

62.57

-1940

RECORDED
★ FEB 2 1940
U. S. Department of Agriculture

Are you planting Stokes Tomato Seed this year?

*We've saved some
for you!*



Watch Your Seed Well!

It tallies only 1 per cent of the cost, but it matters 100 per cent in results



"Stokes Tomato Seed, pedigreed, certified, disinfected and packed in a tamper-proof package, is beginning to approach the ideal that we set for it."
F. C. S.

YOUR success as a Tomato grower is measured by your ability to secure high production of better than average quality Tomatoes. The run-of-the-farm Tomato in America is *not* profitable. This Catalog is written by Tomato men for Tomato men with the hope that it will lead to greater Tomato profits for those who read it.

To introduce ourselves, in case you have not heard of us in the past 58 years, we can state that we are one of the very few seed-growers in this country devoting their entire effort to Tomatoes. We now offer only seven varieties,—obviously but a small fraction of the American introductions,—but this is in line with our policy of intense concentration. We make no attempt at continental coverage. Thoroughness in detail is our aim.

To achieve this, we operate two Proving Grounds—one in summer at Vincenttown, N. J., and one in winter at Homestead, Fla. Field-production of our pedigreed seed is largely carried on in central New Jersey where fertile soil is usually, *but not always*, blessed by normal weather.

If, by chance, you are not entirely satisfied with your progress in Tomatoes, why not consult the nearest seed merchant who sells Stokes Tomato Seed, and if he cannot be found, write to us at Vincenttown, N. J. And that goes for wherever you are, for air-mails have made near neighbors of us all. You will find it a very simple matter to break through the formalities of the printed page. We again express gratitude for the continued good will of the Tomato industry.

FRANCIS C. STOKES COMPANY

1881 *Breeders and Growers of Fine Tomato Seed* 1940
VINCENTTOWN, NEW JERSEY, U. S. A.

Francis C. Stokes
President



Members of our plant-breeding staff taking measurements on singles of Rutgers—1942 Model

ORDER SHEET FOR STOKES TOMATO PLANTS

FRANCIS C. STOKES COMPANY
 BREEDERS AND GROWERS OF FINE TOMATO SEED
 VINCENTOWN, NEW JERSEY

Name.....
 R. D. or Street.....
 Post Office.....
 Express Office.....
 State.....
 Please book my order for tomato plants to be delivered
 May.....1940.

Date.....

<p>AMOUNT ENCLOSED</p> <p>\$.....</p>
--

QUANTITY	VARIETY	PRICE	
		Dollars	Cents
	VALIANT		
	STOKESDALE		
	RUTGERS		
	MASTER MARGLOBE		
	TOTAL		

Price f.o.b. Georgia shipping point, \$2.25 per 1000

f.o.b. New Jersey receiving point, \$2.75 per 1000

Solid cars will be shipped to any point.

Except for private truck delivery we recommend the f.o.b. New Jersey basis, for solid cars arrive a day sooner than L. C. L. shipments.

Shipping Period: April 25 to May 20

ORDER SHEET FOR STOKES TOMATO SEED

FRANCIS C. STOKES COMPANY

BREEDERS AND GROWERS OF FINE TOMATO SEED

VINCENTOWN, NEW JERSEY

Name..... Date.....

R. D. or Street.....

Post Office

State

**AMOUNT
ENCLOSED**

\$.....

Please send the following seed by prepaid parcel post

QUANTITY	VARIETY	PRICE	
		Dollars	Cents
	STOKESDALE Tr. Pkt. 25c; oz. 50c; ¼ lb. \$1.50; lb. \$5; 5 lb. \$22.50		
	STOKES MASTER MARGLOBE Tr. Pkt. 25c; oz. 50c; ¼ lb. \$1.50; lb. \$5; 5 lb. \$22.50		
	RUTGERS Tr. Pkt. 25c; oz. 50c; ¼ lb. \$1.50; lb. \$5; 5 lb. \$22.50		
	LANGE'S EARLIANA Tr. Pkt. 25c; oz. 50c; ¼ lb. \$1.50; lb. \$5; 5 lb. \$22.50.		
	VALIANT Tr. Pkt. 25c; oz. 50c; ¼ lb. \$1.50; lb. \$5; 5 lb. \$22.50.		
	PRITCHARD Tr. Pkt. 25c; oz. 50c; ¼ lb. \$1.50; lb. \$5; 5 lb. \$22.50.		
	BONNY BEST Tr. Pkt. 25c; oz. 50c; ¼ lb. \$1.50; lb. \$5; 5 lb. \$22.50.		
	PROVING-GROUND STOCKS FOR GREEN- HOUSE FORCING This seed is direct from Stokesdale proving grounds. Tr. Pkt. \$1; ¼ oz. \$1.75; ½ oz. \$3; oz. \$5; ¼ lb. \$17.50.		
	STOKESDALE		
	MASTER MARGLOBE		
	RUTGERS		
	VALIANT		
	PRITCHARD		
	BONNY BEST		
	TOTAL		

