to mature. Yields ranged from 755 to 1002 pounds of dry shelled beans per acre.

Low's Champion

Pods well filled, green, stringless. Medium maturity. Can be used as a green pod, green shelled, or dry shelled bean. Yielded 900 pounds of dry shelled beans per acre.

Edible Soy Beans

Soy beans are being grown in increasing quantities in the Middle Western states where they are used for cattle feeding and for the production of oil. In Asia the soy bean has long been a staple crop. There,

many different varieties have been developed especially for human consumption. W. J. Morse, of the United States Department of Agriculture kindly sent us a collection of 27 different lots of these edible soy beans for trial. They were sown at Mount Carmel early in June and most of them matured dry seed. A few were still green at the time of the

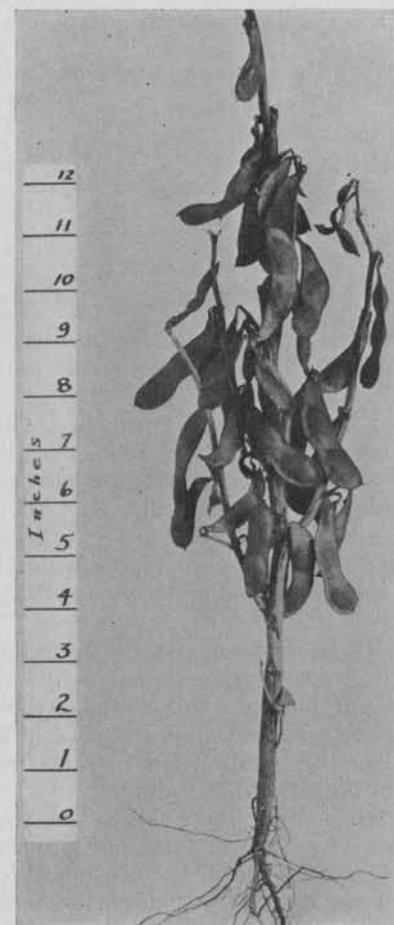


FIGURE 1. Edible soy beans with seeds as large as small lima beans

first killing frost, but were apparently not injured for table use. Lima beans growing at the same time were completely destroyed.

These soy beans are used as green shell beans. The pods are small and rather difficult to shell. The green beans have an excellent flavor, are drier, and slightly different in taste from shell or lima beans. If it were not for the difficulty in picking and shelling, they would be a valuable addition to the list of garden vegetables. Their use will probably be

confined to those sections where lima beans do not produce well. Soy beans are attacked by the bean beetle, but usually less damage is done than to other beans. Most of the varieties have an upright growth with scant foliage and are easy to dust or spray.

The following varieties have the largest pods and seeds of those grown. The color given is that of the mature seed. Before maturity the black seeded varieties vary from a light pink to a dark red.

U. S. D. A. No.	Color of mature seeds
81031	Yellow
81039	Greenish black
81042	Black mottled
86024	Black mottled
86038	Black
89006	Yellow

Beets

The number of Detroit Dark Red strains of beets was reduced from nine in 1932, to five in 1933. These selections represented, in our opinion, some of the best of the 1932 trials.

The seed was drilled in the field on April 23. The rows were made 70 feet long and 14 inches apart, and the roots were thinned to 4 inches. In the first part of the season, they did not grow as well as was expected. Observations were made and recorded July 24. All figures in the table represent percentage of marketable roots.

For the most part the trials this year approximate closely those of last year. Three of the most outstanding beets in 1932 were outstanding this year.

Ohio Canner from J. M. Lupton and Sons, and Good-for-All from the Ferry Morse Seed Company were similar in growth, habit, and size. Ohio Canner had a low proportion of globe-shape roots, only 4 per cent. Most of the roots were top-shaped. Good-for-All had a higher percentage of globe-shape than any other strain. Both strains were uniformly dark in color and free from objectionable zoning.

Detroit Dark Red 9011 from Ferry Morse has been a high quality beet for several years. It is true to type and has been free from wide white zones. This indicates its hereditary constancy for these characters.

Among the Crosby type, or Early Wonder, the four most outstanding strains were: L7.11M, T4.10M, T1.5M, all of the Associated Seed Growers, and 9309 from Ferry Morse. They produced a high proportion of beets with indistinct zones and they were uniform in shape and size.

