DESCRIPTIVE CATALOGUE

OF

VEGETABLES *for* CANNERS

Associated Seed Growers

Incorporated

New Haven, Connecticut

Number Five

Associated Seed Growers, Inc.

Breeders and Growers

New Haven, Conn., U. S. A.

Consolidating

THE EVERETT B. CLARK SEED CO., Est. 1857
N. B. KEENEY & SON, INC., Est. 1860
JOHN H. ALLAN SEED CO., Est. 1856

Cable Address: Asgrow

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Foreword

THIS second edition of our Descriptive Catalogue of Vegetables for Canners illustrates by many changes from the previous edition the progress made through research and breeding in raising the standards of appearance and quality of vegetables for critical packers. Varieties which found ready acceptance a comparatively few years ago are, in many cases, now outmoded. The modern science of genetics, applied to the art of the plant breeder, has improved the quality of many old, familiar sorts and has led to the replacement of others by new and more valuable strains.

Some eighty years have elapsed since the establishment of predecessor firms now incorporated in ASSOCIATED SEED GROWERS, INC. At that time the commercial production and distribution of seed in America was insignificant; for the most part seeds were imported or were exchanged between neighbor and neighbor. The new industry developed rapidly in Connecticut. New England seedsmen followed the retreating frontier to the unknown West. In the developments which have taken place during those eighty years, we are happy to think that we have borne a responsible part and we have been gratified by the appreciation shown by competent observers of the pioneer work of those who went before us—Everett B. Clark, Calvin N. Keeney and John H. Allan.

We have endeavored to carry on and expand the work they began, adhering rigidly through changing times to the high principle they laid down for us of "no compromise with quality." To maintain the stocks we have built up over so many years and to make them adaptable to different sections of the country, we have been led to widely diversified acreages for our breeding and growing work, as may be seen on the opposite page. Much of this work is carried on, for example, in the high, irrigated valleys of the Western Mountain States, in the endeavor to secure vigor and freedom from seed-borne diseases.

Resistant strains form the best insurance for the canner against the spreading menace of plant disease. Throughout this Catalogue evidences of our development and introduction of such strains will be found. Both in the greenhouse and in the field our various Departments of Breeding are continually engaged in this work and in originating new and better types of vegetables.

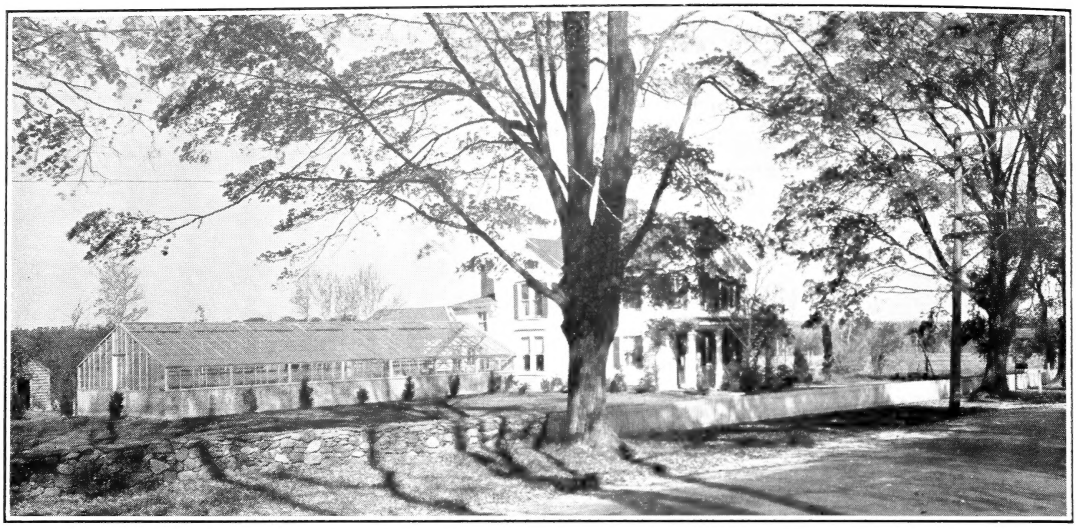
It has been our privilege to be closely associated with the canning industry since its inception and our constant endeavor is to merit a continuance of the happy business relationship and friendship which have been so generously extended to us.

Associated Seed Growers, Inc.

New Haven, Conn.
January 1, 1937.

Asgrow

WELL BRED VEGETABLE SEEDS



Asgrow Seed Laboratory and Greenhouse at our Milford, Connecticut, Breeding Grounds

A trained analyst makes soil or germinator tests of all stocks before shipments are made. Winter reproduction of special progenies is carried on, and hybridization for the development of new and distinct types. Disease resistance tests are also conducted.

ARTICHOKE

Native to Southern Europe

Culture: Sow seed in plant bed of rich, rather moist soil in rows 10 inches apart. When plants are 3 to 4 inches high transfer to field in rows 4 to 6 feet apart with 3 to 4 feet between plants. Frequent cultivation and plenty of moisture are essential. 6 ounces of seed are required for an acre.

LARGE GREEN GLOBE OR PARIS

Used for canning, and shipping; grown extensively in California; heads large, slightly elongated; scales thick at base. Quite different from Jerusalem Artichoke, which is grown for its tuberous root.

ASPARAGUS

Native to Europe

Culture: Sow the seed in the spring in drills about 18 inches apart in light, rich soil. Place seeds one inch apart and cultivate regularly during the summer; plants will be ready to set in the field the following spring. One ounce of seed will produce 700 plants. Deep plowed soil, rich in humus and well drained is best for this crop. Plants should be set 4 to 5 inches deep, spaced 1 foot, in rows 4 feet apart.

MARY WASHINGTON

The latest development of rust resistant asparagus; larger than the original Washington, with very tight tips of fine quality, good for canning.

PALMETTO

Popular as a canning variety. Stalks dark green, pointed at tip. Early and very productive.

BEANS

Through intensive hybridization and selection we have developed sixteen of the leading varieties of stringless beans. These choicer and more desirable sorts are gradually replacing the older, coarser, stringy varieties. In addition to creating new and better types on our breeding grounds we continually apply the thoroughly proven pure-line method of breeding whereby we are able to maintain pure stocks of the standard varieties which meet the needs of the discriminating canner in a uniformly satisfactory manner.

In listing the number of days from planting to picking, we have used average results secured over a period of years. These figures apply to plantings under normal rainfall conditions, and will vary somewhat in different sections of the country. However, the number of days indicated is valuable in showing the relative earliness of the different varieties.

Culture: For best results beans require strong, well-drained, loamy soil. In the North, plantings should be made after danger of frost is past, during latter May and early June. Plant 6 to 8 seeds to the foot, 2 inches deep in rows 24 to 30 inches apart depending on the richness of the land. It takes about 60 pounds of seed to plant an acre.

Green Podded, Dwarf or Bush Varieties

	Length of pod inches	Width of pod inches	Days from planting to canning
ASGROW STRINGLESS GREEN POD ..... Our recent development introduced in 1930. Received All-America Gold Medal Award for 1933. Highly desirable for a fancy pack. Similar to Full Measure, but hardier, and a more dependable cropper. Plant medium large, erect, somewhat thick stemmed, heavily productive. Pods nearly straight, dark green, round, meaty, succulent; stringless, totally without fiber, of outstanding quality. Seed 67 per oz., oblong, purple mottling on buff with brownish cast. Tendergreen is a similar variety.	6 to 6½	⅜	53
ASGROW BLACK VALENTINE ..... Our development introduced in 1930. Received All-America Award of Merit for 1933. Well adapted for market garden use and for early shipping, also used in some sections for canning. Plant large, erect, prolific. Very attractive, oval pods nearly straight, dark green, stringless, and of fine quality and delicate flavor; retain color and texture in shipping long distances; seed oval, 81 per oz., solid black.	6½ to 7	⅜	49

Asgrow Stringless Green Pod
Has now become a leading canning variety

BEANS—Continued

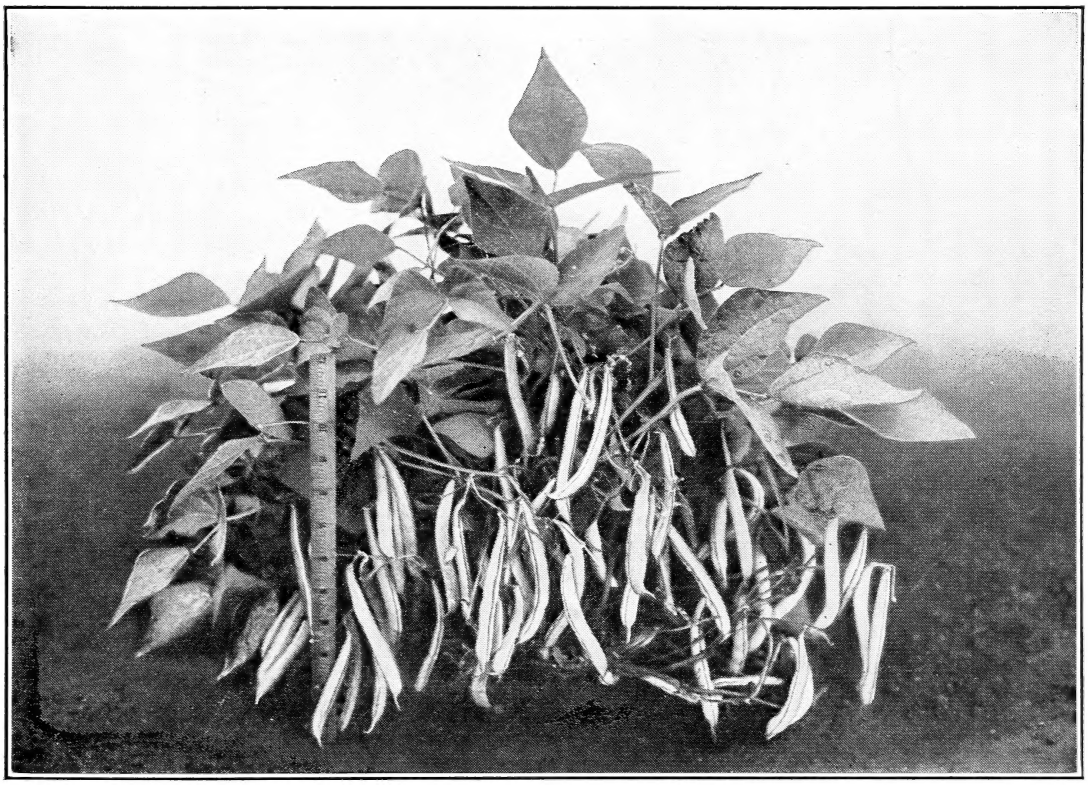
A Block of Pure-Line Progenies on our Bean Breeding Farm at Filer, Idaho

	Length of pod inches	Width of pod inches	Days from planting to canning
BOUNTIFUL ..... An important early variety for home and market gardeners and for shippers. Used also for canning French style or shoestring beans. Plant medium-large, prolific, thrifty. Pods flat, light green, stringless, slightly fibrous and of good quality. Seed yellow-straw color, 65 per oz.	6½ to 7½	½	49
FULL MEASURE ..... A well known variety for canners, having an upstanding prolific plant. Pods round, straight, very fleshy, stringless and tender; medium green. Seed 66 per oz., reddish brown mottled with buff. Of same season as Giant Stringless Green Pod but less hardy and more susceptible to disease than most green podded sorts.	6 to 6½	⅜	54
GIANT STRINGLESS GREEN POD ..... Originated by Calvin N. Keeney and introduced in 1898. One of the favorite stringless green podded sorts, extensively used for canning. Plant large, sturdy, prolific. Pods round, meaty, strictly stringless and brittle; with marked indentations between the beans; color medium green. Seed 72 per oz., oval, solid yellowish brown.	6 to 6½	7/16	54
KEENEY'S STRINGLESS GREEN REFUGEE..... An outstanding development originated by Calvin N. Keeney and introduced in 1908. A medium late variety very popular with canners. Plant large, very spreading, with many tendrils and drooping branches; heavily productive. Pods silvery green, round, absolutely stringless, brittle, without fiber. Seed violet-purple, splashed with pale buff; 97 per oz.	5 to 5½	⅜	70

BEANS—Continued

MOSAIC RESISTANT STRAINS OF STRINGLESS GREEN REFUGEE

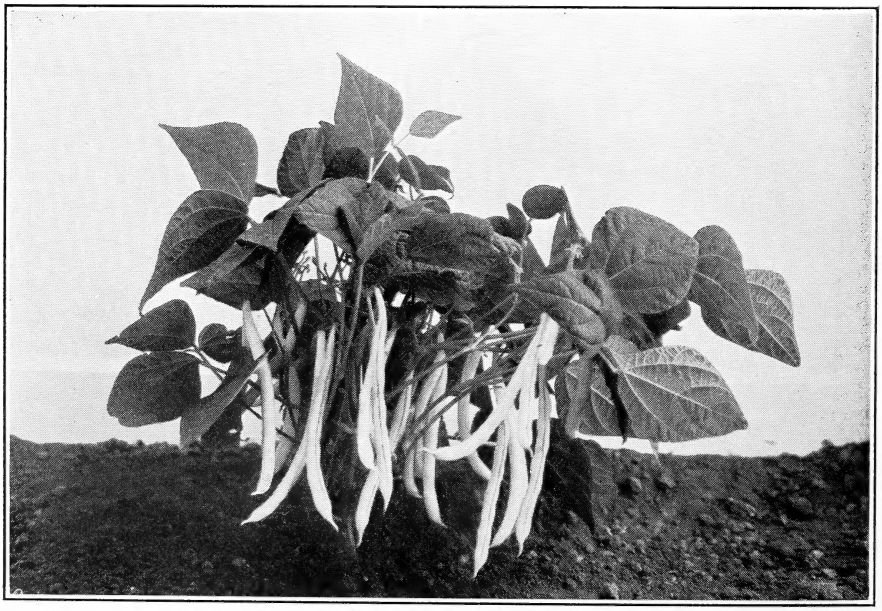
	Length of pods inches	Width of pods inches	Days from planting to canning
IDAHO REFUGEE ..... Developed by Dr. J. C. Walker and Dr. W. H. Pierce cooperatively and introduced by the University of Idaho in 1934; resistant to common bean mosaic. Plant of true Refugee type and strongly prolific. Pods longer than regular Refugee, straight, round, silver-green, stringless, without fiber; seed purple-blue splashed with buff. 6 days earlier than Keeney's Stringless Green Refugee and Wisconsin Refugee. Canning tests show high quality.	5⅜	⅜	64
U. S. NO. 5 REFUGEE ..... Developed and introduced in 1935 by the Division of Fruit and Vegetable Crops and Diseases of the United States Deparment of Agriculture. A cross between U. S. No. 1 and a mosaic resistant rogue from Stringless Green Refugee. Plant large, with many short tendrils, strongly prolific. Pods round, stringless, light silver-green, without fiber, of excellent flavor; seed in size and shape like Refugee but with brownish mottling.	5½	⅜	63
WISCONSIN REFUGEE ..... Developed by Dr. J. C. Walker and Dr. W. H. Pierce cooperatively and introduced by the University of Wisconsin in 1934; resistant to common bean mosaic; in season and plant character very similar to Keeney's Stringless Green Refugee. Pods slightly curved, medium long, round, stringless, of fine quality. Seed violet-purple splashed with pale buff. Scores high in canning test.	5 to 5¼	⅜	70