For Greenhouse Forcing—

PLANT THESE PROVING-GROUND STOCKS

GREENHOUSE men, and other growers who operate on an intensive scale, find that these Proving-Ground Stocks, even at these obviously higher prices, are bargains. This seed is taken directly from our foundation-planting stock and is the same as that we plant for our own pedigreed-seed acreage. It represents the cream of the Stokes crop. It is certified, disinfected, and handled with special care. Most of it is sold in ounces or in fractional ounces.

VALIANT STOKESDALE BONNY BEST PRITCHARD
RUTGERS STOKES MASTER MARGLOBE

Prices, postpaid: Trade pkt. \$1; 1/4oz. \$1.75; 1/2oz. \$3; oz. \$5; 1/4lb. \$17.50

My Tomatoes, Master Marglobe, Valiant, and Stokesdale set an immense quantity of green fruit and I did have a fair crop. I have a small retail greenhouse and sell about 20,000 plants per year. Considering adverse conditions, the quality was superior as to smoothness, size, flavor, and solidity. I consider your strains highly superior and shall continue to plant them until something better is developed.—H. A. W., Halstead, Pa.

I cannot say enough about your Master Marglobe. They are disease-resistant to the very end and ripen perfectly. They are very heavy bearers under the same condition that the Valiant and Stokesdale were grown in, and the Master Marglobe came through with flying colors. I just finished picking them this week, October 14. They started to bear about August 10.—A. C. B., South Haven, Mich.

I have used your Tomato Seed for several years and find it the best to be found on the market any year. My son and I prune and stake all of our plants, some to single stalk and others to two stalks. We sure had some fine Tomatoes last season, some Valiant weighing as high as 12 to 16 ounces each. Twenty Valiant Tomatoes weighed 16 pounds. Merchants we sold to said they were the best Tomatoes in this district. Everyone likes the solid meat of all of your Tomatoes.—W. L. M., Decatur, Ill.

We sell more Master Marglobe plants, wholesale and retail, than any other variety. Next to it is your Stokesdale, one of the very best early varieties that we grow for plant-sale. We put it on the market the first time in 1937 and our customers who purchased plants of Stokesdale came for more plants in 1938, with glowing reports of the large-size, fine-quality fruit. We use the best seeds we can get, regardless of the cost, in order to maintain the quality of the plants we sell. We expect to use your Tomato Seed as long as we can get it.—D. E. Z., Chambersburg, Pa.



Georgia-Grown and Georgia-Certified Tomato Plants

AGAIN AVAILABLE FROM STOKES PEDIGREED SEED

WE CONTINUE to place great faith in Tomato plants certified by the State of Georgia. We continue to hold high respect for the men who grow them, and for the officials who are valiantly aiding these men. To Dr. William D. Moore, U.S.D.A., we extend special praise for distinguished service. Yes, it is true that in 1939 there were unexpected and, in some instances, severe outbreaks of Color Rot (*Macrosporium solanum*). But we are by no means discouraged. On the contrary, new information is now

available to explain these setbacks and to give us confidence in a satisfactory performance from 1940 deliveries. Several factors have been introduced which we believe will contribute greatly in solving obscure and puzzling difficulties. This is a large and important industry and is headed by men of capacity. Stokes Tomato Plant customers have profited greatly in the past. Our 1939 record for the most part was a satisfactory one. Deliveries in 1940 will be protected by a program which includes the following:

1. Our own trained staff in Georgia will supervise all growing contracts, including seeding, fertilization, spraying, pulling, packing, and shipping.
2. Exclusive use of our own high-yielding, pedigreed Tomato Seed stocks—all treated under official N.J.D.A. supervision, subsequently tested and found commercially free from surface-borne pathogenic organisms.
3. Seed-planting schedules, so timed that a constant supply of fresh, growing {not dormant} plants is available throughout the four weeks' shipping season.
4. Extra-thorough spraying, slowly and under high pressure, with tri-basic copper. {No more Bordeaux which has proved too damaging to the plants.}
5. Two applications of fertilizer—half at seeding-time and half when the plants are old enough to absorb it.
6. Greater care in pulling and packing, with more moss, quicker handling, and not too tight packing—always in $\frac{5}{8}$ ths baskets.
7. Use of ventilated express cars with, if possible, some temperature control {58 to 70 degrees F. is ideal}.
8. Immediate delivery from the car after arrival in the North {for the most part all shipments will be handled on a basis of definite reservation}.

Varieties available in 1940—VALIANT, STOKESDALE, MASTER MARGLOBE, RUTGERS

Price f. o. b. Georgia shipping point . . \$2.25 per 1000

Price f. o. b. New Jersey receiving point, \$2.75 per 1000

We anticipate a shipping season lasting from April 25 to May 20, 1940



For the most part we prefer to ship Tomato plants in Express cars. These two are being unloaded at Mt. Holly, N. J.

NOTES ON SOIL-MANAGEMENT FOR TOMATOES

THE problem of the relation of soil to Tomato-growth is one of the most intricate that a grower has to face. He can no longer spread an occasional load of manure and leave the rest to nature. Although that worked when manure was plentiful and Tomato acreage small, today's extensive agriculture depletes our soils so rapidly that manure alone cannot keep them fit. Every grower ought to maintain his soil at least at the fertility level at which he finds it. Many find it profitable to raise the level considerably.

Plants need, in the first place, water and air. If both are to be present in the soil in proper quantities there must be enough humus or decayed organic matter to regulate the physical condition. Sandy soils containing humus will retain more water, while heavy soils, on the other hand, will drain better if humus is present. This equalizing effect on the water supply has its indirect effect on aeration, for soils that do not puddle contain enough air for plant-roots. That is why progressive farmers conserve organic matter. Hester* suggests a minimum content of 1 per cent in sands, 1½ per cent in sandy loams, and 2 per cent in loams. Manure is an excellent source, but next best is a green-manuring program. Crop-rotation and the turning under of vegetation will keep soil organic matter high. Your county agricultural agent knows particular rotations suited to your region.

Among the nutrients plants need, nitrogen rates high in importance. The quantity carried by organic matter is usually insufficient and its form unavailable. During the second and third months after transplanting, Tomato plants need nitrogen in larger quantities than the soil can supply it. Since nitrogen-carrying fertilizers in the soil at transplanting time can be injurious, and since much leaches away before the plant needs it, nitrogen should be side dressed.

Phosphorus is the element which is most commonly deficient in soils. Tomatoes respond favorably to large quantities of superphosphate. Mixed with the soil, it will not injure young plants. Apply it before or at transplanting time, for the plant uses it immediately.

Potassium is the third important chemical fertilizer commonly added to the soil. It resembles nitrogen in that large quantities in the soil at setting-time injure the plants. Toma-

*Dr. Jackson B. Hester in Campbell Soup Co. Bulletin 1, "The Soil Side of Tomato Growing."

atoes do not use it until the second and third months after transplanting.

We therefore suggest that in applying your fertilizer this year you use an analysis such as 0-16-0 or 2-16-0 at plant-setting time and 10-0-15 as a side dressing, four weeks, and again, eight weeks after transplanting. The quantities vary in different regions. In New Jersey the most successful growers use 1000 pounds 0-16-0 and two side dressings—400 pounds per acre each—of 10-0-15. We urge those who think this procedure too costly to try it on a few plants.

There is much talk about the need of other elements such as boron, copper, manganese, and zinc. The soils where these are deficient are so limited in area that it is not wise for most farmers to buy fertilizers containing them. An excess might be injurious.

There are two more elements, calcium and magnesium, which are often added to soils. These are usually called soil amendments rather than fertilizers. The reason is that their chief use is in changing soil acidity, although plants use them in small quantities. Their addition to the soil as lime produces a chemical condition which helps the plant obtain other elements, especially phosphorus. Since a pH of between 6. and 7. is the best acidity for Tomatoes, most of our soils are too acid. That means that, generally, lime helps. Do not lime your soil unless a test shows it is needed, for an excess is more harmful than a deficiency.