The Wyman strain of Crosby's Egyptian from which the Early Wonder strains are supposed to have originated, was grown this year. This strain has been continued by the Waltham Vegetable Field Station at Waltham, Mass. Only 3 per cent of the roots of this strain had a dark interior color and only 16 per cent were free from wide white internal zones. When we compare this strain with what seedsmen consider ideal for garden beets there is indeed a wide discrepancy. For example, of the strain L7.11M from the Associated Seed Growers, 72 per cent of the

roots had a dark interior color as compared with 3 per cent for the Waltham Station strain. Similarly, this strain had few beets that were free from zoning—only 17 per cent, while L7.11M had 88 per cent.

TABLE 2. BEETS

Variety	Percentage of marketable roots							Zones Indistinct
	Size	Shape			Inside color			
	Medium	Globe	Top	Oblate	Dark	Medium	Light	
Good For All Ferry-Morse Seed Co.	50	51	33	15	94	6	0	100
Detroit Dark Red, 9011 Ferry-Morse Seed Co.	64	41	54	5	92	8	0	100
Detroit Dark Red, 318 Joseph Harris Seed Co.	82	26	66	8	83	17	0	96
Ohio Canner J. M. Lupton and Sons	53	4	94	0	93	7	0	95
Detroit Dark Red L4.1M Associated Seed Growers	38	18	80	2	60	32	8	88
Early Wonder L7.11M Associated Seed Growers	54	1	98	0	72	23	5	88
Early Wonder T4.10M Associated Seed Growers	58	2	98	0	45	42	13	83
Crosby's Egyptian T1.5M Associated Seed Growers	60	5	90	0	62	31	7	79
Early Wonder 9309 Ferry-Morse Seed Co.	61	12	85	0	35	55	10	73
Crosby's Egyptian J. M. Lupton and Sons	58	24	72	0	33	33	34	69
Early Wonder Field Station, Waltham, Mass.	45	0	100	0	3	15	73	17
Early Wonder 332-62 F. H. Woodruff and Sons	68	5	95	0	35	54	0	11

Carrots

Like the beets, the carrots were drilled in rows 70 feet long, and 14 inches apart on April 23. Observations were recorded on July 24.

Only nine lots of carrots were grown this year. Each was quite consistent as to type and shape. However, a large percentage of the roots was small, probably due to the prevailing dry weather.

Among those grown were representatives of the long types: Tender-sweet and Perfection from the Joseph Harris Seed Company, Imperator from Associated Seed Growers, and Hutchinson from the Waltham Field Station.

These all have long slender roots, even longer, as a rule, than Danvers Half Long. Some are pointed and others have what is called a rat-tail root end. These roots were all put under the Danvers type, but in many cases it was difficult to determine in what class a particular strain should

belong. Each of these varieties was distinct in some one characteristic. For example, Emperor had cylindrical roots and resembled an exaggerated Nantes type; Hutchinson was long and tapering; Tendersweet had a dark orange color with a purplish tinge at the crown. Perfection has a short top. None of these types fit into our interpretation of a true Danvers type, although we have called them such in our classification. In Table 3, the first column gives the percentage of all roots that were marketable, and the other columns show the classification in percentage of these marketable roots.

TABLE 3. CARROTS

Variety	Grade	Percentage of marketable roots						Core
		Type			Size			
		Marketable	Chantenay	Danvers	Nantes	Small	Medium		Large	Indistinct
Red Cored Chantenay 26766x Associated Seed Growers	62	91	9	..	73	15	2	93
Red Cored Chantenay 338 Joseph Harris Seed Co.	69	88	12	..	74	26	..	93
Chantenay No. 16 Pieters Wheeler Seed Co.	57	74	26	..	58	42	..	88
Chantenay 337 Joseph Harris Seed Co.	59	66	33	..	57	43	..	90
Danvers Half Long Pieters Wheeler Seed Co.	64	..	100	..	62	38	..	81
Danvers Half Long Joseph Harris Seed Co.	55	5	95	..	80	20	..	75
Tendersweet 308 Joseph Harris Seed Co.	68	..	100	..	90	10	..	93
Emperor N180.1 Associated Seed Growers	75	3	97	..	86	14	..	86
Perfection 346 Joseph Harris Seed Co.	45	4	77	13	85	15	..	93
Hutchinson Waltham Field Station	62	..	100	..	81	19	..	75

Sweet Corn

The most important development in sweet corn the past season was the marked increase in the injury from the bacterial wilt known as Stewart's disease. At Mount Carmel, the damage was especially severe. Some varieties showed all of the plants infected and many killed outright. Most varieties were seriously reduced in yield. Some went through the season with no apparent infection. In addition to bacterial wilt, both the corn borer and corn ear worm were unpleasantly prevalent in the early corn at Windsor.