Idaho Refugee, the New Mosaic Resistant Bean

BEANS—Continued

	Length of pods inches	Width of pods inches	Days from planting to canning
KONSERVA ..... A recent introduction of David Sachs, particularly desirable for canning young pods, whole. Plant medium, erect, heavily productive. Pods medium green, round, slightly curved, stringless, somewhat fibrous at mature stage, of good flavor, and very attractive. Seed 85 per oz., white with faint pink splashing.	5	3/8	53
LOW'S CHAMPION ..... Also known as Red Cranberry. Used by canners and market gardeners in the Eastern States. Plant medium, erect, dark green, moderately productive. Pods medium green, straight, flat, stringless, and of excellent quality. Seed 50 per oz.; oxblood red.	5	5/8	55
STRINGLESS GREEN POD, IMPROVED ..... Originally introduced as Burpee's Stringless Green Pod. Since its origination in 1894 by Calvin N. Keeney we have markedly improved the shape and length of pods of this early, sturdy, stringless variety. Plant large, erect, very productive. Pods round, medium, green, very meaty, fully stringless and fiberless and of excellent quality. Seed coffee-brown, 75 per oz. Used extensively by canners for cut beans.	6	7/16	52
STRINGLESS GREEN POD, LANDRETH'S STRAIN... An excellent type of this variety, very similar to Improved Stringless Green Pod.	5½ to 6	7/16	52
RED KIDNEY ..... Originally introduced from South America. A commercial variety of fine quality for dry bean use. Plant large, vigorous, productive. Pods waxy green color, oval flat, stringy, tough and fibrous. Seed reddish brown; 50 per oz. Used for canning.	5 to 6	½	95
WHITE PEA OR WHITE NAVY..... Robust and Scofield are selected strains. Best known of commercial varieties. Plant large, spreading, with many runners; heavily productive. Pods flat, tough, stringy. Seed small, round-oval, white; 130 per oz. Used by canners.	4	3/8	90



Round Pod Kidney Wax—also known as Brittle Wax
The leading wax variety for canners

BEANS—Continued

Wax Podded, Dwarf or Bush Varieties

	Length of pods inches	Width of pods inches	Days from planting to canning
ROUND POD KIDNEY WAX OR BRITTLE WAX..... Originated by Calvin N. Keeney, and introduced in 1900. An outstanding sort for canning. Plant large, erect, medium green, vigorous and moderately productive. Pods handsome in appearance, medium yellow, round, slightly curved, deeply creasebacked, extremely brittle, fleshy, succulent, absolutely stringless and fiberless; the standard of highest quality. Seed white, kidney shaped, with black eye; 78 per oz.	5½ to 6½	⅜	58
KEENEY'S IMPROVED STRINGLESS KIDNEY WAX Originated by Calvin N. Keeney and introduced in 1908. Excellent for canning. Plant large, erect, reasonably productive. Pods oval, light yellow in color, brittle, stringless, fleshy, and of fine flavor. Seed white, kidney shaped with black eye; 75 per oz. Sometimes called New Stringless Kidney Wax.	5½ to 6¾	5/16	58
PENCIL POD BLACK WAX ..... Originated by Calvin N. Keeney; introduced in 1900. An exceedingly desirable variety for home and market gardens, used in some sections for canning. Plant large, stocky, vigorous and strongly productive. Pods round, slightly curved, fleshy, golden yellow, tender, entirely stringless, without fiber, brittle and of finest quality. Seed oblong, slightly flattened, 88 per oz., solid black.	6½ to 7	7/16	55
REFUGEE WAX ..... Originated by Calvin N. Keeney and introduced in 1885. Desirable for canning and market garden use. Plant sprawling bush, with many runner-like branches, very productive. Pods round, curved, light yellow faintly splashed with purple; brittle, stringless, fine grained, and of excellent quality. Seed cylindrical, bluish black splashed with pale buff; 100 per oz.	4½ to 5	⅜	53

Green Podded Pole Varieties

Culture: Sandy loam, well-enriched, is the best soil for pole beans. Plant in hills 4 feet each way 4 to 6 seeds to the hill about 2 inches deep. Poles 6 feet above ground should be set for the beans to climb on. It requires 30 to 35 pounds of seed to plant an acre.

BLUE LAKE ..... Early, vigorous, strongly productive; a good climber. Snap pods round, medium green, fleshy, stringless when young, tender and of fine quality. Seed small, oval, ivory white; 120 per oz. Highly desirable for canning asparagus style and for home gardens.	5 to 6	½	63
KENTUCKY WONDER OR OLD HOMESTEAD..... Also called Texas Prolific. The best known and most popular pole bean. Strong climber, hardy, very prolific over long season. Pods nearly round, curved, with undulating surface, meaty, of good quality; stringless when young, fiberless, very brittle. Seed 80 per oz., buff brown. Our special strain bred particularly for canners' use is highly free from flat pods.	7½ to 8½	½	65
U. S. NO. 3 ..... Introduced in 1935 by the Division of Fruit and Vegetable Crops and Diseases of the United States Department of Agriculture. Similar in some respects to White Kentucky Wonder; an attractive variety. Plant vigorous, 5 to 6 feet tall and good climber. Pods round, fairly straight, medium green, smooth, meaty, stringless at all stages, tender and of fine quality. Seed medium large, flattish oval, solid white, 88 per oz. Good for home and market gardens and for canning.	6 to 7	½	65

BEANS—Continued

Bush Lima Beans

Culture: Lima beans are particularly susceptible to injury from cold, wet weather and therefore should not be planted until two weeks later than string beans. Sandy loam well manured or heavy sod plowed deeply is the best foundation for producing crops of this item. In some areas lima beans are planted in latter June as a second crop after peas in which case only moderate yields can be expected. Sow seed 1½ to 2 inches deep in rows 22 to 28 inches apart with 3 to 5 seeds to a foot in the row. 40 to 50 lbs. of seed are required to plant an acre.

	Length of pods inches	Width of pods inches	Days from planting to canning
FORDHOOK ..... Most used by market gardeners of all large seeded Dwarf Limas; also used in a limited way for canning. Potato lima type. Plant large, upright, vigorous, highly productive. Pods straight, with thick fibrous walls; contains 3 to 4 seeds. Green shelled beans large, thick-oval, green of excellent quality. Dry beans white with tinge of green; 22 per oz.	4 to 4½	1	75
HENDERSON'S BUSH ..... Sometimes called Baby Lima and known in the South as a Butter Bean. Used largely for canning and freezing. The Asgrow strain developed through a period of years by intensive breeding is exceptionally uniform in plant growth and more concentrated and earlier in season than standard stocks, resulting in a larger percentage of green beans at canning stage. Plant small, dark green, erect, bushy, very early. Pods flat, contain 3 to 4 seeds. Green shelled beans flat, small, of excellent quality. Dry beans creamy white; 90 per oz.	3 to 3¼	¾	6

Henderson's Bush Lima
The Asgrow strain is early and concentrated in season

WOOD'S PROLIFIC ..... Similar to Henderson's Bush in type, but with larger plant and somewhat larger pods and seed; 65 per oz. Can be used for canning where medium size beans are desired.	3¼ to 3½	13/16	69

BEET

In the production of Beets we have bred pedigreed strains well adapted to canning requirements. Evenness of maturity, depth of color, uniformity and smoothness of roots are features of these stocks grown from mother beets selected with discriminating care. Our strains have substantial tops,—an important factor in harvesting by machinery.

Culture: Deep loam, well fertilized with manure is best suited to the growth of beets. Sow seed in May, in rows 12 to 18 inches apart with ¾ inch covering. 8 to 12 pounds are required to plant an acre depending on distance between rows. Frequent cultivation is important.

Days from planting to canning

ASGROW CANNER 68

Bred specially by us for canners' requirements; received All-America Award of Merit for 1936. Tops medium, erect, green and red. Roots globe-shaped, smooth with small neck; dark maroon-red. Flesh deep ox-blood red with very indistinct red zones; exceptionally vivid and attractive with deep wine-colored juice when freshly cut; holds quality well until roots are full-grown.

Asgrow Canner Beet

Exceptional depth of color in both flesh and juice

ASGROW WONDER ..... 56 to 58

Our development introduced in 1932. Received All-America Gold Metal for 1934. A pedigreed stock, the result of many years of pure-line breeding. Good for canning baby beets; unsurpassed in earliness, uniformity, and in depth of interior color. Tops medium, erect, uniform. Roots semi-globular, deep red, smooth, with small neck and tap root. Flesh deep red with zones of slightly lighter shade; tender, and of excellent quality.

BEET—Continued

Days from planting to canning

DETROIT DARK RED 68
A leading variety for canners. Our pure-bred line is a standard of quality. Tops medium, dark green tinged with red. Roots globular, smooth, uniform, attractive, with small tap root. Color deep ox-blood red. Flesh dark red with indistinct zones. Fine quality, sweet and tender.

OHIO CANNER 66
Developed by Dr. Roy Magruder at the Ohio Agricultural Experiment Station. A mid-season variety well adapted for canners' use. Tops medium, erect. Roots flattened globe in shape, smooth, ox-blood red; flesh dark red with indistinct slightly lighter zones, sweet and tender.

PERFECTED DETROIT 68
A mid-season variety. Tops tall, green and red. Roots flattened globe-shape, medium smooth, deep red; flesh dark red with somewhat lighter zones; of good quality. Adapted to the uses of canners and market gardeners.

BROCCOLI

A member of the Cabbage family

The Italian Sprouting or branching type is being used increasingly, and is a valuable addition to the list of vegetables that can readily be produced in most sections of the country.

Culture: Sow seed in plant bed in early May in rows 8 to 9 inches apart and plants will be ready to transfer to field in June. Set plants 1½ feet apart in rows 3 to 3½ feet apart. Rich soil with plenty of moisture is needed for strong development and tender stems and heads. 4 ounces of seed will plant an acre.

Days from setting of plants to first cutting

ITALIAN GREEN SPROUTING (CALABRESE) ..... 55 to 65
The leading variety for shippers, for canning and for freezing. A tall branching plant forms a central compact head of bluish green flower buds resembling a loose head of Cauliflower. After the main head is removed, side branches continue to develop throughout the season, and frequently form small heads, which, with the stems, are cut and served in the same way as Asparagus. It is a highly desirable, delicious vegetable, steadily gaining in favor.

BRUSSELS SPROUTS

A member of the Cabbage family

Culture: This crop requires very much the same treatment and conditions as cauliflower. It will grow in any soil that is good for cabbage provided it is well cultivated and reasonably enriched. Care should be taken not to overfeed the plants which may lead to the sprouts becoming coarser and larger than is desirable for canning. Rows should be 3 feet apart with 2 to 3 feet between plants. Four ounces of seed will produce enough plants for an acre.

HALF DWARF IMPROVED 70
Highly desirable for home and market garden; used also for canning. Plants 20 to 24 inches tall; stem thickly set, with firm Cabbage-like balls of 1½ inch diameter, maturing successively.

It should be noted that the descriptions given throughout this catalogue apply particularly to Asgrow strains. Our stocks of many older varieties have been greatly improved through continual work on our breeding grounds.

CABBAGE

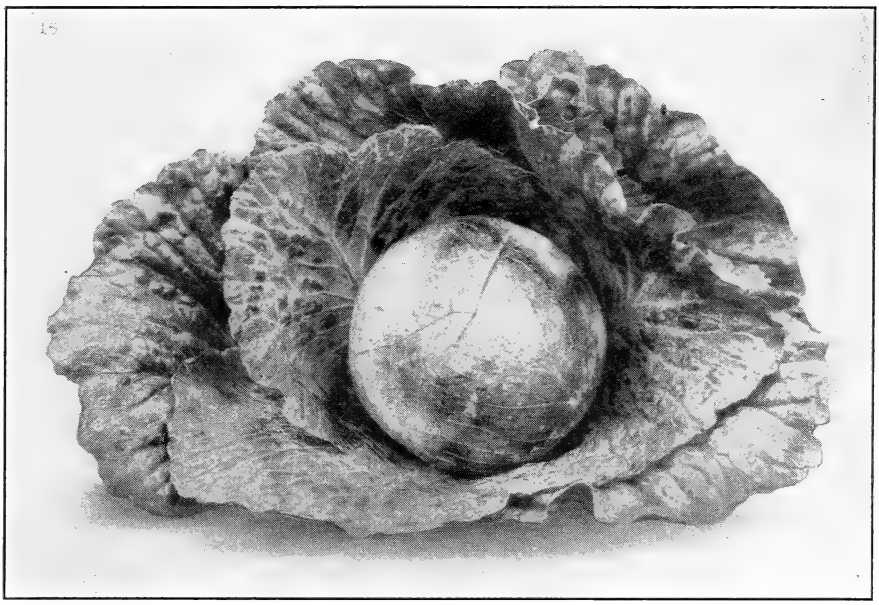
Native to Western Asia, Cultivated since the Earliest Times

Our cabbage seed is produced largely in the Puget Sound section of Washington under our personal direction from seed stocks of highest quality. Some strains are grown for us in sections of Europe where experience has shown that exceptionally high quality is assured. Each year the various varieties are checked at our Milford, Connecticut breeding farms to guard the vital factors of earliness, evenness of maturity and uniformity.

Culture: Sow seed in plant bed in drills 8 to 9 inches apart in May and plants will be ready to transplant in the field in July. Plants should be set at distance of 12 to 18 inches in rows 2 to 3 feet apart, so as to allow for machine cultivation. One ounce of seed will produce 4000 plants; 3 to 4 ounces required per acre. Rich, heavy clay loam with abundant moisture is the best soil for Cabbage.

	Diameter of head inches	Weight of head pounds	Days from setting of plants to marketable heads
COPENHAGEN MARKET ..... Dependably early and uniform, used largely for early kraut; desirable likewise as an early shipper. Few outer leaves, short stem; heads round, solid, and of superior quality. An excellent variety.	6½	3½ to 4	70 to 75
ALL HEAD EARLY ..... A medium early variety, excellent for kraut and for shipping. Heads flat, slightly rounded at top, 7 inches deep, solid, uniform in size and color, and of good quality.	9	6	75
GLORY OF ENKHUIZEN ..... Used largely for kraut, also by truckers and shippers. Heads large, round, solid, with few outer leaves; of excellent quality.	8	5 to 8	80
STEIN'S EARLY DWARF FLAT DUTCH ..... Plant medium, vigorous, a good second early variety, with large, solid, flat heads, 6 inches deep; good for early kraut.	11 to 12	11 to 12	90

Copenhagen Market
A popular early variety for kraut



Danish Ball Head or Hollander

	Diameter of head inches	Weight of head pounds	Days from setting of plants to marketable heads
DANISH BALL HEAD OR HOLLANDER ..... Most widely used and the best type of late cabbage for kraut. Plant fairly large, sturdy, with short stem; outer leaves medium. Heads deep round, very hard; interior decidedly compact, leaves composing head smooth and closely arranged. Texture tender, crisp; flavor good; ideal for high quality kraut.	7 to 8	6 to 7	100 to 110
PENN STATE BALL HEAD ..... A late variety, excelling in productivity and uniformity. Developed by Prof. C. E. Myers of Pennsylvania State College. Plant medium, with short stem. Heads attractive, flattened globe, extremely hard, 6 to 7 inches deep. Desirable for winter storage, and the manufacture of kraut.	7 to 8	5½ to 6½	110
PREMIUM LATE FLAT DUTCH ..... A deservedly popular, large, late variety. Excellent for kraut. Heads extremely large, flat, and solid; 6½ to 7 inches deep; of high quality.	10 to 11	9 to 11	95 to 105

A corner of the Asgrow Breeding Grounds at Milpitas, California

Yellows Resistant Strains

Developed by Dr. J. C. Walker and Dr. L. R. Jones, and associates, cooperatively between the University of Wisconsin and the United States Department of Agriculture. Highly valuable for use in areas infested with "cabbage yellows" disease.