The whole problem of soil-management is more complicated than this brief survey indicates. We have ignored entirely the beneficial effects of bacteria and hormones present in manure which cannot be supplied in any other way. We have likewise neglected the effects of different tillage methods, and the whole problem of what compounds of the fertilizer elements to use. Soils may influence such widely different properties as disease-resistance and market quality besides the general-yield factors. Lastly, all the work on which these suggestions are based was done on varieties Rutgers and Marglobe. Other varieties have different needs.

In view of the complexity of factors involved, we suggest that you write us your special soil problems. We need the cooperation of our customers in determining the important fields for further research.

SUGGESTED CONTROLS FOR TOMATO DISEASES

WHEN we consider the three dozen or more diseases that can harm Tomatoes it seems incredible that any Tomato plant survives. Fortunately, most of them are not so serious that we cannot control them.

Our Company has eliminated entirely one source of infection—the seed. All of Stokes Certified Seed is grown on plots inspected by state departments of agriculture and pronounced free from any serious infection. In addition, all Certified Seed of our varieties Master Marglobe, Rutgers, Stokesdale, and

Valiant has been dipped in a solution of New Improved Ceresan (ethyl mercury phosphate). We are thus in a position to furnish seed which is absolutely clean. If our growers use disease-free seed-beds and practice rotation and clean culture in the field, the most serious diseases will be under control.



This tamper-proof canister identifies the genuine Stokes products. It is one of the most respected seed packages in North America.

Mosaic, which causes blotched leaves and stunted plants, is caused by a virus carried in the plant-juice. It may spread from weeds, potatoes, and certain other crops to the clothes of workers. Tobacco used by workers will also introduce it. Since it is most serious when introduced to the seed-bed, a little care in the exclusion of weeds, plant debris, and tobacco from the bed will reduce losses.

Physiological troubles, such as blossom-end rot, puff, crack, and scald, are difficult to handle because we do not know all the factors responsible. Much work is yet to be done in this field.

We have in process of preparation a series of leaflets summarizing the latest recommendations for control of each of the important Tomato diseases. An annual revision will incorporate the results of recent research.

There are, however, some diseases for which added precautions must be taken. The fungus causing fusarium wilt, for instance, persists despite all sanitation and rotation. If you live in an area in which soils are wilt-sick, use the resistant varieties Rutgers, Marglobe, or Prichard.

Every Tomato patch contains plants damaged by one or both of the leaf-spots. They spread with dew or rain. Although the damage can be reduced by copper sprays, most farmers feel that the cost of the spray offsets the increase in yield. According to some recent work, bordeaux mixture injures young blossoms so that farmers who use copper might try some of the other compounds on the market. Since much of this work is still experimental, it is best to follow the example of your most successful neighbors. In some regions this means the use of copper, while in others it means forgetting the leaf-spot.

There are several field diseases which occur in greenhouses or in market Tomatoes. Most of these disappear when proper sanitation and care are practiced.

Stokesdale —

THIS IS LIKELY TO BE YOUR MOST PROFITABLE TOMATO

New York State-Grown. Ratio, depth-to-width, 87 per cent. Days to maturity, 112. Average weight, 7 ounces.

THE success of Stokesdale is due to its maturing a 7-ounce Tomato of streamline proportions one week earlier than the Marglobe group. As such it has filled an important place in the industry. Bonny Best, introduced by this house in 1908, is still in the running, but, by comparison, it is small and has less disease-resistance. After all, 32 years is a long time in the life of any Tomato.

The fact that has most surprised us about Stokesdale is its universal adaptability. We were confident that there was an important place for it in the short-season areas—northern-tier states, and in higher altitudes. We were quite prepared for that. The surprising factor to us has been its distinguished performance in the Lower Rio Grande Valley of Texas where in four seasons it has already won deserved recognition. Several thousand acres of Stokesdale will be grown there in 1940 for the green-wrap trade. Florida, Georgia, and the Carolinas will not be far behind. But this is not all; the canning trade has already given Stokesdale important recognition. This is, no doubt, based on its ability to produce unusual tonnage. One New York State packer reported a 25-ton-per-acre crop. See photo below.

The Stokesdale Tomato is now in its eighth generation. Infinite care on the part of our Breeding Staff has corrected two points that were not at first satisfactory—an open-vine tendency and a depth-to-width ratio of 80 per cent in the fruit. Stokesdale now has ample vine-coverage and a ratio of 87 per cent. The layman may consider that these are small changes but the veteran grower will not.