On the light sandy soil at Windsor the first planting was made on May 3, in hills 3 by 2 feet, three stalks to a hill. A good stand resulted.

When the plants were beginning to tassel, counts were made on the number of plants clearly showing injury from bacterial wilt.

At Mount Carmel planting was delayed until May 26. The plants were spaced singly in rows $3\frac{1}{2}$ feet apart and 14 inches in the row, equivalent to hills spaced $3\frac{1}{2}$ by $3\frac{1}{2}$ with three stalks in the hill. At this wide spacing and late planting, the early varieties were somewhat handicapped at Mount Carmel. At Windsor the dry weather during June and July reduced the yields of all varieties, particularly those ripening later.

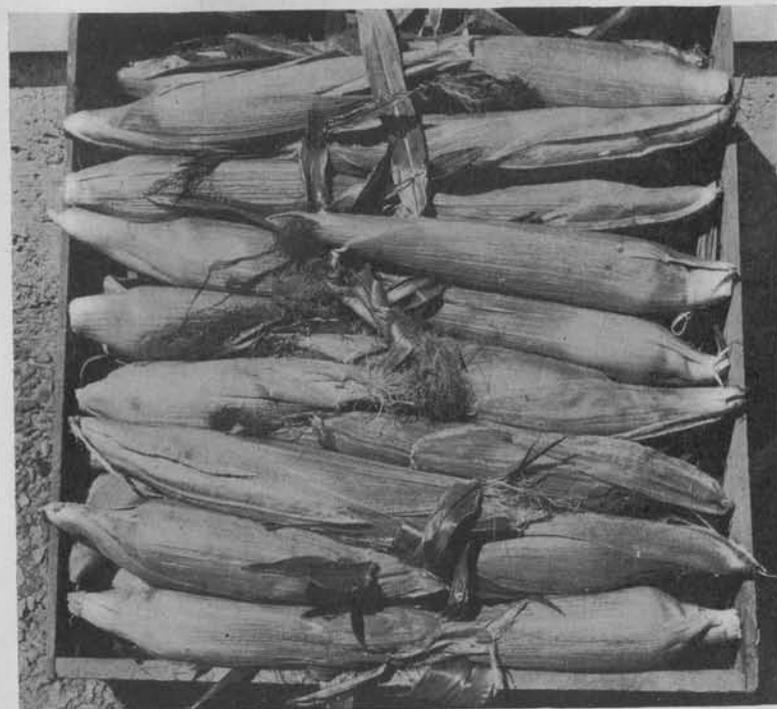


FIGURE 2. Spanish Gold

Spanish Gold was again the first variety to produce marketable ears at the early planting. The first picking was made July 14 at Windsor and the crop was finished by July 17. Golden Early Market was six days later in starting to ripen and was finished on July 22. There was a total of 10,176 marketable ears for the Spanish Gold as compared to 7,769 for the Golden Early Market. The difference was even greater at Mount Carmel where Spanish Gold produced more than twice as many ears.

The marked difference in productiveness was due in a large part to the noticeably greater susceptibility of Golden Early Market to bacterial wilt. It has been the common result in most parts of Connecticut during the past season for this variety to be badly injured. At Mount Carmel,

90.9 per cent of the plants were infected and at Windsor 13.4. Under exactly the same conditions Spanish Gold was much less injured, as shown in Table 4. The chief objection to Spanish Gold is the small size of ears and failure to fill out properly under certain conditions. Some growers have been able to overcome this by growing the plants on very fertile soil. There is a need for a large-eared variety that ripens at about the same time as Spanish Gold, and is more immune to bacterial wilt than Golden Early Market.