	Diameter of head inches	Weight of head pounds	Days from setting of plants to marketable heads
ALL HEAD SELECT ..... Resembles standard strains of this variety but earlier; very uniform in leaf and head growth; flat, of fine quality. Good for early kraut and storage.	9	4 to 6	65 to 70
IMPROVED GLOBE ..... A resistant improved stock of Glory of Enkhuizen. Heads large, solid; used for kraut.	8 to 9	4 to 6	75
MARION MARKET ..... A development from Copenhagen Market, but with slightly larger, spherical, firm heads. Valuable for early kraut.	7	4 to 6	70
RED HOLLANDER ..... As its name indicates, this variety combines red color with the round, hard head of the Hollander type. Good for shipping.	6½ to 7½	6	100
WISCONSIN ALL SEASONS ..... A mid-season general purpose variety; keeps well; used for kraut; slightly coarser than standard All Seasons; heads flat to drum head.	10 to 12	5 to 8	90
WISCONSIN BALL HEAD ..... A late resistant variety for kraut, storage and shipping. Heads very hard, more uniform and smoother than Wisconsin Hollander and somewhat earlier.	7 to 8	7 to 8	100
WISCONSIN HOLLANDER NO. 8 ..... A late sort excellent for kraut and winter storage; heads flattened spherical. Produces heavy crops on land that is badly infested with yellows disease. This strain has been an important factor in bringing back to successful operation large acreages that were lost to cabbage production, on account of this disease. Similar in type to standard stocks of Hollander or Danish Ball Head.	7 to 8	5 to 8	100 to 105

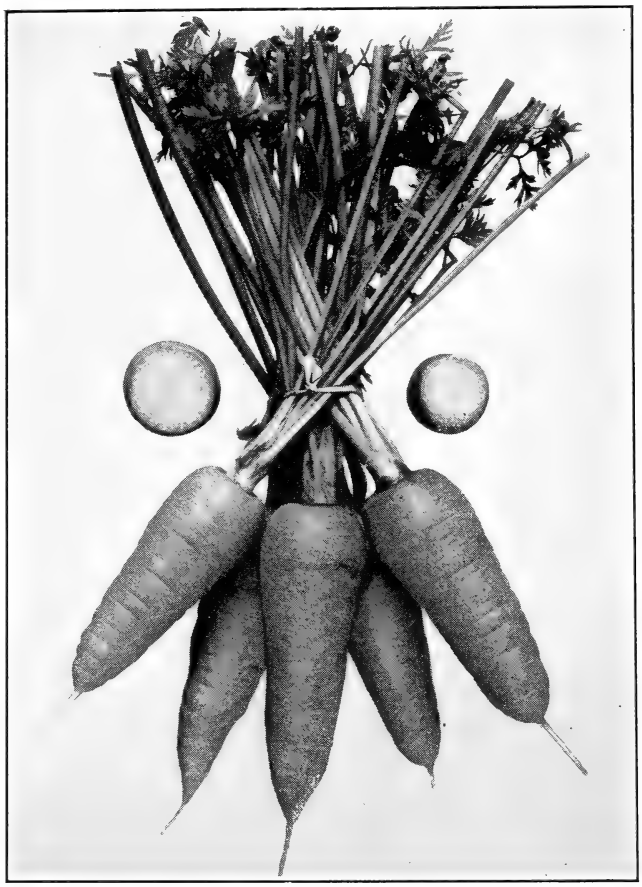
Threshing Cabbage Seed in the Northwest

CARROT

Parent planting stocks are produced through progeny breeding and are carefully checked for adaptability to both eastern and western growing conditions. In giving the number of days for the development of roots, we have used the averages of readings for a period of years. These will vary somewhat in different locations. Carrots were originally developed in Europe.

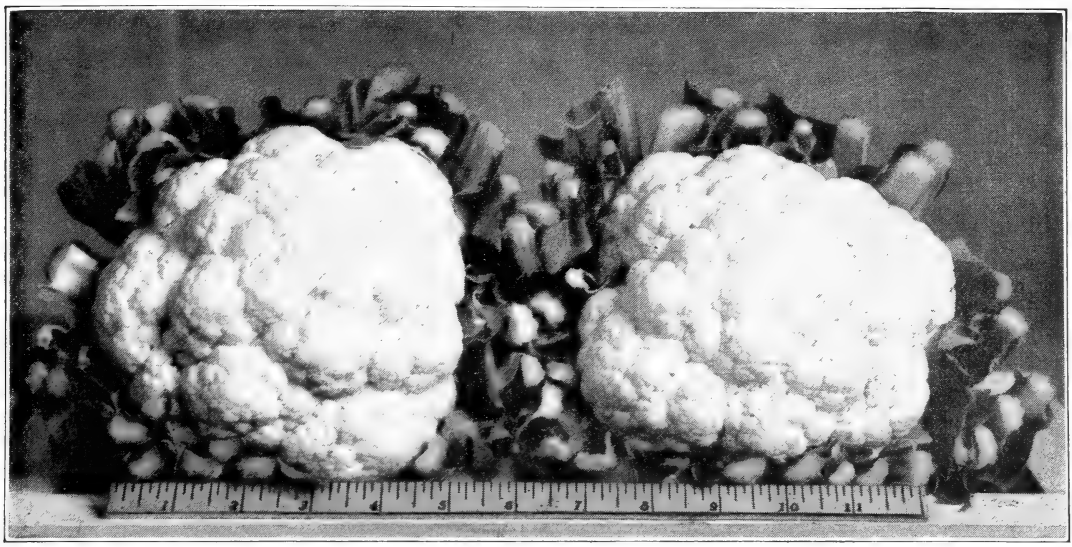
Culture: For best development carrots require rich, sandy loam soil plowed deeply, and well drained. For field planting sow seed in rows 2 to 2½ feet apart to allow for machine cultivation; for smaller plots to be cultivated by hand, 18 inches between rows is sufficient. 3 to 5 pounds of seed are required to plant an acre.

	Length of root inches	Diameter at shoulder inches	Days from planting to canning
CHANTENAY, IMPROVED ..... An excellent, all-purpose, medium early variety; desirable for canners in packing diced carrots; a good cropper. Roots deep orange, smooth, tapered, stump-rooted; flesh deep orange with indistinct core.	5 to 6	2¼	72



Red Cored Chantenay

CHANTENAY, RED CORED ..... A desirable Chantenay with good interior color. Roots somewhat shorter than Improved Chantenay; flesh reddish orange, with indistinct core of nearly the same color as the surrounding flesh; tender and sweet. Excellent for dicing.	4½ to 5½	2¼	72
NANTES IMPROVED CORELESS ..... Excellent for forcing; also used for canning. Tops very small. Roots bright orange, cylindrical, blunt ended. Flesh reddish orange, crisp, tender, and of very delicate flavor; practically coreless.	5½ to 7	1⅜	70



CAULIFLOWER

Culture: Sow seed in plant bed in drills 9 inches apart in May and transplant to fields in latter June or early July in rows 3 to 4 feet apart with 1½ to 2 feet between plant in the row. Deep rich soil with an abundance of moisture is necessary for good crops. Frequent cultivation with top dressing of fertilizer insures rapid growth and delicate flavor. For blanching, the leaves should be gathered loosely and tied over the top of the head. 4 ounces of seed will produce plants sufficient to set an acre.

	Diameter of head inches	Days from setting of plants to marketable heads
EARLY SNOWBALL ..... The best and most widely used early variety. Good for use in packing mixed pickles. Plant dwarf, with short pale green leaves. Heads medium, firm, compact, solid, pure white, and of finest quality; a dependable header.	6 to 7	55
SUPER-SNOWBALL ..... A highly desirable main crop variety, also used for early planting. Starts heading early and uniformly. Heads medium large, compact, very white; much used by produce growers and shippers.	7 to 7½	56

CELERY

Culture: Celery is usually begun in a cold frame and transplanted to a rich field when the seedlings are 6" high. If blanching is to be done afterwards by boards or heavy paper the seedlings are set 4" to 5" apart, with 8" between single rows and 3-3½ ft. between double rows. If soil is to be used for blanching, single rows are better, set somewhat farther apart. Four ounces of seed will produce enough plants for an acre.

EASY BLANCHING or SANFORD SUPERB ..... A second early variety. Vigorous and compact in habit of growth, it blanches readily to attractive white, and is a good keeper. Stalks slightly taller than Golden Self Blanching, are thick, solid, and of good flavor.	125
GOLDEN SELF BLANCHING, DWARF ..... This original French strain is still widely popular. Plant medium in height, stocky and compact; foliage yellowish green; stalks very solid, broad, of delicate, nutty flavor; blanches readily to golden yellow.	120
WONDERFUL or GOLDEN PLUME ..... An early, desirable variety, resembling Golden Self Blanching, but earlier. Plant of medium height with compact, full heart; blanches readily to golden yellow; of excellent quality.	112 to 115

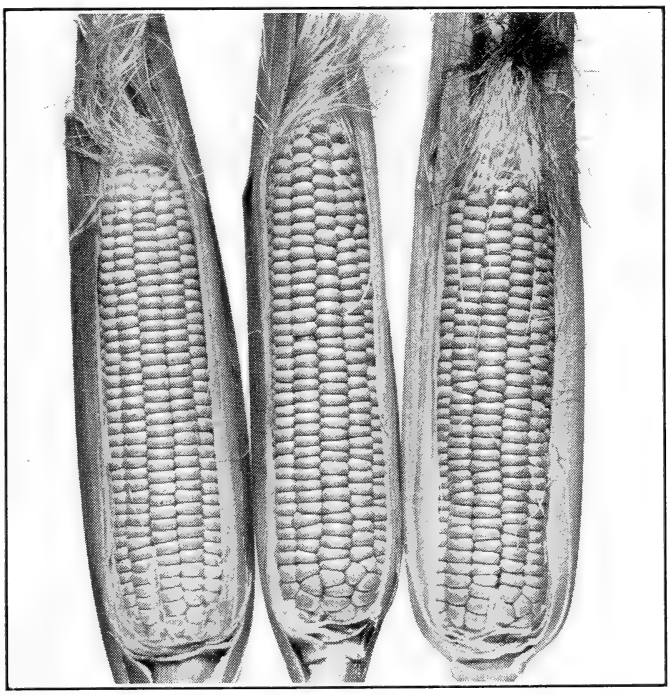
SWEET CORN

Native to America

Sweet Corn has been an important item with us for nearly eighty years, during which time we have originated a number of the best known canning varieties. Our breeding program includes the development of disease resistant strains as well as emphasizing the factors of uniformity in type, tenderness of hull and productivity. The number of days indicated for each variety to develop ears to canning stage represents average trial row readings for many years at our Milford, Connecticut breeding farms.

Through the use of more recent breeding methods for the improvement of Sweet Corn varieties, we have developed through fourteen years of controlled pollination a number of inbred lines of high merit. The crossing of these produces hybrids of outstanding vigor, uniformity and productivity. Likewise the top-crossing of inbreds on open-pollinated stocks gives uniformity and yields far in advance of those obtained from standard stocks. We can now furnish stocks of some varieties that are highly resistant to Stewart's disease or bacterial wilt.

From these years of experience and from trial plantings by canners and at Agricultural Experiment Stations in various states, we are in position to recommend to our canner customers the particular hybrids or top crosses that are best adapted to their sections.



Bantam Evergreen Hybrid

Particularly desirable for freezing

HYBRIDS

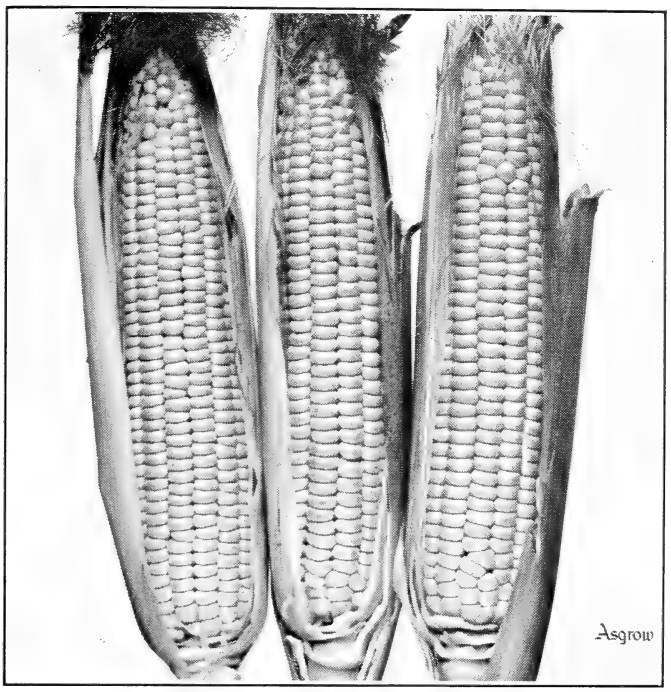
Single Crosses and Top Crosses

Yellow Varieties

	Height of stalk feet	Length of ear inches	Days from planting to eating stage
BANTAM EVERGREEN HYBRID	8	8	89

Our own development from crossing inbred lines Asgrow 24 x Purdue 39; introduced in 1930. Particularly valuable to canners. Stalk upright, sturdy, uniform; leaves wide, dark green. Ears cylindrical 14 to 16 rowed. Kernels golden yellow, medium wide and deep, with tender hull, sweet and of excellent quality.