Here, then, is the Stokesdale Tomato 1940 Model: Vine—midway between Bonny Best and Marglobe, both in growth and disease-resistance. Leaves—light green and finely cut. Fruit—7-ounce average, 87 per cent ratio, smooth, solid, brilliant color. {This covers all green-wrap requirements.} Harvest of fruit will average one week earlier than Stokes Master Marglobe and ten days earlier than Rutgers.

If you do not know Stokesdale, don't postpone the opportunity. When we introduced it, five years ago, we remarked that it might revise the entire variety schedule. *It has done just that* for a large number of growers. You, too, may find in it a new source of profit, and we are anxious for you to give it a complete test in your 1940 program.

Price, postpaid: Trade pkt. 25 cts.; oz. 50 cts.; 1/4 lb. \$1.50; lb. \$5; 5 lbs. \$22.50



Stokesdale at Westfield, N. Y., August 31, 1938. This field of Messrs. Meed and Loveless was reported to have yielded in excess of 25 tons per acre. It was almost impossible to walk through this field without damaging the fruit. It was one of the very heaviest crops we have ever seen.

Stokesdale The Largest Second Early Tomato

Stokesdale vs. Grothen's Globe

IT IS TRUE that these two varieties have several points in common. Both have an obscure origin. Stokesdale was found in a single plant selection of Bonny Best on our Stokesdale Proving Ground. Grothen's Globe was found in a field of Break O'Day. Regardless of these diverse sources, we suspect that each one has Marglobe blood in it; in fact, both may be mutations from that amazing variety. More than once we have seen a similar break in Marglobe—Lamb's Special is one of them.

With Grothen's several different ideals were followed, with size the dominating factor. With Stokesdale our regular breeding routine has been followed, stressing smoothness, solidity, depth, vine-coverage, and high production. The result is that while Grothen's Globe is slightly larger than Stokesdale, it lacks the interior structure that is required for successful lug-box shipment. Stokesdale is *slightly* earlier, far more refined, and will produce some 25 per cent more U.S. No. 1 fruit per acre. In disease-resistance they are about equal, neither one quite matching the high rating of either Master Marglobe or Rutgers.

We had very fine results from the Stokesdale seed that we received from you. Some of our acreage turned out 15 tons per acre of good firm fruit. When we get ready to take on our requirements for another season, we shall contact you for more seed.—Wm. Bewley, Middleport, N. Y.



STOKESDALE in a Massachusetts garden. Photo courtesy Miss Margaret Marsh, North Hatfield.

Valiant and Stokesdale, here in Missoula, Mont., were wonderful. They began to ripen July 20 and at this date (October 18, 1938) they are still full of ripe and green Tomatoes. I had no culls from Valiant or Stokesdale.—J. C. S., Missoula, Mont.



Stokes Master Marglobe^{*}—

16th GENERATION. GENERALLY CONCEDED TO BE AMERICA'S FOREMOST SHIPPING TOMATO

New Jersey Certified.

Ratio, depth-to-width, 92 per cent.

Days to maturity, 118.

Average weight, 6 ounces.

THE high money in the northern markets goes to the Tomatoes that are uniformly large, deep, and solid. The consumer has fixed this standard for she invariably chooses a Tomato that she thinks will slice well. The green grocer knows this and so chooses the deep-fruited samples, but he watches two other points, also. He wants size—5 x 6 or 6 x 6 and he guards against loss by buying *solid* fruit.

As Tomato breeders, we have worked hard and long over Master Marglobe. There have been disappointments, as there always are, but in the long run we have gained ground. After sixteen plant generations, with an expenditure of approximately \$30,000, Stokes Master Marglobe has developed an average depth-to-width ratio of 92 per cent—a most unusual figure. The colored photograph opposite shows that. What you do not see is the solid interior—a characteristic of the Marglobe parent, Merveille de Marche. Fred Pritchard's magic touch started all of this back in the days of the first World War. What he sought and found was resistance to disease. His Livingston Globe x Marvel cross has brought millions of dollars to the Tomato industry.

Our part in this development has been a humble one. Perhaps the best to be said for it is consistency of effort. Through war and peace, through good times and bad, we have never relaxed on the breeding program of Stokes Master Marglobe. The results tell their own story. The 1939 stock is as near perfection as anything we have ever produced, and that goes for all the qualities, including size, depth, solidity, color, and uniformity of vine-coverage.