FIGURE 3. Top Crossed Spanish Gold resistant to bacterial wilt

Early Yellow Sensation from F. H. Woodruff and Sons is a locally grown corn that in previous trials was much the same as Golden Early Market in size and earliness. This past season it proved to be appreciably more resistant to bacterial wilt at Mount Carmel where the infection was more severe than on our other field. It was not grown at Windsor. At Mount Carmel it produced three times as many ears as Golden Early Market, was equal in stalk growth and in size of ear, and matured at approximately the same time. No record was made on the ripe ears, but the dates of first tassel and first silk were about the same as for Golden Early Market. Although it is by no means immune to the disease, it is worthy of more extended trial.

The Burpee variety is another early sweet corn that in previous tests seemed to have no advantage over other varieties of similar season. During the past season it has been slightly less injured by bacterial wilt than has been Early Yellow Sensation. The Burpee variety is also a little earlier in ripening. In spite of its comparative freedom from bacterial wilt it did not produce as many marketable ears. Our trial was limited, and we can say only that it appears to be worthy of further test.

The first generation cross of Spanish Gold by an inbred strain of Golden Bantam (Indiana 39) has shown the most immunity to bacterial wilt during the past season. (A cross of a variety with an inbred of

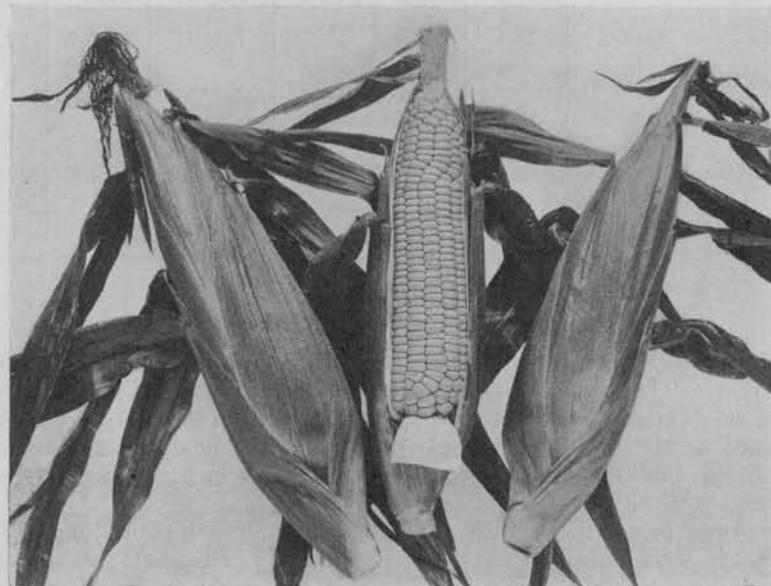


FIGURE 4. Whipple Cross with large well-filled ears grown on vigorous plants free from bacterial wilt

this kind is called a top cross. A number of these top crosses are being produced at Mount Carmel and other places, and some of them are very promising.)

At Mount Carmel no plants of this Top Crossed Spanish Gold were infected. Only a small number was grown so the test is not so reliable as at Windsor where in more than 1,000 plants grown in three different parts of the field, only 3.5 per cent were diseased. The plants made a large and vigorous stalk growth, the ears were mostly 12-rowed, and were well filled. They were somewhat longer than Golden Early Market, but not so thick. More than 10,000 ears per acre of Top Crossed Spanish Gold were produced at both Mount Carmel and at Windsor, compared with 7,000 and 2,000 ears of Golden Early Market. Unfortunately this top cross is about a week later in ripening. Other top crosses with Spanish Gold are being produced that show equal freedom from disease,

fully as large an ear, and early maturity. Some of these will be available for testing in 1934.

TABLE 4. SWEET CORN AT WINDSOR AND MOUNT CARMEL

Variety	Percentage bacterial wilt		Date of first picking		Number ears per acre	
	Windsor	Mt. Carmel	Windsor	Mt. Carmel	Windsor	Mt. Carmel
Spanish Gold	5.8	20.0	July 14	July 31	10,176	4,741
Golden Early Market	13.4	90.9	July 20	July 31	7,769	2,134
Early Yellow Sensation	...	35.7	.....	.....	.....	6,519
Burpee	...	26.7	.....	.....	.....	4,741
Spanish Gold x Ind.39	3.5	0	July 27	August 5	10,258	10,668
Tendergold	...	55.2	.....	August 8	.....	7,408

Lettuce

Sixteen strains of lettuce were grown from both plants and seeds this year. The transplanted lettuce was started in flats in the greenhouse on March 10 and set directly in the field on April 10. On April 11, seed of the same strains was planted in the field. Both lots were planted in duplicate and spaced 14 inches by 14 inches. The lots were treated identically.