SWEET CORN—Continued



Golden Cross Bantam

	Height of stalk feet	Length of ear inches	Days from planting to eating stage
GOLDEN CROSS BANTAM ..... Developed by Glenn M. Smith and introduced jointly by the United States Department of Agriculture and Purdue University Agricultural Experiment Station. Well adapted to canners' use. It is replacing other main crop yellow varieties. Stalk sturdy, with exceptionally broad, vigorous leaves. Ears 10 to 14 rowed, slightly lighter yellow than Golden Bantam. Kernels medium in width and depth. The result of crossing Purdue 39 and Purdue 51. This hybrid is extremely uniform in plant and ear characteristics and in maturity. Highly resistant to Stewart's disease.	6	7½ to 8	88
MINHYBRID NO. 202 ..... A development of the Minnesota Agricultural Experiment Station particularly desirable for canning corn-on-the-cob, one of the few eight rowed yellow hybrids. Stalk sturdy, medium tall. Ears predominately eight rowed. Kernels medium large, yellow, of quality comparable with Golden Bantam; cob extremely small. This variety is probably best suited to areas with short season and long days.	5 to 6	6 to 8	76
TOP CROSS BANTAM ..... Our introduction developed from crossing a drought resistant Golden Bantam and a prepotent inbred; introduced in 1931. Excellent for canning. Similar in plant characteristics to Golden Cross Bantam but not quite as uniform. Stalk sturdy with vigorous leaves. Ears 10 to 14 rowed; color deep yellow, similar to Golden Bantam. Kernels medium, tender and sweet. Highly resistant to Stewart's disease and very productive.	6	7 to 7½	86

SWEET CORN—Continued

	Height of stalk feet	Length of ear inches	Days from planting to eating stage
TOP CROSS MAINE BANTAM ..... One of our recent developments particularly adapted for canners in short season areas; introduced in 1934. Stalk sturdy with deep green foliage; ear as long as Golden Cross Bantam and somewhat thicker, very slightly tapered with 10 to 14 rows; kernels deep yellow, tender and of excellent flavor. Very successful results are being obtained from this new introduction. Highly resistant to Stewart's disease.	5½ to 6	6½ to 7	78
TOP CROSS SUNSHINE ..... Known also as Tendergold. A good canning sort maturing about a week ahead of Golden Cross Bantam. Stalk sturdy and vigorous with strong foliage; highly resistant to Stewart's disease. Ear nearly cylindrical, 12 to 16 rowed, kernels medium in width and depth, golden yellow, tender and of good quality. Desirable for northerly sections of shorter season.	5½ to 6	7½	80
TOP CROSS WHIPPLE'S YELLOW or Whipcross P39.. This very uniform intermediate top cross was developed primarily for home and market garden use. Stalk sturdy with strong foliage; highly resistant to Stewart's disease; ears 12 to 14 rowed, well filled at tip; kernels golden yellow of medium length and good flavor. It is very prolific.	7	7½	84

White Varieties

ASGROW SHOEPEG HYBRID (19 x 9) ..... Our introduction developed from crossing inbred lines Asgrow 19 x Asgrow 9. Particularly desirable for canners. Stalk sturdy, upright with ears 3½ to 4 feet from ground. Ears long, cylindrical, well filled at tip. Kernels very fine and deep, tender and of excellent quality.	8½ to 9	8	93
ASGROW COGENT HYBRID (19 x 24) ..... Another Country Gentleman Hybrid of our breeding; introduced in 1929. Has a somewhat thicker ear and larger kernel type than Hybrid 19 x 9. Well adapted for canners in areas of heavy, rich soil in the Eastern States. Stalk erect with good foliage and strongly prolific. Ears medium long, slightly tapered, well filled at tip.	8 to 9	7½	93
CROSGREEN ..... A top cross line developed by crossing a Stowell's Evergreen inbred on Early Crosby. Uniform and fairly prolific. Good for canners in areas of medium length season. Stalk sturdy with heavy foliage. Ears quite large, slightly tapered, 14 to 18 rowed; kernels medium wide and deep, cream white; cob medium.	6 to 6½	7 to 8	86
NARROW GRAIN HYBRID (26 x 15) ..... Developed by crossing inbred lines Asgrow 26 x Asgrow 15. Introduced in 1931. Very uniform and highly desirable for canning. Stalk sturdy, upright with no suckers; leaves wide, dark green. Ears cylindrical with 20 to 22 rows. Kernels medium narrow, deep, tender.	8	7½	94
REDGREEN ..... Developed by Dr. D. F. Jones and introduced in 1928 by the Connecticut Agricultural Experiment Station. A hybrid strain well adapted to canners' uses in areas having medium length of season. On account of strong close-fitting husks it is quite resistant to ear worms. Stalk upstanding, frequently develops two ears; foliage reddish green. Ears cylindrical, slender, 12 rowed. Kernels very white, not as deep as Evergreen; cob small.	9	8 to 8½	95

SWEET CORN—Continued

	Height of stalk feet	Length of ear inches	Days from planting to eating stage
STOWELL'S EVERGREEN HYBRID (14 x 5) ..... Our development from crossing inbred lines Asgrow 14 x Asgrow 5. Introduced in 1930. Received All-America Special Mention for 1934. Highly valuable to canners. Stalk sturdy with close growing upright ears, 4 feet from ground; foliage medium green. Ears very slightly tapered, uniform, with 16 to 18 rows. Kernels white, medium wide, deep; medium cob.	9	9 to 9½	96
TOP CROSS COUNTRY GENTLEMAN ..... Developed from crossing mid-western grown open-pollinated Country Gentleman and Inbred 440, and introduced in 1933. Particularly adapted to middle western conditions. Its uniformity in maturity makes it desirable for whole kernel pack. Stalk erect with strong foliage; highly productive. Ears slightly tapered, well filled at tip. Kernels medium fine, deep, tender, of very good quality.	8½ to 9	8	91
TOP CROSS EVERGREEN ..... Our development from crossing our mid-west strain of Narrow Grain Evergreen and Asgrow Inbred 230. Particularly adapted for canners in the Corn Belt. More uniform and higher yielding than ordinary Evergreen varieties; tall, vigorous growth, excellent fodder. Ear long, attractive, with 16 to 22 rows; kernels narrow, of good depth, white.	8 to 9	7½ to 8½	95

Hybrid Sweet Corn: A crossing field on one of the Asgrow Breeding Farms. The lighter rows are pollen parents; the others, which have been detasseled, furnish the seed

OPEN-POLLINATED

Early Yellow Varieties

GOLDEN BANTAM ..... Introduced by W. Atlee Burpee Company. The best and most favorably known of all the yellow varieties. Stalks often have 2 ears. Ears 8 rowed; kernels broad, with tender hull, sweet, and of very fine flavor.	5 to 5½	6 to 6½	80
GOLDEN SUNSHINE ..... An early yellow variety with good sized ear; used in market gardens and for canning. Four to five days earlier than Golden Bantam. Ears 10 to 12 rowed. Kernels medium broad, golden yellow, sweet, and tender.	5 to 5½	6½ to 7	76

Intermediate Yellow Varieties

	Height of stalk feet	Length of ear inches	Days from planting to eating stage
BARDEN'S WONDER BANTAM ..... Introduced by C. S. Clark & Sons. A desirable second early variety with somewhat longer ear and slightly taller stalk than regular Golden Bantam. Ears 8 rowed. Kernels broad, tender, sweet, of good flavor.	5½ to 6	6½ to 7½	82
BURBANK BANTAM ..... A second early yellow variety good for canning. Ears large, rather short with 10 to 14 rows. Kernels medium, tender and of good flavor. Holds up well under adverse weather conditions.	5½ to 6	6	84
GOLDEN BANTAM, IMPROVED 10-14 ROWED ..... Our development introduced in 1922. A selection from the original strain of Golden Bantam resulting in a larger ear with more rows and greater productivity. Ears 10 to 14 rowed, uniform and attractive. Kernels golden yellow, medium wide, deep, sweet, and of fine flavor; remain tender longer than regular Golden Bantam. Particularly desirable for canners.	5½ to 6	6 to 6½	84
GOLDEN GIANT ..... A mid-season yellow variety, the result of crossing Golden Bantam and Howling Mob; good for home and market garden planting. Ears rather thick at the butt, 12 to 16 rowed. Kernels golden yellow; of fair quality.	7	6½ to 7	88
WHIPPLE'S EARLY YELLOW ..... Deservedly popular as a large eared second early sort, for home and market garden. Stalk sturdy and erect; ears 12 to 14 rowed, strong husks, well filled at tips. Kernels golden yellow, fairly deep, sweet, and of good flavor.	6½	7 to 7½	84

Late Yellow Varieties

BANTAM EVERGREEN ..... Also known as Golden Evergreen. Bred by the Everett B. Clark Seed Company and introduced in 1910. A cross of Golden Bantam on Stowell's Evergreen having Evergreen type of ear with 14 to 18 rows. Kernels rich, golden yellow, deep, with tender hull, sweet, and of fine quality. A superior medium late variety excellent for canners.	7 to 8	7 to 8	89
ASGROW GOLDEN COLONEL ..... One of our newer developments. Received Award of Merit in All-America selections for 1936. The result of 10 years breeding in crossing White Country Gentleman and Golden Bantam. This new variety is identical in stalk and ear characteristics with regular Country Gentleman except for its golden color. Stalk sturdy, often with two ears. Kernels very deep, narrow, tender, arranged irregularly without row formation. This variety is distinct from Golden Cream as it has a much larger, more attractive ear with the typical Country Gentleman kernel pattern. Its dainty shoepeg kernels give a most attractive whole kernel pack, vacuum or brine.	7 to 8	7 to 7½	91

Early and Second-Early White Varieties

EARLY SURPRISE ..... An outstanding early white sort, our development, bred from Early Mayflower, and introduced in 1927. It surpasses others in ear size combined with extreme earliness. Ears 8 to 12 rowed, well protected with strong husks. Kernels pure white, tender, and of good quality.	4½ to 5	6½ to 7	72

	Height of stalk feet	Length of ear inches	Days from planting to eating stage
EARLY CROSBY ..... A well known popular variety, used extensively by canners in sections having shorter growing season. Ears 14 to 16 rowed, with snowy white narrow kernels set compactly; tender hull, sweet, and of good flavor.	6	6½	88
HOWLING MOB ..... A popular, prolific, second early variety, with large ear. Ears 12 to 16 rowed, thick butts, strong husks with green streamers. Kernels clear white, plump, and of fair quality.	6 to 7	6½ to 8	85

Late White Varieties

CLARK'S EARLY EVERGREEN ..... One of the best known and widely used canning varieties. Originated by Everett B. Clark more than fifty years ago. Ears 16 to 20 rowed. Kernels very deep, ivory white, sweet, and tender.	8	7½ to 9	90
COUNTRY GENTLEMAN or SHOE PEG ..... A late prolific variety of excellent quality, used widely by canners. Stalk often with two ears. Kernels very deep, slender, sweet, with tender hull, and set irregularly without row formation; 230 per oz.	7 to 8	7 to 7½	93
NARROW GRAIN or MAINE STYLE EVERGREEN ... Our introduction in 1904. Bred for discriminating canners from Stowell's Evergreen by the Everett B. Clark Co.; it is unsurpassed in kernel type in all the Evergreen family. Ears 20 to 24 rowed, small cob. Kernels white, very deep, slender, of tender hull, sweet, and of fine flavor.	8 to 10	7 to 8	95
STOWELL'S EVERGREEN ..... The best known late variety of Sweet Corn; a stock first grown in 1847 by Nathan Stowell at Burlington, N. J. Used extensively by canners for a standard product. Stalk sturdy and erect; ears 2½ inches thick, uniform, 16 to 20 rowed. Kernels clear white, deep, rather broad, sweet and tender; 112 per oz. Holds well in prime condition at eating stage.	8 to 10	8 to 9½	95

Asgrow Golden Colonel

CUCUMBER

Native to the East Indies

The breeding of new strains and improvement of standard varieties is carried on at our breeding grounds at Greeley, Colorado. Exceptional care is exercised in the isolation of plots to prevent hybridization. The number of days indicates the time required from planting of seed to develop fruits to first picking of slicers. The time should be reduced several days for small pickles. Our stocks of the pickling varieties are uniform, true to type and very prolific.

Culture: Sandy loam, well-manured is the best soil for cucumbers. Sow seed in June after all danger of frost. Some growers prefer to plant in drills 5 to 6 feet apart to be thinned later, others plant in hills 5 to 6 feet apart each way. 2 pounds of seed will plant an acre.

National Association Pickling Cucumber

	Length of fruit inches	Diameter of fruit inches	Days from planting to picking
BOSTON PICKLING or EARLY GREEN PROLIFIC, b. s. Similar to Green Prolific. Very early and prolific. An excellent pickling variety. Fruits weigh 1½ pounds; medium green, slightly tapered.	6 to 6½	2½	58
CHICAGO PICKLING, b. s. ..... A widely used pickling variety. Uniform and attractive; also good for slicing. Fruits medium green, square ended; very prolific.	6½	2½	59
DAVIS BLEND, b. s. ..... A desirable pickling strain recently developed for the use of Pickle Packers. At full maturity the fruits weigh 1½ lbs.; deep green, squarish ended, uniform, productive. Resembles National Association Pickling.	6	6½	57
EARLY RUSSIAN, b. s. ..... Very small, exceptionally early, and prolific. Used largely for pickling. Fruits weigh 1 to 1¼ pounds.	4½ to 5	2	54
EVERBEARING, b. s. ..... Small, very early variety, similar to Early Russian; used for early pickles. Fruits weigh 1¼ pounds, chunky. By keeping the fruits picked, it will continue to bear throughout the growing season.	4¼ to 4½	2	55

	Length of fruit inches	Diameter of fruit inches	Days from planting to picking
JERSEY PICKLING, b. s. ..... A standard pickling variety. Fruits weigh 1½ pounds; medium green, tapered at both ends; uniform and slender.	6 to 8	2 to 2½	63
LEMON, b. s. ..... In appearance somewhat resembles a lemon; used for pickles and for salads. Fruits nearly round, weigh ⅜ of a pound; rich lemon color, of excellent flavor; crisp. Increasing in favor and usage.	3	2½	65
NATIONAL ASSOCIATION PICKLING, b. s. ..... A highly desirable pickling strain developed at the Michigan Agricultural College in collaboration with the National Pickle Packer's Association. Full grown fruits weigh 1½ pounds; dark green, symmetrical, square ended; solid with thick wall structure. Resembles Snow's Perfection.	6	2½	56
SNOW'S PERFECTION PICKLING, b. s. ..... A somewhat smaller sort than Chicago Pickling. Early, prolific and rightly popular. Fruits weigh 1½ pounds; deep green, strictly square ended, uniform and attractive. A widely used pickling sort.	5½ to 6	2½	56
WEST INDIA GHERKIN ..... Native of Jamaica, distinct from Cucumber, used for very small pickles. Fruits weigh 3 to 4 ounces; pale green, covered with prickly spines; oval and uniform.	2	1	60

Recording Trials on our Cucumber Breeding Grounds, Greeley, Colorado

DANDELION

Culture: Mellow, well-fertilized loam produces the most satisfactory results. Sow seed in April in rows 14 to 16 inches apart and plants can be cut in late fall and in following spring. Only occasional cultivation is necessary. 5 to 6 pounds of seed will plant an acre.

ARLINGTON THICK LEAVED OR FRENCH BROAD LEAVED
A highly desirable variety; plant rather upright; forms a rosette of large, broad leaves 20 inches across. Leaves are thick, easily blanched. Used by gardeners and for canning Dandelion greens.

DILL

Culture: Sow seed ½ to ¾ inch deep in well pulverized soil in rows 24 to 36 inches apart. 5 pounds of seed are required to plant an acre.

LONG ISLAND MAMMOTH
Plant 2 to 2½ feet high, with finely cut leaves; resembles Fennel. Seed very flat, has strong, bitter flavor. Used for flavoring pickles or as a condiment.

MUSTARD

Used extensively in the South for greens and for canning.

Culture: Sow seed in spring to mid-summer in mellow loam in rows 12 to 18 inches apart. Cultivate frequently when plants are well above ground to insure rapid growth. 5 pounds of seed will plant an acre.

FORDHOOK FANCY OR OSTRICH PLUME
A handsome, upright growing, mild variety, slow to bolt seed stalks; leaves bright green, plume-like, and deeply fringed on the edges; excellent for salads; seed reddish brown.

SOUTHERN GIANT CURLED
The best known and most popular sort for greens. Leaves long and wide, light green, tinged with yellow, heavily crumpled and curled at the edges. Seed small, reddish brown.

MUSTARD SPINACH or TENDERGREEN
A quick growing plant of Oriental origin, particularly desirable for the South. Leaves oblong, broad, fairly smooth, with light green center ribs; slow to seed, resistant to heat and drought; combines flavors of mustard and spinach.

OKRA OR GUMBO

Thrives best in warm climates, and is well adapted to the Southern States.

Culture: Sow the seed in warm sandy loam soil in rows about 2 feet apart. When plants are well above ground thin to 9 inches apart. Frequent cultivating and hoeing are essential for best results. Pods should be picked when quite green, and 2 to 2½ inches long. 8 to 10 pounds of seed are required to plant an acre.

	Height of plant feet
PERKINS' MAMMOTH — A medium early, productive sort. Pods bright, deep green, 7 to 8 inches long; slender, meaty, pointed, and ribbed. A valuable market and canning variety.	3½ to 4½
WHITE VELVET — Plant early, prolific; pods ivory white, 6 to 7 inches long, meaty, tender; smooth, and pointed, excellent for home garden and canning.	3 to 3½

ONION

Culture: Rich, deep, sandy loam and muck land are good for onion production. Frequent cultivation and hand weeding are necessary. Sow seed in April or May. 4 to 5 pounds per acre in drills 12 to 15 inches apart.