When you buy Stokes Master Marglobe in our tamper-proof canisters you are getting our prize product. Perhaps we may be pardoned for believing it represents the finest breeding work in America. If you have planted unidentified stocks of Marglobe and have been disappointed, don't condemn the variety until you have tried Stokes Master Marglobe—crop 1940. Our 770 acres under New Jersey Department of Agriculture Certification represents an enormous effort going back twelve continuous years. Our 40,000-pound seed harvest is already heavily booked against. We urge that you cover your requirements promptly.

★Trade-mark registered

Price, postpaid: Trade pkt. 25 cts.; oz. 50 cts.; 1/4 lb. \$1.50; lb. \$5; 5 lbs. \$22.50



This is part of one day's delivery from our 750 acres, sixteenth-generation Stokes Master Marglobe at our Vincentown, N. J., plant, August, 1939

Stokes Master Marglobe[★]—

DEEP
SOLID
RESISTANT



"Fitness is so inseparable an accompaniment of beauty that it has been taken for it."

—EMERSON.

★TRADE-MARK REGISTERED

We doubt if this record can be equaled. Over \$30,000 has been spent in the development of this stock. Yet this seed is available to you at a cost of less than \$1 per acre.

Streamlined and Finely Bred

THE fame of this beautiful shipping Tomato is almost legendary. Stokes Master Marglobe is conceded to be the most important market Tomato in North America. You are cordially invited to share in its success.

Stokes Master Marglobe can claim sixteen generations of single-plant selection.

Rutgers—A TOMATO OF VERY REMARKABLE QUALITIES

New Jersey Certified. Ratio, depth-to-width, 84 per cent. Days to maturity, 122. Average weight, 8 ounces.

AS TOMATO breeders and growers, we confess that we did not recognize the grand qualities of this variety when it was first introduced by Prof. L. G. Schermerhorn. But, believe us, we see them now. And we are here to go on record that there is a strength in Rutgers that we have never seen in other varieties. This strength is symbolized by a strong central stalk which, through fair weather and foul, seems to have the ability to produce large, handsome fruit, and which is sturdy enough to keep that fruit out of the mud.

Again, Rutgers is a Tomato in whose veins runs the magical Marglobe blood. Innumerable crosses have it. Even other Marglobe x J. T. D. have it, but this is the only one we have seen that carries with it that glowing vitality, that ability to produce fine Tomatoes in spite of heat and high water. In all honesty, the Rutgers Tomato worthily carries the name of the University that sponsored it.

The original cross was made by the Campbell Soup Company; they, in turn, passed it on to Prof. Schermerhorn of the New Jersey Experiment Station for perfecting. It is now in its ninth generation of selection. Our own company strains have constantly tended toward a deeper fruit, and in this we have had some

success, which was emphasized to us this past season when the New Jersey State certifying agency temporarily delayed certification because the depth of our Rutgers approached that of Master Marglobe. Rutgers' habit of ripening from the inside out is a factor that must be considered at the time of harvest. But the color of Rutgers is an outstanding asset.

The factor of size in Rutgers has gained it many friends among growers for the green-wrap trade. That, combined with its high resistance to Fusarium Wilt and other diseases, has given it a place of importance with the shippers of Florida and southern Texas. To growers who have difficulty in producing the coveted 5 x 6 and 6 x 6 sizes, and to those who have had unusual vine defoliation, we very strongly recommend Rutgers. To canners, the variety is well and favorably known. This holds true particularly in the lighter soils of southern New Jersey and the Eastern Shore of Delaware, Maryland, and Virginia. Rutgers has been a boon to the canning industry, both as a whole-pack Tomato and for Tomato products. This holds for all areas except those in the far north where the growing season is too short to allow full maturity.

Price, postpaid: Trade pkt. 25 cts.; oz. 50 cts.; 1/4 lb. \$1.50; lb. \$5; 5 lbs. \$22.50



Rutgers inspection, August 8, 1939, at Stokesdale Proving Grounds, Vincentown, N. J. Messrs. Patterson, McCall, Emmons and Stokes

Rutgers— SPECIAL HORTICULTURAL PRACTICES

SINCE man began domesticating plants, a few ambitious souls have always made themselves happy by pampering plants to a greater degree than their neighbors do. Occasionally worth-while responses reward their efforts. Always the gardener thinks his work is important. When we find a grower who prunes, or stakes, or mulches his field-grown crops, we find him convinced that his method of growing them is the only correct one. For people who have a discriminating market, the extra care may bring more money. Whether or not the profits are higher, many will continue their practices for the sheer love of doing it.