By June 5, on the transplanted lot, about one-third to one-half of the heads were ready to harvest. By June 19, all plants which would produce marketable heads had done so. The seeded lots were not ready to harvest until about June 30. Because the weather conditions this year were not as favorable for lettuce as last year, the percentage of marketable heads was much lower for every strain planted.

In the transplanted lots, New York 12 W.S. from Waldo Rhonert Seed Company, and New York 12 209.1 from Pieters Wheeler Seed Company, were highest in the percentage of marketable heads.

In the seeded lots, New York 4-820 from Pieters Wheeler Seed Company was highest in the percentage of marketable heads, and New York 12 W.S. from Waldo Rhonert Seed Company was second. New York 4-820 from Pieters Wheeler Seed Company was the only strain to produce a significantly larger percentage of marketable heads in the seeded lot than in the transplanted lot.

The highest yielding strain last year was New York 12 T297.5 from the Associated Seed Growers. Ninety-nine per cent of the transplanted plants and 92 per cent of the seeded plants produced marketable heads, while this year 80 per cent of the transplanted, and 53 per cent of the seeded plants, produced marketable heads.

We are trying to find a strain of lettuce of the New York type that will come to a satisfactory head during the last part of June and the first part of July. It is at this period that native head lettuce brings the highest price.

TABLE 5. LETTUCE

Variety	Percentage marketable heads	
	Transplanted	Seeded
New York 12 W.S.	85	62
New York 209.1	85	42
New York T297.5	80	53
Imperial D	79	55
New York O.F.X	74	61
New York 56	73	50
New York 4051	60	22
New York 690x	58	37
New York 1-235	58	46
New York 4 D1x	55	33
New York D296.1	50	46
New York 4-820	50	67
New York 514	47	50
New York 515	47	52
New York 831	47	49
New York Select	37	29

Potatoes

Two new varieties of white potatoes originated by the United States Department of Agriculture at Presque Isle, Maine, were grown in comparison with Green Mountain at Windsor and Mount Carmel. Both of these potatoes resemble the Irish Cobbler in shape of tuber. Their growing season is longer, however, and in yield both compare favorably with late varieties. The outstanding features of these new potatoes, Katahdin and Chippewa, are their resistance to some of the virus diseases and the uniformity in size and shape of the tubers, which are round and smooth with shallow eyes.

The accompanying table shows the yields and grading percentage in comparison with Green Mountain.

Both Katahdin and Chippewa seem to be somewhat more susceptible to late blight than Green Mountain. The vines died earlier and probably for that reason the two new varieties did not compare so well in total yield. The proportion of first grade tubers was noticeably higher. Both varieties bake well and are firmer than Green Mountain when boiled. They produce an attractive crop and are worth trying by Connecticut potato growers. So far there seems to be little choice between the two new varieties. Chippewa in the Green Mountain territory has usually given the larger yields.

TABLE 6. POTATOES

Variety	Yield in bushels per acre		Percent No. 1
	Mt. Carmel	Windsor	Mt. Carmel
Green Mountain	430	378	84.4
Chippewa	408	...	91.2
Katahdin	387	266	93.8

Sweet Potatoes

The sweet potato has been considered as a crop to be grown on some of the land that formerly has been used for tobacco in this state. The results of the past season indicate that well developed roots and good yields can be obtained on the sandy soil characteristic of the Windsor farm. However, as stated before, the past season was above the average in mean temperature during the principal growing months and the rainfall was below the usual expectation. Both factors are favorable to this crop. Frost also held off until after October 7, when the roots were dug. In consequence of these factors, as good results as were obtained last year may not be repeated for some time.