	Days from planting to marketable bulbs
WHITE BARLETTA — An exceptionally early sort, used for pickling, and for green bunching. Bulbs small, flat, pure white, of mild, sweet flavor.	90 to 92
WHITE PORTUGAL OR SILVERSKIN — The most widely used white onion. It might be called an all-purpose variety, as it is excellent for sets, as a pickler, for green bunching, and for storage. Bulbs medium sized, thick-flat, clear white, hard, fine grained, and of pleasing flavor. It is a dependable cropper.	100 to 102
WHITE QUEEN — Valuable for early market and pickling, and sometimes used for bunching and for sets. Bulbs small, flat, clear white, firm and mild.	90 to 92

PARSNIP

	Days from sowing seed to edible roots
HOLLOW CROWN or GUERNSEY — Most commonly used of all varieties. Roots 12 to 14 inches long, 2½ to 3 inches thick at shoulder; hollow crowned, uniformly tapered.	95
SHORT, THICK — A very early variety with medium top. Root 6 to 8 inches long, 2½ to 3 inches in diameter at shoulder; full crowned, slightly rounded at top; flesh tender and sweet.	75 to 80

Planting Scene at one of our Pea Breeding Stations. The most modern methods and equipment are used throughout

PEAS

By breeding pedigreed stocks through generations of pure-line cultures, we are continually improving existing leading varieties of peas. This intensive process, supported by careful inspection and checking of field crops, produces exceptionally high grade stocks. In addition to maintaining standard varieties, new strains are developed by means of hybridization and selection, which enable us to combine desirable plant characters such as disease resistance, productiveness, and quality of two or more parents in new and more useful introductions.

We have indicated in the number of days from planting to canning, average results under normal rainfall conditions. These figures will be of assistance in comparing the relative earliness or lateness of the various varieties when planted in any locality.

Culture: Peas are grown successfully on various types of well-drained, non-acid, mellow soils but deep fertile loam with some clay mixture is best under rainfall conditions. In western areas, under irrigation, lava ash and læss with good humus content produce the most satisfactory crops. Fall plowing is recommended, also application of lime where needed. Sow seed broadcast with grain drill as soon as land can be properly worked in the spring. When commercial fertilizer is used, direct contact between seed and fertilizer should be avoided. 3½ to 4½ bushels are required to plant an acre.

Smooth Seeded Varieties

	Height of vine inches	Length of pod inches	Days from planting to canning
ASGROW ALASKA ..... Introduced in 1930. Fully resistant to Fusarium wilt. Used very extensively for canning as a first early variety. Vine slender, light green, very uniform in maturing. Pods single, blunt, light green, round, straight, contain 6 to 8 peas of good quality. Seed small, round, smooth, bluish green. The Asgrow strain, the first progeny line pedigreed stock of this variety ever developed, is noted for its pods size and productivity.	32	3	60
WINNER ..... Developed and introduced by Rogers Bros. Seed Company. An early canning variety, used where small sizes are desired. Vine light. Pods single, narrow, light green, blunt, straight; contain 6 to 7 peas of fair quality. Canned peas round, medium-light green; sieve sizes 1 to 3, largely 3. Seed small, deeply dimpled or semi-wrinkled, light green.	24	2	60

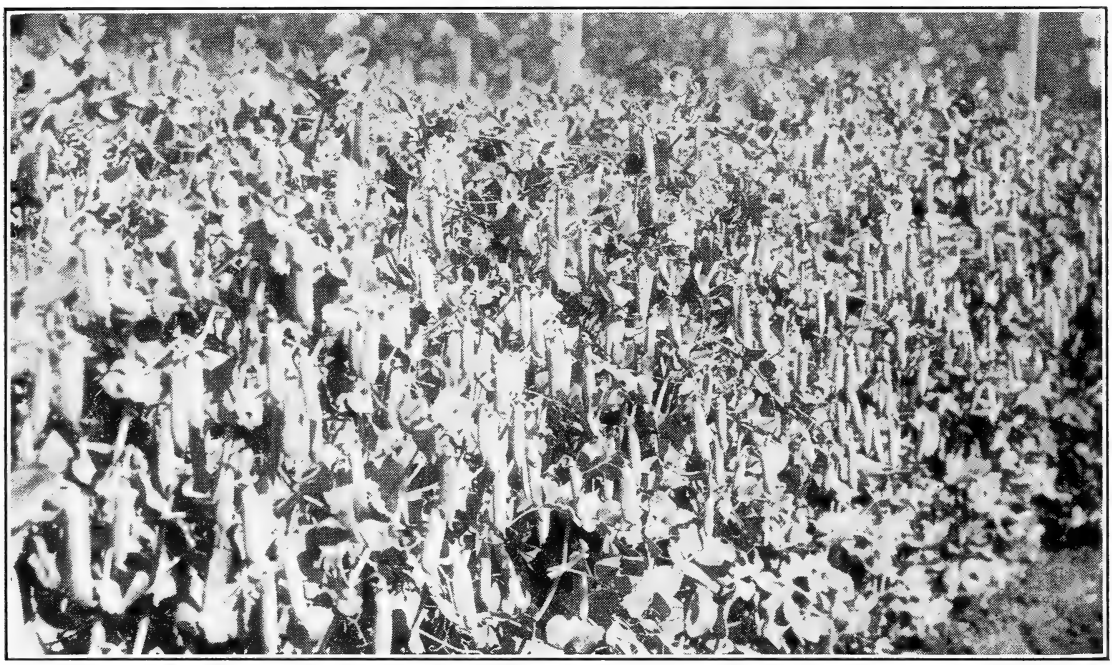
PEAS—Continued

Wrinkled Seeded Varieties

Early and Second-Early

	Height of vine inches	Length of pod inches	Days from planting to canning
ASGROW EARLY HARVEST	28 to 30	2¾	61

Our development, fully resistant to Fusarium wilt, ready in 1937. An early sweet wrinkled canning type showing more vigor than either Surprise or Wisconsin Early Sweet. Vine slender, medium green. Pods single, light green, plump, blunt; contain 6 to 8 peas having tender skins and excellent flavor. Canned peas round, light green; sieve sizes 1 to 5, largely 2 to 5, also excellent when ungraded.



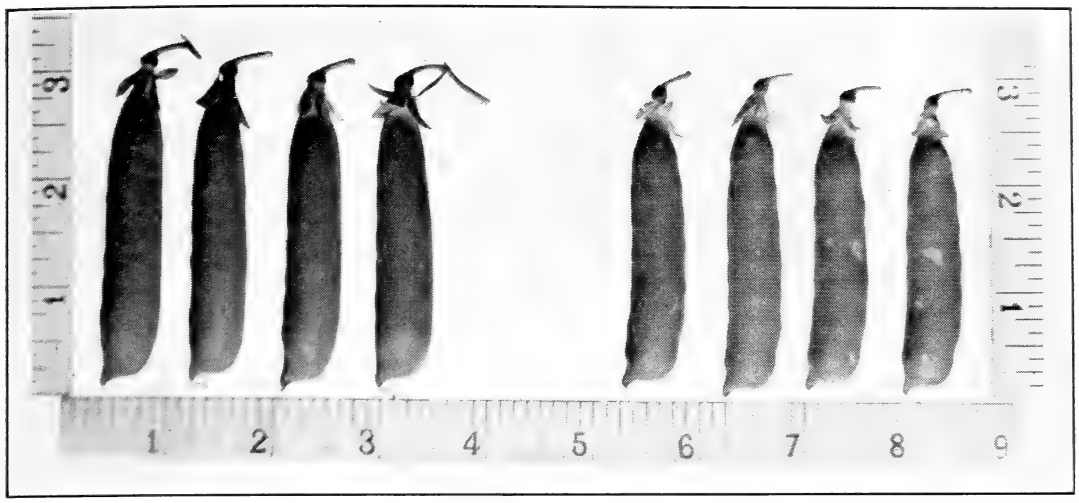
One of our new introductions—Asgrow Teton

ASGROW TETON	32 to 36	3¾ to 4	65

Developed on our Montana Pea Breeding Grounds, and ready in 1937. A hybrid variety fully resistant to Fusarium wilt. Excellent for market gardens, shipping, canning and freezing. Vine dark green, medium heavy. Pods single, large, straight, blunt, dark green, concentrated in season; well filled with 7 to 8 large, succulent peas of very fine quality. Canned peas semi-round, olive green; sieve sizes 3 to 7. Seed large, cream and green, wrinkled.

HUNDREDFOLD	18 to 20	4¼	63

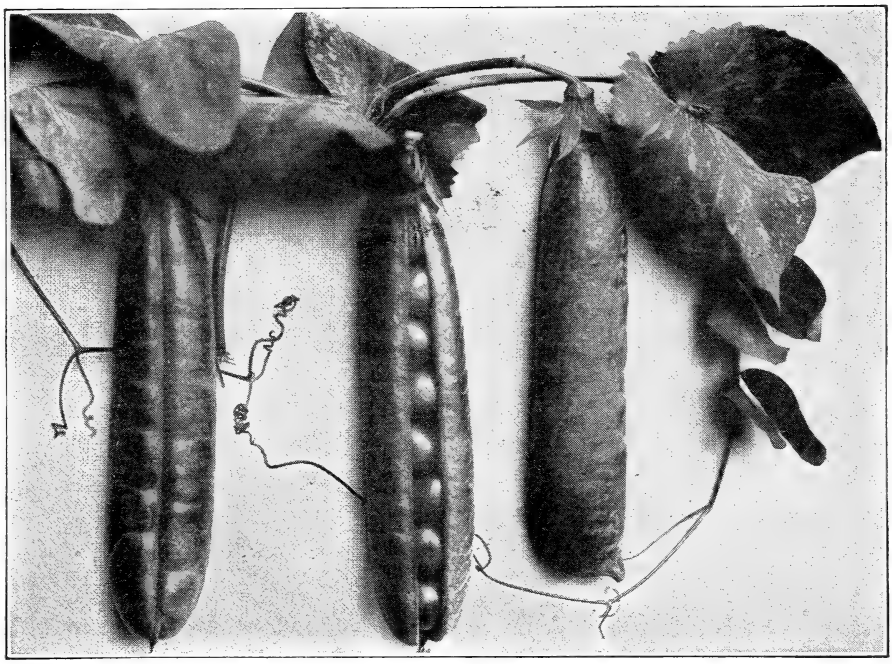
A very attractive, early, large podded sort, resembling Laxtonian, for shipping, canning and freezing. Vine very dark green, stout, has tendency to develop "spikey" top. Pods single, broad, very deep green, pointed, curved; contain 8 large peas of excellent quality. Canned peas oblong, dark green; sieve sizes 3 to 7. Seed large, wrinkled, yellow and green, somewhat flat.



Asgrow Early Harvest Pods (left) excel Surprise (right)

PEAS—Continued

	Height of vine inches	Length of pod inches	Days from planting to canning
LAXTONIAN ..... The best known of the early, dwarf, large podded sorts. Used for shipping, canning and freezing. Our strain has exceptionally large, dark pods. Vine dark green, rather coarse; "tops off" well at maturity. Pods single, broad, dark green, slightly curved, pointed; contain 7 to 8 large, succulent peas. Canned peas oblong, deep green; sieve sizes 3 to 7. Seed large, flattish, yellow and green, wrinkled.	18	4½	62
LAXTON'S PROGRESS ..... Developed by Laxton Bros. and introduced in 1922. The largest podded and most attractive of the Laxtonian family. Popular for shipping, garden planting and for canning and freezing. Vine medium dark green. Pods single, ⅞ inch wide, dark green, somewhat curved, pointed, handsome; contain 7 to 9 large peas of good quality. Canned peas oblong, deep green; sieve sizes 3 to 7. Seed large, cream with green, wrinkled. Our strain of this important variety is noted for its solid deep green color.	16 to 18	4½ to 5	62
PREMIUM GEM, WILT RESISTANT ..... A new development fully resistant to Fusarium wilt. Used for home gardens and by some canners. Vine dark green, medium, productive. Pods single and double, light green, round, straight, blunt; contain 6 to 7 peas of good quality. Canned peas oblong, medium green; sieve sizes 1 to 5, largely 3 and 4. Seed wrinkled, green, medium sized. Our introduction in 1935.	20 to 22	2¾	64
SURPRISE ..... A popular early canning sort of first quality. Vine medium green, slender. Pods single, light green, plump, blunt; contain 6 to 8 peas. Canned peas round, light green; sieve sizes 1 to 5, largely 2 to 5, also excellent when ungraded. Seed small, wrinkled, green. This variety excels in tenderness of skin and sweetness of flavor. Our long podded pure-line is outstanding.	28 to 30	2¾ to 3	61



Dark Podded Thomas Laxton: our recent development

THOMAS LAXTON, DARK PODDED ..... 30 to 36 3½ to 3¾ 63
Original light-colored strain introduced by Laxton Bros. in 1898. Our improved dark podded strain retains the earliness of the first introduction but is more attractive in both vine and pods. Excellent for canning and freezing. Vine deep green and medium heavy. Pods single, rich deep green, plump, broad, blunt; contain 7 to 8 large, tender peas of splendid quality. Canned peas semi-round, olive green; sieve sizes 3 to 7. Seed of medium size, cream and green, wrinkled.

WISCONSIN EARLY SWEET ..... 26 to 30 2½ to 2¾ 61
Originated by Prof. E. J. Delwiche, and introduced by the Wisconsin Agricultural Experiment Station in 1932. An early, sweet, canning variety, similar to Surprise, resistant to Fusarium wilt, and of fine quality. Vine medium green, slender. Pods single, light green, plump, blunt; contain 6 to 7 peas. Canned peas round, light green; sieve sizes 1 to 5, largely 2, 3 and 4. Seed medium small, wrinkled, green. This recent introduction has tenderness of skin, firmness and fine flavor, and is popular with canners.

WORLD'S RECORD ..... 24 to 26 3¾ to 4 61
A Gradus type, but four to five days earlier, and very uniform in maturing. Excellent for early markets and for freezing. Vine light green, medium heavy. Pods single, medium green, pointed, broad, plump; contain 7 to 8 large tender peas of fine quality. Canned peas oblong, deep green with thin skin; sieve sizes 3 to 7. Seed large, cream and green, wrinkled. Our strain is noted for earliness and size of pods.

Midseason and Main Varieties

ADVANCER 26 3¼ 68
An older standard second early variety for canning, now largely replaced by Perfection; prolific, and of good quality. Vine dark green, stocky. Pods single and double, light green, blunt, plump; contain 6 to 7 peas of good quality. Canned peas semi-round, medium green; sieve sizes 1 to 5, largely 3 and 4. Seed wrinkled, medium light green.