Pruning and Staking

Pruning practices for Tomatoes vary. Some growers train them to a single stem, others to two or three stems, and others allow them to branch at will. Many workers top the plants after they reach a certain height.

The type of stakes used may be barrel hoops on stakes surrounding a single unpruned plant, individual short stakes for the main stem of an unpruned plant, individual long stakes for a pruned plant, posts connected by wires for a whole row of pruned plants, or inverted V's made of two stakes for two adjacent rows of pruned plants. Almost always the pruning and staking is a more in-

tensive method so that plants are set closer, fertilized more heavily, and even irrigated or shaded occasionally.

The one result this treatment nearly always accomplishes is larger fruit size. In addition to this the grower gets more early fruit per plant; that is, more top-price market fruits. Total yield per plant is, of course, much less on pruned than unpruned plants, but close planting often makes the yield per acre much higher. Since spray materials on staked plants can cover more thoroughly, there is less disease to lower fruit quality. Physiological factors, such as yellow tops, cracking, blossom-end rot, or puff may either decrease or increase, depending on weather conditions and type of culture used.

The very important factor to remember in engaging in these practices commercially is that the extra investment involved makes necessary a thorough job. If pruning and staking are worth while then adequate fertilization, proper soil-preparation and cultivation, close planting, irrigation, and maybe mulching or shading are also worth while.

For any of this intensive work, another primary requisite is good seed. Be sure of your seed-source.

Lange's Earliana — EARLIEST MATURING TOMATO

Ontario-Grown. Ratio, depth-to-width, 75 per cent.
Days to maturity, 104. Average weight, 4 ounces.



AVASTLY improved selection out of the Spark's Earliana introduced by Johnson & Stokes in 1900. The seed we are offering this year has been grown for us in Ontario by our Canadian associates, Stokes Seeds Limited. In our opinion it is the earliest and

smoothest stock of Lange's Earliana we have ever offered. The success of the variety is due to its ability to produce fully half of its crop during the first ten days of harvest. The crown-set is exceptionally heavy and the Tomato is unusually smooth and deep for Earliana.

Price, postpaid: Trade pkt. 25 cts.; oz. 50 cts.; 1/4 lb. \$1.50; lb. \$5; 5 lbs. \$22.50



Our customer, Mr. Kenneth C. Miller, Wathena, Kans., who sends us this photograph of Valiant, says, "I plant two plants to the willow stake and wigwam them, and prune them to two main stalks; thus they grow as high as sixty Tomatoes to a plant. They had large strong vines with plenty of foliage."

Valiant — EXTRA EARLY · EXTRA LARGE · EXTRA SMOOTH

New Jersey-Grown.

Ratio, depth-to-width, 88 per cent.

Days to maturity, 108.

Average weight, 7 ounces.

IN MANY districts, Valiant is fast replacing the Earliana types. The four additional days' time that is required for its maturity is quickly overlooked when the market returns come in. Valiant has a sparse, open vine and therefore will never be an all-purpose Tomato, but in its limited field, where it can be matured without too much danger of sunburn, it is already greatly prized.

The experience of one grower, Mr. T. Wood Wyne, of Thorofare, Gloucester County, N. J., is typical of many in the extra-early field. Mr. Wyne has found that Valiant is so profitable that he has entirely abandoned his Earliana acreage. By the use of hotbed-grown, blocked plants, Valiant, under average New Jersey conditions, matures most of its crop before the

Valiant was the best Tomato we ever had. Very solid, free from cracks, and of excellent flavor. As to earliness, they were not enough behind Earliana to be noticeable. I have never been disappointed in Stokes' seeds.—C. J. T., Auburn, Me.

severe July heat. The fruit is so smooth and deep that in many cases it is marketed in the Marglobe class. With proper feeding on heavier soils, we have seen Valiant develop an almost normal vine-coverage.