Five varieties of distinct type were grown. Plants of some varieties were started from roots bedded in sand in electrically heated hot beds. The roots were started April 15 and the plants were pulled and set in the field early in June. Part of the plants were purchased in the south. They arrived in good condition and were set in the field with very little loss. It will probably be more satisfactory to buy the plants rather than the seed roots to grow plants from, provided healthy plants can be obtained.

The plants were set on top of ridges, 3 feet between the rows and the plants about 18 inches apart in the rows.

The varieties grown and the notes taken at the time they were dug are as follows.

Porto Rico

Red outside, yellow inside color. Mostly large roots, varying from long and slender to round and chunky. Yielded 291 bushels per acre.

Maryland Golden

Yellow outside, dark yellow inside color. Roots smooth, tapering, ranging in size from small to large. Prominent veins on many roots. Very attractive on account of color. Yielded 249 bushels per acre.

Nancy Hall

Light pinkish yellow outside, bright yellow with pinkish streaks inside color. Roots blunt pointed, medium to large in size, chunky, ribbed, variable in size and shape. Yield not recorded.

Big Stem Jersey

Light yellow outside, light yellow with some pinkish yellow inside color. Medium to small in size, short, blunt pointed, chunky, smooth. Yielded 235 bushels per acre.

Yellow Jersey

Light yellow outside, light yellow inside color. Roots mostly medium in size, smooth. Tapering gradually at both ends. Most desirable in size and shape but many roots badly discolored at the time of digging. Yielded 312 bushels per acre.



FIGURE 5. Four varieties of sweet potatoes grown at Windsor. (1) Yellow Jersey; (2) Nancy Hall; (3) Maryland Golden; (4) Porto Rico

Peppers

The five peppers grown during the past season represent the best varieties from previous trials, and include early, mid-season and late, yellow and red, thin-walled and thick-walled, and a variety of shapes and variation in smoothness. Bountiful continued to be the most productive pepper in the first part of the picking season, arbitrarily divided at August 1.

This yellowish-green pepper is so variable in shape that it is not suitable for stuffing and will not sell on some markets. It is a tender, well-flavored pepper that is being sold in increasing quantities in some parts of the state.

Early Giant produced a good yield both in the first and second parts of the season. The average weight of individual fruits was heavier in the first part. In color, size and early production, this continues to be the most popular pepper on the market.

TABLE 7. PEPPERS

Variety	Yield to August 1		Total yield to September 12	
	Average weight of individual fruit, ounces	Yield per acre, pounds	Average weight of individual fruit, ounces	Yield per acre, pounds
Harris Early Giant, 443 Joseph Harris Seed Co.	3.6	3289	2.9	14179
Bountiful, 7 Conn. Agr. Exp. Station	2.3	3873	2.1	13156
Oshkosh, 446 Joseph Harris Seed Co.	4.0	1607	3.2	13448
Oshkosh E. C. Swartly, Sterling, Ill.	4.8	2777	3.4	14545
World Beater Associated Seed Growers	3.7	1544	2.9	11430
California Wonder Ferry-Morse Seed Co.	5.1	1544	4.8	10812

The attempt to produce a smooth, thick-walled, large-fruited pepper as attractive as California Wonder, but earlier, still goes on. A new red-fruited strain of Oshkosh from E. C. Swartly of Sterling, Ill., has considerable promise. This pepper is similar in plant growth to the yellow Oshkosh. The fruits are larger, equally smooth and thick-walled, but differ in having the pointed tip somewhat depressed. During the first part of the picking season it yielded nearly twice as many pounds of fruit as California Wonder or World Beater, and appreciably more for the whole season. It was the most productive pepper of the five grown, but had the serious fault of not breaking easily from the plants when picked. The tendency was to adhere to the branch, breaking the plants unless carefully handled. This made harvesting much slower and more difficult.

California Wonder continues to be the heaviest and smoothest pepper available at the present time, but it is surpassed in total yield by World Beater.

Tomatoes

Tomatoes were planted in flats in the greenhouse on March 10. Later they were transplanted to four inch pots and on May 22 set in the field. There they were planted in paired rows with 4 feet in the row, 4 feet between rows, and 6 feet between each pair of rows.

The dry hot weather throughout the latter part of July and the first of August seriously reduced the tomato yields. A large percentage of the fruit of the earlier varieties was unmarketable because of sun scald. The reason for this is that Bonny Best, Clark's Early, and John Baer, all early varieties, have somewhat of an open growth habit which offers less protection from the sun than the later varieties.