PEAS—Continued

	Height of vine inches	Length of pod inches	Days from planting to canning
ALDERMAN or TALL TELEPHONE ..... A handsome large podded variety of the Telephone family. Excellent for canning large, luscious peas garden run style and for freezing; resistant to Fusarium wilt. Vine dark green, coarse. Pods single, very broad, plump, straight, dark green, pointed; contain 8 to 10 peas of highest quality. Canned peas oblong, dark green; sieve sizes 3 to 7, and a few larger. Seed large, wrinkled, light green. This variety can well be considered the standard of high quality.	40	4½ to 5½	74
ASGROW CANNER KING ..... Our recent hybrid development ready in 1937; fully resistant to Fusarium wilt. Highly desirable as a main canning variety. Vine similar to Perfection but with more open habit of growth; color light to medium green; quite resistant to aphids. Pods slightly curved, largely double, medium green, blunt, contain 7 to 9 peas. Canned peas semi-round, medium green; sieve sizes 2 to 7, largely 4, 5 and 6. Seed wrinkled, green, of medium size.	28 to 30	3½	67
ASGROW NO. 40 ..... Our introduction in 1932. Resembles Stratagem, but 4 to 5 days earlier; unexcelled in pod size, and exceptional in quality; resistant to Fusarium wilt. Bred particularly for shippers and market gardeners and for freezing. Vine dark green, stocky and branching. Pods single and double, round, dark green, plump, pointed, curved at tip; contain 8 to 10 large, succulent peas. Frozen peas large, oblong, dark green; sieve sizes 3 to 7 and a few larger. Seed large, wrinkled, green.	26	5 to 6½	75

One of our new hybrids—Asgrow Pride. Exceptional in yield and uniformity

ASGROW PRIDE ..... Developed on our Montana Pea Breeding Grounds and introduced in 1936. A hybrid variety, exceptionally productive. Fully resistant to Fusarium wilt; excellent for canning; similar in color and texture to Perfection. Vine dark green, open at top, sturdy, very uniform, quite resistant to aphids. Pods single and double, straight, plump, dark green, well filled with 7 to 9 peas; highly concentrated in season. Canned peas semi-round, medium-deep green; sieve sizes 1 to 6, largely 3 to 5. Seed medium, green, wrinkled. Produces crops of quality peas under adverse conditions.	26 to 28	4	65

Asgrow Triumph, a new mid-season hybrid

	Height of vine inches	Length of pod inches	Days from planting to canning
ASGROW TRIUMPH ..... Our recent development introduced in 1936. A new canning variety of mid-season maturity, fully resistant to Fusarium wilt; prolific and quite resistant to aphids. Vine medium stem, and medium green in color. Pods single, plump, nearly straight, semi-blunt; contains 7 to 9 uniform peas. Canned peas semi-round, medium green; sieve sizes 1 to 5, largely 2, 3 and 4. Seed wrinkled, green. This variety can be described as having an Admiral vine and Perfection type pod and peas. Produces crops of quality under adverse conditions.	36 to 40	3¼	67
CANNER'S GEM ..... Can be classed in type between Premium Gem and Advancer, running more to single pods than the latter variety. Primarily for canners, it reaches canning stage half way between Alaska and Perfection. Vine dark green. Pods single and double, light green, blunt, straight; contain 6 to 7 peas of good quality. Canned peas semi-round, medium green; sieve sizes 1 to 5, largely 3 and 4. Seed medium, wrinkled, light green.	24	2¾	65
CLIMAX ..... A mid-season variety fully resistant to Fusarium wilt. Vine medium green, slender, of Admiral type. Pods single and double, light, blunt; contain 6 to 7 peas; of good flavor. Canned peas semi-round, medium green; sieve sizes 1 to 5, largely 2 and 3.	36 to 40	2¾	66
EARLY PERFECTION ..... Our own origination and introduction; a pure-line stock bred to mature 4 to 5 days in advance of regular Perfection strains. Particularly valuable to canners in giving them a desirable sweet wrinkled pea maturing between Surprise and Perfection. Vine dark green, thrifty. Pods single and double, blunt, light green, plump; contain 7 to 8 peas of good quality. Canned peas semi-round, medium green; sieve sizes 1 to 6. Seed medium sized, green, wrinkled.	28	3¼	66
GREEN ADMIRAL ..... Developed and introduced by Rogers Bros. Seed Company. A dependable cropping variety for canners. Resistant to Fusarium wilt. Vine dark green, slender. Pods single, blunt, straight, plump and well filled, medium green; contain 6 to 8 medium small peas of uniform size. Canned peas oblong, light green; sieve sizes 1 to 5, largely 2 and 3. Seed small, very green, wrinkled.	36 to 40	2¾ to 3	69

	Height of vine inches	Length of pod inches	Days from planting to canning
GRADUS, IMPROVED ..... A popular second early, large podded variety for gardeners and for freezing. Vine medium green, stocky. Pods single, broad, plump, pointed, medium green; contain 8 to 10 large, sweet, delicious peas. Frozen peas oblong, deep green, tender; sieve sizes 3 to 7. Seed large, wrinkled, cream and green.	36	4	65
KAY ..... Used in some sections where small sieve sizes are desired. Vine slim, medium dark. Pods double, blunt, light green; contain 6 to 7 small peas. Canned peas nearly round, medium green; sieve sizes 1 to 5, largely 2 and 3. Seed small, wrinkled, green.	30	2½	68
MORSE'S MARKET ..... A large podded, mid-season, dwarf variety for shipping and freezing. Vine medium green, sturdy, somewhat coarse. Pods dark green, single, plump, curved, pointed; contain 7 to 9 peas. Frozen peas oblong, deep green, sieve sizes 3 to 7. Seed large, cream with green, wrinkled.	22	4½	68

Asgrow No. 40 (page 29). An important freezing variety

	Height of vine inches	Length of pods inches	Days from planting to canning
NUMBER 71	36 to 38	2¾	65

Resistant to Fusarium wilt and tolerant to aphids. This mid-season variety reaches canning stage between Surprise and Perfection. Vine slender, with open top, medium green, prolific. Pods single and in pairs, light, blunt; contain 6 to 7 peas of good flavor. Canned peas medium green, nearly round; sieve sizes 1 to 5, mostly 2 and 3. Seed green, small, wrinkled.

ONWARD	27	4	74

A medium late variety of recent introduction, very fine in quality and of strong productivity; good for canning where large size, tender peas are desired and for freezing. Vine medium light green with heavy stem and foliage. Pods single and double, ¾ inch wide, medium green, blunt, straight, attractive; contain 6 to 8 large, succulent peas. Canned peas oblong, dark green; sieve sizes 3 to 7. Seed large, green, wrinkled.

PERFECTION	28 to 30	3½	70

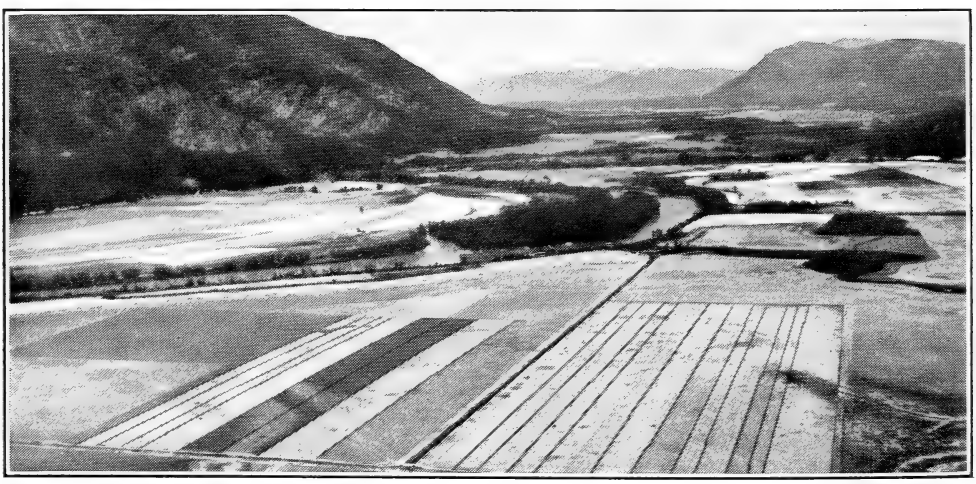
An important main canning variety, fully resistant to Fusarium wilt; concentrated in pod development and very productive. Our stock is known particularly for its uniform, large, attractive pods. Vine medium green, stocky. Pods double, medium green, blunt, slightly curved; contain 7 to 9 peas. Canned peas semi-round, medium green; sieve sizes 1 to 6, largely 3, 4 and 5.

PRESIDENT WILSON	20	5	65

Developed by Sutton and Sons and introduced in 1919. A handsome second early dwarf variety, with exceptionally large, attractive pod. Used by market gardeners and for freezing. Vine very dark green, stocky, with large leaves. Pods single, broad, plump, pointed, slightly curved, rich deep green; contain 8 to 9 large succulent peas. Frozen peas oblong, dark green; sieve sizes 3 to 7, and a few larger. Seed large, wrinkled, green; excellent for home and market garden, and for shipping.

SENATOR	36	4	71

A productive medium late sort, for canning; resistant to Fusarium wilt. Vine stout, medium green. Pods single and paired, curved, pointed, plump, medium green; contain 6 to 8 large peas of good quality. Canned peas oval, medium green; sieve sizes 3 to 7. Seed moderately wrinkled, cream and green, medium sized.



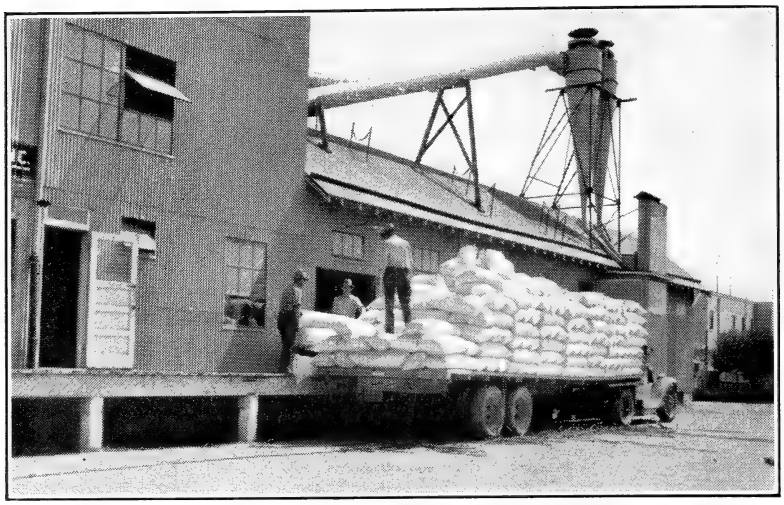
Aerial view of increase blocks of Asgrow pure-line stocks of peas

PEAS—Continued

	Height of vine inches	Length of pod inches	Days from planting to canning
YELLOW ADMIRAL ..... A productive canning variety, resistant to Fusarium wilt. Vine dark green, medium stem. Pods single, light green, straight, plump, blunt; contain 6 to 8 medium sized uniform peas. Canned peas oblong, light green; sieve sizes 1 to 5, largely 2, 3 and 4. Seed square, creamy yellow, wrinkled.	36 to 40	2¾ to 3	69

Later Varieties

CHARLES THE FIRST ..... A main season canning variety following Perfection. Vine deep green, stocky, prolific. Pods single and double, pointed, curved, medium green; contain 7 to 9 peas of very good flavor. Canned peas semi-round, medium green; sieve sizes 1 to 6, largely 3 and 4. Seed wrinkled, medium green. About 80 per cent resistant to Fusarium wilt.	32 to 34	3 to 3¼	77
DWARF ALDERMAN ..... Desirable for market gardens and shipping; used also for freezing; of good size but type not completely fixed. Vine dark green, stocky, branching, resistant to Fusarium wilt. Pods single and double, dark green, plump, pointed, slightly curved; contain 7 to 9 large peas of good quality. Frozen peas oblong, dark green, sieve sizes 3 to 7, and a few larger. Seed large, green, wrinkled.	24	4½	76
DWARF TELEPHONE or DAISY ..... A late, large podded, highly productive sort for home garden and truckers, and for shipping; also used for canning in a limited amount; resistant to Fusarium wilt. Vine light green, stocky and branching. Pods single and double, medium light green, lightly curved, broad, pointed and attractive; contain 8 to 10 peas of excellent quality. Canned peas large, oblong, light green, tender; sieve sizes 3 to 7, and a few larger. Seed large, wrinkled, green with bluish cast. Our strain is unsurpassed in size and appearance of pods.	22	4½	79
EVERBEARING ..... Used by canners in packing large sized, ungraded peas; fully resistant to Fusarium wilt. Vine dark green, thick, coarse and branching. Pods double, light green, plump, blunt, straight; contain 4 to 5 large peas of good flavor. Canned peas oblong, medium green; sieve sizes 3 to 7, and a few larger. Seed very large, light green, flat, wrinkled.	32	3	76
HORSFORD'S MARKET GARDEN ..... A very productive canning variety. Vine dark green, thick stemmed, and branching. Pods double, light green, plump, blunt, straight; contain 6 to 7 uniform peas of fair quality. Canned peas semi-round, medium green; sieve sizes 1 to 5, largely 3, 4 and 5. Seed medium sized, green, wrinkled.	28 to 30	3	76
NUMBER 13 ..... Introduced by Jerome B. Rice Seed Co. A late canning variety of good quality, and productive. Vine deep green, medium, stocky. Pods single and double, pointed, curved, medium green; contain 7 to 8 peas of good quality. Canned peas semi-round, medium green; sieve sizes 1 to 6, largely 2, 3 and 4. Seed wrinkled, medium green.	36	3¼	79
PRINCE OF WALES ..... A desirable sort for canning large sized garden run peas; resistant to Fusarium wilt. Vine medium green, coarse. Pods single and double, light green, blunt; contain 4 to 6 large peas. Canned peas oblong, medium green; sieve sizes 3 to 7, and a few larger. Seed large, wrinkled, cream and green.	40	3½	74



A load of seed from an Asgrow farmer-grower

PEAS—Continued

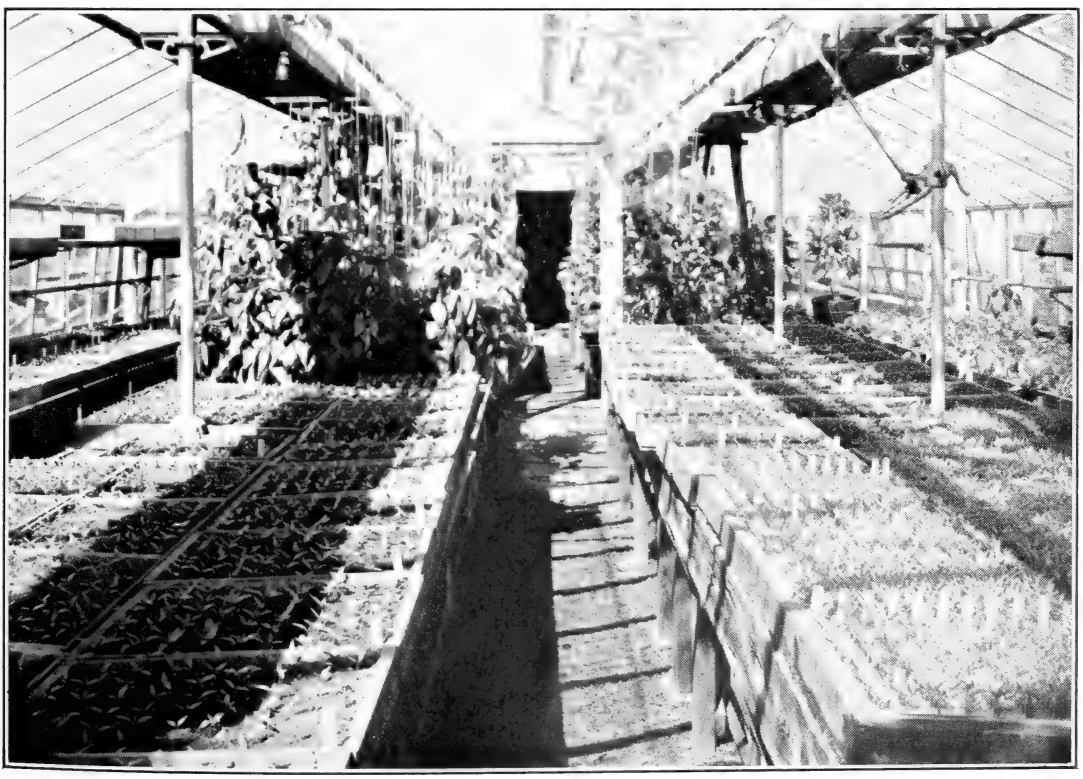
	Height of vine inches	Length of pod inches	Days from planting to canning
PROFUSION ..... A medium late sort for canning; resistant to Fusarium wilt. Vine medium green, with stout stem. Pods single and paired, light green, plump, straight, blunt; contain 5 to 6 large peas of good quality. Canned peas oblong, medium green; sieve sizes 3 to 7, and a few larger. Seed large, wrinkled, cream and green.	42	3½	75
STRATAGEM, IMPROVED ..... Our improved strains of Stratagem and Potlatch are identical. A superior late variety, for canning and freezing; resistant to Fusarium wilt. Vine deep green, stocky, and branching. Pods single and paired, ⅞ inch wide, nearly round, straight, pointed, dark green; contain 8 to 10 tender, succulent peas. Canned peas oblong, dark green; sieve sizes 3 to 7, and a few larger. Seed large, wrinkled, green.	26	4½	79
YORKSHIRE HERO ..... A medium late sort, desirable for canning; resistant to Fusarium wilt. Vine dark green, stocky, and branching. Pods double, medium green, blunt, straight, plump; contain 5 to 6 large sweet peas of good quality. Canned peas oblong, medium green; sieve sizes 3 to 7, and a few larger. Seed large, flat, green, wrinkled.	28	3	75

PEPPER

Native to tropical America, the pepper has come to be an important vegetable in the United States.