Valiant, a Stokes 1936 introduction, is now in its eighth generation. It is a half-brother of Stokesdale, being a selection out of that remarkable variety. The fruit is unusually large in comparison with the vine, is solid and of brilliant scarlet color. Valiant is not recommended as a cannery type, nor is it recommended for production where it cannot be matured under normal temperatures. In its field, however, it has made a handsome profit for those who have handled it properly. We recommend that a planting of Stokesdale should always follow Valiant.

It is indeed a task to sit down and write all about the beauty, firmness, and productivity of your Valiant. We have never had a Tomato which exceeded our expectations in every way as much as did this one. It is certainly the most bountiful, firm, and easy-growing Tomato to be raised.—B. Bros., Altamont, N. Y.

Price, postpaid:

Trade pkt. 25 cts.; oz. 50 cts.; 1/4 lb. \$1.50;
lb. \$5; 5 lbs. \$22.50



We took about \$90.00 from about 650 plants of Valiant. Quite a number of the plants were ruined at the height of their season by rain, and others were obviously injured. The quality was often remarked upon, especially their firmness and keeping qualities. Even dead-ripe fruit did not become soft or bruised.—J. O. W., Merrimac, Mass.

I am pleased to say that this was the biggest Tomato year I ever had. Your Valiant is a real mortgage lifter. I believe that Marglobe is a little better market Tomato than Stokesdale. Rutgers is much firmer than Marglobe or Stokesdale, but give me *Valiant, the Champion*.—J. G. R., Taunton, Mass.

Your Valiant is the only new variety I planted this year. I am very pleased with it. It is not only very early but a firm Tomato of good quality. I rely on Pritchard for midseason and late Tomatoes.—E. H. B., Poughkeepsie, N. Y.

Pritchard — The Last Origination of a Great Plant Breeder

Michigan Certified.
Ratio, depth-to-width, 85 per cent.
Days to maturity, 112.
Average weight, 4 ounces.



Price, postpaid:
Trade pkt.
25 cts.;
oz. 50 cts.;
¼lb. \$1.50;
lb. \$5;
5 lbs. \$22.50

WE HAVE a wholesome respect for the Pritchard Tomato. Under certain growing conditions, this variety outyields all others. This particularly applies to New York and to New England where Marglobe ordinarily does not always ripen a full crop. In maturity, Pritchard will average five days ahead of Marglobe.

Pritchard, a Marglobe x Cooper's Special hybrid, originally introduced by the U. S. Department of Agriculture as Scarlet Topper, was officially renamed by the Department to honor its originator, the late Dr. Fred J. Pritchard. His originations in wilt-resistant types have had a vast influence on Tomato production in the United States.



Hybridized and bagged Master Marglobe at Stokesdale Proving Grounds—July, 1939.

Bonny Best — A STOKES INTRODUCTION WHICH HAS SUCCEEDED FOR THIRTY-TWO YEARS

New York State-Grown.

Ratio, depth-to-width, 85 per cent.

Days to maturity, 112.

Average weight, 4 ounces.

THE Tomato industry has made a great deal of profit from Bonny Best. It created a sensation when it was introduced by Walter P. Stokes in 1908. For many years thereafter it was one of the leaders in production and popularity. In some of the northern areas it still holds its place, sometimes under the name of Bonny Best or John Baer (the names are now practically interchangeable).

New England, New York, Michigan, Oregon, and Washington still have a strong preference for it, but thirty-two years is a long time for any variety, and we

shall not be surprised nor hurt if it is entirely replaced by other introductions within the next five years. Bonny Best has none of the wilt-resistant qualities of the Marglobe group. It is small. Its vine is light, but is a heavy bearer, and, what is finally important, the variety is still a money-maker for a lot of growers.

This stock is of our own saving in northern New York. It is larger than many of the present strains and resembles very closely the type our house originally introduced. It is early, deep, and smooth, with thick walls and the old Bonny Best color and flavor.

Price, postpaid: Trade pkt. 25 cts.; oz. 50 cts.; 1/4 lb. \$1.50; lb. \$5; 5 lbs. \$22.50



For many years, the name Stokes has been associated with fine Tomato seed. Introductions, by our company, of varieties like Atlantic Standard, Earliana, Bonny Best and Master Marglobe have added greatly to the income of Tomato growers. Our plant-breeding staff is working constantly to maintain and where possible better our existing strains.

TOMATO SEED —

Grown by Stokes



Stokesdale

•
A seven-ounce
Tomato,
maturing one week
ahead of the
Marglobe group