Pritchard, a new early type, was the only exception in this early group. This variety has abundant foliage and does not spread out as much as the other types, so the fruit is rather well-protected against sun scald. Of the 12 strains grown this year Pritchard was highest

in the production of early fruit and in total yield. It also had the largest fruit at the beginning of the season, and the average weight of individual fruits throughout the season was surpassed only by Clark's Hybrid No. 2. The Pritchard has large, smooth, almost round fruit, but in color it has a yellowish cast, making it less attractive than the Bonny Best.

Last year the Pritchard was fifth in production with a yield of 25 tons to the acre. This year the yield was 21 tons to the acre, a decrease of only 16 per cent. This constancy of production in two widely different seasons indicates its merits and its adaptability to Connecticut conditions.



FIGURE 6. Tomatoes grown by the method of paired-row spacing

The superiority of the Pritchard is apparent when we consider the yields of other varieties for the two seasons. In 1932, Clark's 100 D47.3M from the Associated Seed Growers was the highest yielding variety with a record of 29 tons to the acre. This year it produced only 14 tons to the acre, a decrease of more than 50 per cent.

Clark's Early L 45.6M of Associated Seed Growers was a high yielding variety in 1932 with a yield of 24 tons to the acre. This year it yielded only 16 tons to the acre, a decrease of about 33 per cent.

Marglobe from Ferry-Morse was third in total production. This record was somewhat surprising. Ordinarily Marglobe has not come into bearing until later in the season and usually a large proportion of the crop is still on the vines when frost comes. This year the period of heavy production came between the middle of August and the first part of September.

The difference in yield between the Ferry-Morse strain of Marglobe and the Special Marglobe from F. H. Woodruff and Sons, as shown in Table 8, is significant.

The most uniform variety grown this year was a selection from John Baer. The seed was secured from W. H. Carrier of Glastonbury, who made the original selection several years ago and has continued to save seed from desirable plants. It is remarkably uniform in size, shape and color, smooth, free from cracks, deep red in color, and almost spherical in shape. In yield it is just below Clark's Early and higher than Bonny Best. It is an attractive tomato of high quality.

TABLE 8. TOMATOES

Variety	Yield to August 1		Total yield to September 5	
	Average weight of individual fruit, ounces	Yield per acre, pounds	Average weight of individual fruit, ounces	Yield per acre, pounds
Pritchard				
Associated Seed Growers	7.1	4287	4.2	42061
Marglobe				
Ferry-Morse Seed Co.	3.9	1361	3.5	33825
Clark's Early L45.6M				
Associated Seed Growers	3.7	2382	3.7	31920
John Baer				
W. H. Carrier	3.6	1905	3.0	30422
Bonny Best, 531				
Joseph Harris Seed Co.	3.7	2654	2.8	29674
Bonny Best, 320				
F. H. Woodruff and Sons	3.1	1497	2.8	28789
Clark's "100" D47.3M				
Associated Seed Growers	3.9	1701	3.9	27428
Special Marglobe				
F. H. Woodruff and Sons	3.5	952	4.0	26883
Clark's Early Hybrid T46.1M				
Associated Seed Growers	5.5	884	4.1	25522
Clark's "B" L41.1M				
Associated Seed Growers	3.6	1020	4.0	21575
Clark's Hybrid No. 2, D46.2M				
Associated Seed Growers	4.6	884	4.5	20690
Greater Baltimore				
Comstock-Ferre Seed Co.	3.7	408	3.2	13203

Appendix

Source of seed	Address
Associated Seed Growers	New Haven, Conn.
Carrier, W. H.	Glastonbury, Conn.
Comstock-Ferre & Co.	Wethersfield, Conn.
Ferry-Morse Seed Co.	Detroit, Mich.
Harris, Joseph, Seed Co.	Coldwater, N. Y.
Lupton, J. M., and Son	Mattituck, N. Y.
Pieters-Wheeler Seed Co.	Gilroy, Calif.
Rhonert, Waldo, Seed Co.	Gilroy, Calif.
Swartly, E. C.	Sterling, Ill.
Waltham Field Station	Waltham, Mass.
Woodruff, F. H., & Sons	Milford, Conn.