Culture: Peppers do best on sandy loam soil. Sow seed in hotbeds in February or March and transplant to field as soon as plants are ready and soil thoroughly warm. Plants should be set 18 inches apart in the row with 24 to 30 inches between rows. One ounce of seed will produce 1000 plants; 2 to 3 ounces required per acre.

	Length inches	Diameter inches	Days from setting of plants to picking
ANAHEIM CHILI — A hot, late variety, planted largely in the South and in California. Used for canning and drying. Fruits tapering, deep green, changing to bright scarlet at maturity.	6 to 7	1	80
CALIFORNIA WONDER — An outstanding medium late variety. Plant vigorous, upright, prolific. Fruits 4-lobed, chunky; very attractive, smooth, uniform, and deep green, changing to bright crimson; flesh thicker than any other variety, sweet and mild.	4½	4	75
FLORAL GEM — A very pungent pickling variety, used extensively in Southern California. Plant large, upstanding, very prolific. Fruits tapering, waxy yellow with reddish cheek when half mature or at pickling stage, changing to full red at maturity. Rarely used at ripe stage.	2 to 2½	1	75
HUNGARIAN YELLOW WAX — A first early, hot sort. Plant dwarf and prolific. Fruits medium slender, tapering, smooth and very pungent. Color waxy yellow, changing to bright crimson at maturity.	5½ to 6½	6	65



Part of the greenhouse at Milford, Conn.
Fully equipped for breeding and testing

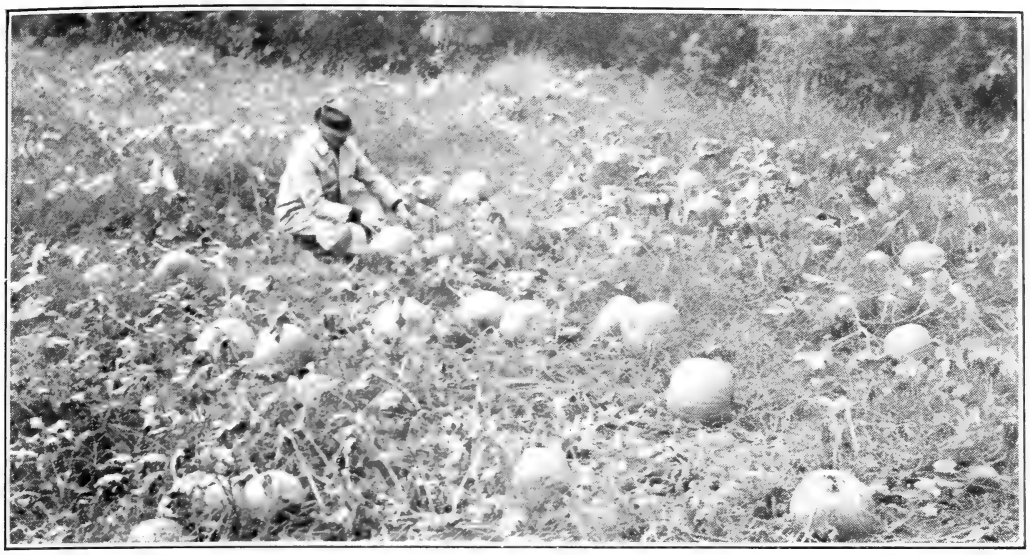
	Length inches	Diameter inches	Days from setting of plant to picking
LONG RED CAYENNE — A favorite hot variety, used largely for canning, and in pickles; also for drying. Plant large and productive. Fruits tapering, frequently twisted; very pungent; deep green, changing to brilliant red.	5	¾	70
PIMENTO — Also known as Perfection. Pre-eminently a canning variety. Plant large, erect, prolific. Fruits heart-shaped, very smooth; color dark green, changing to bright crimson at maturity; flesh exceptionally thick, sweet and mild.	3½	2½	73
RED CHERRY — Popular for use in pickles. Plant vigorous, upright, prolific. Fruits round, smooth, solid, exceedingly pungent; color deep green, changing to deep scarlet.	1	1	82
RED CHILI — Plant of low spreading growth, 18 inches tall, very productive. Fruits erect, conical, extremely pungent; color yellowish green, changing to deep red; used in making pepper sauce.	2½	½	82
TABASCO — A very late, extremely hot variety, used in pickles and pepper sauce. Plant large and spreading. Fruits small, tapering, smooth; color greenish yellow, turning to scarlet red.	1	⅜	90 to 95

PUMPKIN

Native to America

Culture: Pumpkins thrive on sandy loam and clay soil. Sow seed in May in hills 6 to 8 feet apart each way. Pumpkins are also grown successfully by planting sparingly in corn fields. 3 to 4 pounds of seed will plant an acre.

	Depth inches	Diameter inches	Days from planting to canning
CONNECTICUT FIELD — Extensively grown for making pies, for canning, and for stock feed; usually planted in corn fields. Fruits large, flattened at the ends, weigh 15 to 25 pounds. Surface hard, smooth, somewhat ribbed; deep orange in color; flesh thick, orange-yellow, coarse and sweet.	10 to 14	12 to 15	120
JAPANESE PIE — Resembles the Cushaws in shape, but earlier and large. Skin dark green, with lighter green stripes. Flesh deep yellow, and of good quality. Weight 12 pounds. Seed has markings resembling Japanese characters. Valuable for canning and stock feed.	12	8	115
KENTUCKY FIELD — Widely used for canning, and for stock feed, particularly through the South. Fruits large, slightly ribbed, not fixed in shape, some being flat, others globular and elongated; weigh 10 to 15 pounds; color dull orange; flesh deep yellow, coarse, and of good flavor.		12 to 14	120
LARGE CHEESE — Our pedigreed strain, exceptionally early and uinform, is particularly valuable to canners. Fruits very flat, weigh 10 pounds, slightly ribbed, cream colored; flesh very thick, orange-yellow, and of fine quality.	6 to 8	12	108
SMALL SUGAR OR NEW ENGLAND PIE — Standard for general use. Fruits round, flattened at ends, weigh 6 to 8 pounds; skin hard, smooth, somewhat ribbed, deep orange; flesh thick, sweet, orange-yellow and of high quality. Used also for canning.	8	10	118



Breeding plot of Connecticut Field Pumpkin at Milford, Conn.

RHUBARB

Native to Mongolia

Culture: Sow seed in the spring an inch deep in rows 10 to 12 inches apart and later thin to 4 to 6 inches between plants. Transplant to well-manured field in the fall, in rows 4 to 5 feet apart with plants 3 to 4 feet apart. The crowns of the roots should be set 2 inches below the surface of the soil. In transplanting, it is necessary to discard undesirable plants as all do not come true from seed. Blossom stalks should be cut back to the ground when they appear. It requires 3 pounds of seed to plant an acre.

LINNEAUS

A second early variety with thick, long stalks, reddish in color, and of fine flavor. Used by gardeners and for canning.

VICTORIA

A main crop sort, vigorous in growth, with upstanding, thick, red stalks of excellent quality. Used by gardeners and for canning.

SPINACH

The time from planting to cutting of marketable plants varies considerably with the season of the year in which sowings are made. The accompanying schedule applies to spring planting in the Northern States. Spinach was developed from a wild plant in Central Asia.

Culture: For best results, spinach requires a large amount of humus in the soil. Sowings can be made in March and April for early summer harvest and in August and September for fall crop. Plant seed in rows 16 to 20 inches apart. 10 to 12 pounds of seed will sow an acre.

Days from sowing to cutting

BLIGHT RESISTANT SAVOY (VIRGINIA SAVOY) 39

A Savoy-leaved sort, bred at the Virginia Experiment Station for mosaic resistance. Upstanding, vigorous plant; seeding rather early; highly desirable for planting in infested soil. Leaves somewhat smoother than other strains of Savoy.

BLOOMSDALE SAVOY, LONG STANDING 42

Only a few days later than the regular Bloomsdale Savoy, it holds twelve to fourteen days longer before throwing seed stalks. Plants are very uniform and sturdy, with very attractive, highly crumpled and blistered dark green leaves. Exceptionally valuable for home and market gardens, for canning and for shipping from the extreme South.

Giant Nobel Spinach, an excellent thick leaved variety

Days from sowing to cutting

GIANT NOBEL or GIANT THICK LEAVED 45
A recent European introduction of high merit. Very valuable for canning. Plant large, vigorous, and spreading. It is slow to form seed stalks, and an extremely heavy yielder. Leaves very large, thick, smooth, pointed, with rounded tip; deep green, tender. The best of the thick leaved sorts.

JULIANA 48
A splendid, second early, long standing sort, for shipping, and canning. Plant compact and dense, growing close to the ground. Leaves rounded, with short stems; thick, crumpled, very dark green; slow in producing seed stalks.

KING OF DENMARK 46
An exceptionally long standing sort, highly desirable for canning. The large, spreading plant carries broad, rounded, very dark green leaves, which are somewhat crumpled. Excellent for spring planting, as seed stalks are slow in forming.

PRICKLY WINTER 43
A late, prickly seeded, long standing canning sort, used extensively on the Pacific Coast for fall planting. Plant large, upstanding, and vigorous. Leaves arrow-shaped, thick, medium dark green.

PRICKLY WINTER, DARK GREEN OR HOLLANDIA 43
More attractive and productive than the regular strain, it is highly desirable for canners. The leaves are large, broad, arrow-shaped, and very dark green. Used extensively in California.

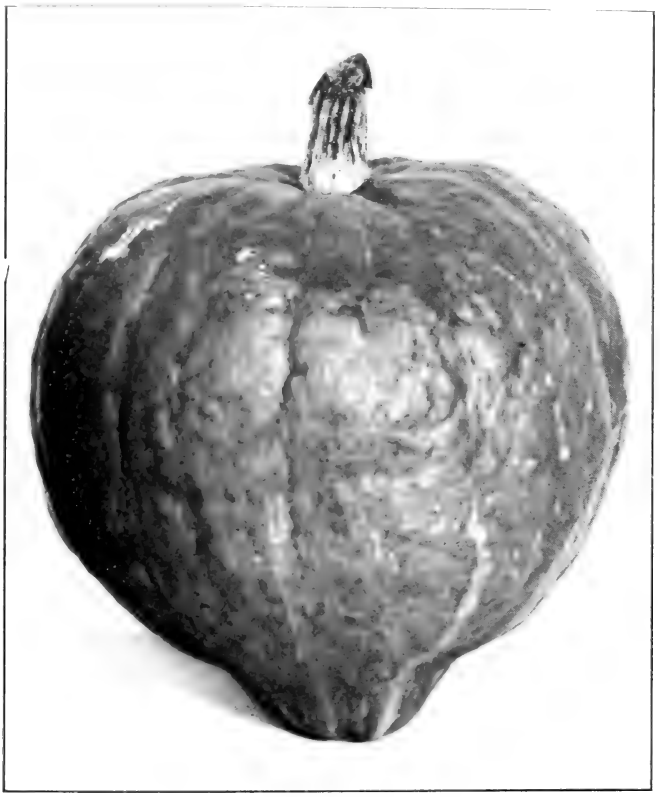
VIKING 45
This new variety may well be described as a dark green Nobel and is also known as Northland. Excellent for market gardens and canning. Plant large, spreading, vigorous, long-standing and heavily productive. Leaves very large, thick, dark green.

VIROFLAY 45
An extremely large mid-season, vigorous growing variety, with long, broad, pointed, thick, smooth leaves, of deep green color. Desirable for canning.

SQUASH

Of all the vegetables, squashes exhibit the greatest range in plant and fruits characters and hybridize most readily under average field conditions. Consequently they are given special care and attention on our breeding grounds in Colorado, California and Connecticut. Pedigreed lines are established by covering flowers with bags to control pollination. Increase blocks are grown in fields well-isolated from any other squash variety. The number of days indicates the time from planting of seed to mature fruits. The measurements apply to fully grown fruits at canning stage.

Culture: Squashes require practically the same soil conditions as pumpkins. Sow seed after warm weather is assured in hills 6 to 8 feet apart each way. 3 pounds of seed will plant an acre.



Golden Delicious Marrow. Has dry, sweet flesh

	Depth inches	Diameter inches	Days from planting to canning
BOSTON MARROW ..... A very productive, late fall variety, extensively used for canning. Resembling Hubbard in size and shape, the fruits weigh 6 to 8 pounds. The deep orange skin is somewhat rough, and quite hard; flesh is yellow, thick, firm, fine grained, moist. Vine of trailing type.	12	9	97
GOLDEN DELICIOUS MARROW ..... Highly desirable for canning, on account of its extremely dry flesh. Vine of trailing type. Fruits top-shaped, weigh 7 pounds. Color bright reddish orange, with deep green tip at blossom end. Flesh thick, medium grained, golden orange, sweet and dry.	10 to 12	8	100
GOLDEN HUBBARD ..... Similar to Green Hubbard, but earlier, smaller, and more prolific. Popular with canners. Fruits somewhat pointed at each end, weigh 8 to 10 pounds, moderately warted, orange-red, with faint cream colored stripes toward blossom end; flesh deep orange, dry, and of fine quality; it keeps well.	11	8	100

Asgrow Scarlet Dawn. All-America Gold Medal 1935
Increasingly used for canning in areas of shorter season

TOMATO

Native to tropical America, formerly called Love Apple

New varieties and new strains are being developed at our breeding grounds, and older varieties improved through individual cultures produced under expert handling. Disease resistance, attractiveness of color, thickness of walls, and heavy cropping qualities, have been attained to a high degree. The number of days indicated represents the time required from setting of plants to produce marketable fruits. It takes 4 to 5 weeks to produce plants for field setting. Varieties listed in larger type are important, widely used ones. We are also furnishing stocks of leading canning and shipping varieties, *certified* as to purity and freedom from disease by various State Departments of Agriculture.

Culture: Tomatoes thrive on various types of well-enriched soils but strong sandy loam is preferable. Sow seed in hotbeds in March and April and transplant to field in June when danger of frost is past. Set plants 3 to 4 feet apart in the row with 4 to 5 feet between rows. One ounce of seed will produce about 2500 plants; 2 to 3 ounces will plant an acre. In localities where seed is sown in the field without transplanting, 1 to 2 pounds are required per acre.

Early and Second-Early Varieties

Days from setting plant to canning

ASGROW SCARLET DAWN 70
Our development introduced in 1934. Received All-America Gold Medal Award for 1935. A cross of Clark's Early and Marglobe, earlier in season than either parent. Vine of medium growth, fairly open, very prolific. Fruits medium large, globular with thick wall structure, smooth, free from flat sides, bright scarlet, ripening well to the stem, exceptionally attractive. Highly desirable for home garden and shipping; also for early canning.

BONNY BEST 74
Standard second early variety, valuable for canners and shippers. Vine medium, not very hardy. Fruits medium sized, apple-shaped, smooth, solid, bright scarlet in color, of excellent quality.

BREAK o' DAY 70
Originated by the late Dr. F. J. Pritchard, of the United States Department of Agriculture, in 1930. A cross of Marglobe and Marvana, resistant to wilt and nail-head rust. Plant light, of open, spreading habit, with medium foliage; early and very prolific. Fruits medium large, orange-red, uniform, globe-shaped, smooth; walls not as thick as in Marglobe. The yellow cast in color and light vine growth are drawbacks to this variety.

Days from setting plants to canning

CHALK'S EARLY JEWEL 75
A second early sort good for canning in the North. Plant medium, with open growth; prolific. Fruits medium large, smooth, scarlet, flattened globe-shaped.

CLARK'S SPECIAL EARLY 72
Our origination introduced in 1919. A medium early variety extensively used in the extreme South. Vine of medium growth, open, very prolific. Fruits medium large, globe-shaped, bright scarlet, smooth, solid, with thick walls. An excellent early variety for canning in northerly sections.

EARLIANA 66
A first early sort used in northerly sections for canning. Ours is one of several excellent strains of this important variety which has been bred for thicker, smoother fruits. Vine is open, spreading, medium small. Fruits flattened, medium sized, firm, bright red, quite smooth.

EARLY BALTIMORE 73
Developed by Dr. Walter A. Huelsen and introduced by the University of Illinois in 1935. A second early variety resistant to Fusarium wilt. Vine intermediate, somewhat smaller than Greater Baltimore; leaves finely cut. Fruits oblate, smooth, bright red, solid with small core and shallow basin at stem. Good for market gardens and canning. Particularly adapted to Midwest conditions of heat and dry weather.

JOHN BAER 70
An early sort maturing between Earliana and Bonny Best. Excellent for canning. Vine of medium height and open growth. Fruits medium sized, semi-globular, very attractive bright scarlet-red, smooth and quite firm. We have an exceptionally early strain.

King Humbert, a mild tomato for a solid pack

KING HUMBERT 75
A small fruited variety used for canning solid pack and for puree, also for preserves. Vine medium, rather open, very prolific. Fruits oval, 2½ inches long by 1½ inches in diameter, borne in clusters, deep red, with little juice and of very mild flavor.

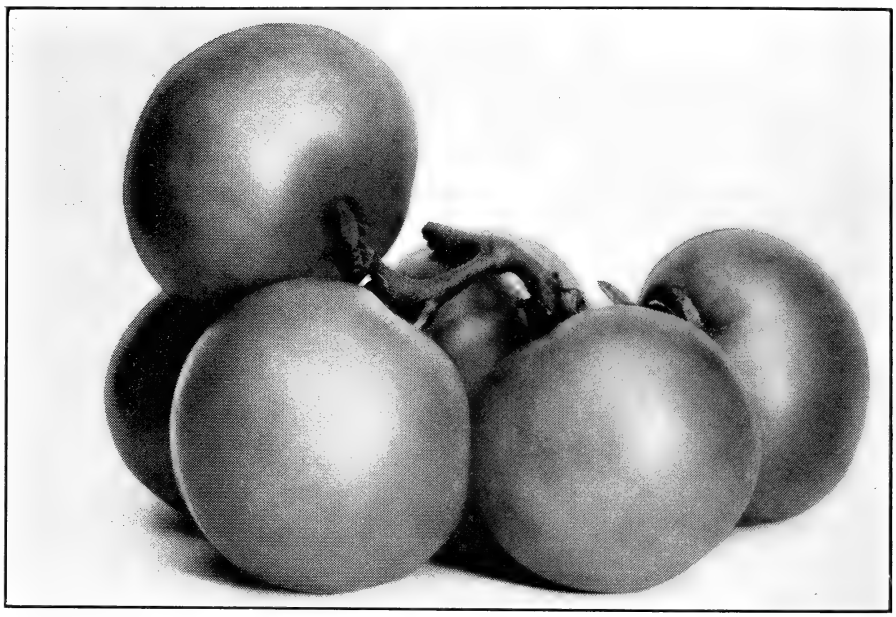
MONUMENTAL 74
A medium early variety used in some sections of the West and South for canning and for shipping. Vine of medium growth, somewhat open, quite prolific. Fruits medium large, deep-flat, scarlet, solid.

NYSTATE 68
Developed by the Division of Vegetable Crops of the New York Agricultural Experiment Station, Geneva, and introduced in 1935. A second-early variety for canners, resulting from a cross of King Humbert and Ponderosa. Plant medium, vigorous. Fruits large, smooth, deep red, comparatively free from cracks, with medium walls; flesh scarlet-red, mild in flavor.

Days from setting plant to marketable fruits

PRITCHARD OR SCARLET TOPPER 73
A scarlet, self-topping, disease-resistant variety originated by the late Dr. F. J. Pritchard, of the United States Department of Agriculture, in 1931. A cross between Marglobe and Cooper's Special, it has inherited fine qualities from each parent. Heavily productive. Fruits large, smooth, globular, solid, with thick walls and cross-sections; color light scarlet, not as intense as could be desired.

RUTGERS 72
Certified or regular stock as desired. A second early variety developed at the New Jersey Agricultural Experiment Station and introduced in 1935. A cross of Marglobe and J. T. D., desirable for canning regular pack and for juice. Plant large with thick stems and vigorous foliage. Fruits similar to Marglobe but flatter at stem end; bright red, smooth with thick walls and small seed cells, ripen from center; flesh red and firm and of low acidity.



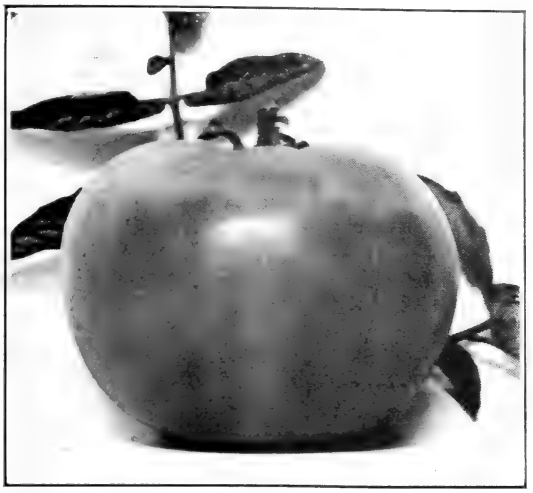
Pritchard, a productive, disease-resistant variety

Main Crop Varieties

ASGROW EARLY STONE 79
This new development, ready in 1937, brings this widely used prolific type into intermediate season maturity. Particularly desirable in areas where Stone matures too late. Vine large, heavy, deep green, very prolific. Fruits larger than regular Stone, semi-globular, smooth, deep scarlet-red; ripens well to stem; quite free from skin cracks. Interior color deep red, of fine flavor.

GREATER BALTIMORE, IMPROVED 82
Our improved strain is particularly desirable, as it is earlier and deeper than most stocks. Vine large and medium heavy. Fruits large, thick-flat, smooth, deep red, solid and attractive. Used extensively for canning.

INDIANA CERTIFIED GREATER BALTIMORE 81
This earlier, deeper-fruited strain is particularly desirable for canners of the East and Midwest; certified as to type and freedom from seed-borne diseases by Purdue University Agricultural Experiment Station. Vine large with medium heavy foliage. Fruits large, thick-flat, smooth, deep red, solid and attractive; good for juice as well as for regular pack.



Indiana Certified Greater Baltimore

Days from setting plant to marketable fruits

CLARK'S SPECIAL B 81

A pedigreed stock developed by ourselves as a main crop canning variety. Plant vigorous, somewhat open, prolific. Fruits large, deep-flat, bright red, quite free from cracks, solid; interior color deep red; small seed cells. Resembles Indiana Baltimore, but deeper and somewhat smoother.

CLARK'S SPECIAL C 87

Our introduction developed particularly for canners' use. Resembles Stone, but is more uniform, and ripe fruits quite free from green collar about the stem. Vine heavy, vigorous, and prolific. Fruits very large, deep scarlet-red, globe-shaped, flattened; very smooth and solid. Follows Clark's Special B in season.

MARGLOBE 79

Since its introduction by the United States Department of Agriculture about 1925 this main crop variety has come into use in some sections by canners. Plant vigorous, with heavy foliage, resistant to wilt and nail-head rust; moderately productive. Fruits medium large, nearly globular, smooth, solid, with thick walls and cross-sections; of fine quality.

INDIANA CERTIFIED MARGLOBE 78

Our special stock of this well-known and widely used variety is particularly desirable for canners. Plant vigorous, dark green, resistant to Fusarium wilt and nail-head rust, quite productive. Fruits large, nearly round, smooth, bright deep scarlet with solid interior containing small seed pockets; flavor mild. Adapted to field and greenhouse production.

MATCHLESS 83

A reliable mid-season sort, well-adapted to canning. Plant heavy in growth, erect, strongly productive. Fruits large, thick-flat, quite smooth, bright cardinal-red.

NORTON WILT RESISTANT 88

A wilt resistant variety, similar to Stone, introduced some years ago by the United States Department of Agriculture. Plant medium heavy and productive. Fruits large, flattened globe-shape, deep cardinal-red; solid, and of excellent quality.

NUMBER 113 83

Our introduction in 1936. A mid-season variety developed at our Milpitas, California breeding grounds particularly adapted to California growing conditions; desirable for canning regular pack and juice. Plant sturdy, vigorous with medium foliage, very prolific. Fruits semi-globular, solid, smooth, deep scarlet, very free from skin cracks; hold firmness and shape well when canned. Mild acidity and bright red interior make juice particularly attractive.

Days from setting plant to marketable fruits

NUMBER 114 90
Our introduction in 1936. A late, heavy yielding variety, bred particularly to meet California growing conditions. Plant growth extremely vigorous with dark green foliage; unsurpassed in yield. Fruits ¾-globe, thick walled with solid center structure; deep red, average weight ¾ pound. Exceptionally desirable for solid pack canning.

STONE, IMPROVED 86
A medium late variety, deservedly popular with canners and market gardeners; our strain ripens evenly, and is uniform. Vine large, dense, very productive. Fruits large, flattened, but deep, smooth, attractive scarlet-red, of fine flavor.

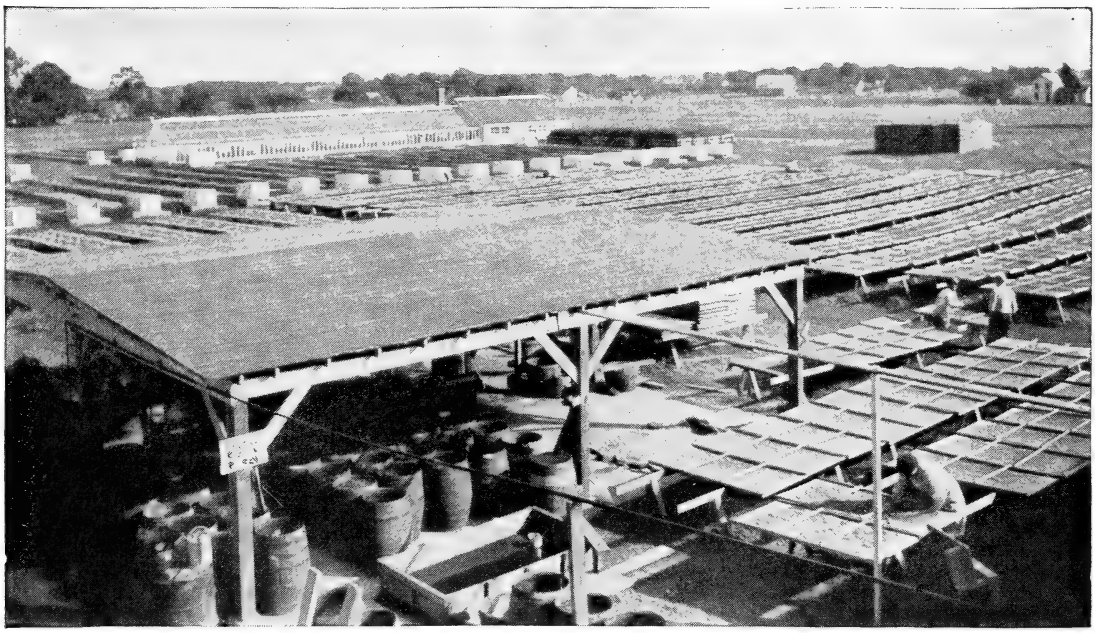
BROWN'S SPECIAL ..... 88 to 90
Also known as Market Champion. A very late, prolific canning variety good for solid pack and for juice; well suited to soil and climate conditions in Delaware and Maryland. Vine large, stocky, dark green with extremely heavy foliage. Fruits very large, flattened-globe, dark red, solid; interior deep red.

Yellow Varieties

YELLOW PEAR 73
Valuable for canning solid pack and for preserves. Vine rank and spreading. Fruits small, deep yellow, pear-shaped; borne in heavy clusters; flavor mild and inviting.

YELLOW PLUM 73
Similar in type to Yellow Pear. Good for canning solid pack and for preserves. Fruits smooth, deep yellow, plum-shaped; of mild flavor.

GOLDEN QUEEN 84
The leading large yellow variety for main crop planting. Good for canning and for juice. Vine of medium size. Fruits medium large, deep golden yellow; smooth, rather solid, of mild flavor.



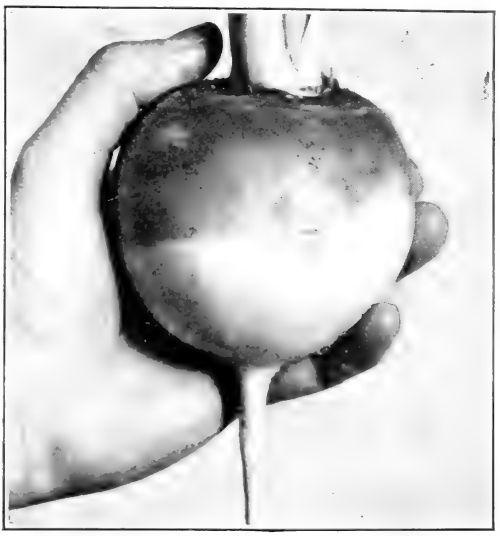
Tomato seed saving operations. Every precaution is taken against seed-borne diseases, from sterilized soil in the greenhouse to disinfection of the seed

TURNIP

Native to Europe

The number of days represents the time required, from sowing of seed, to produce roots of marketable or storage size, at our Milford, Connecticut, breeding farm. Our purebred stocks of the leading varieties are standards of quality.

Culture: Seed should be sown in July or early August for main crop. Drill in rows 2 feet apart and thin to 6 to 8 inches between plants. Highly desirable to make sowings just before rain to insure rapid growth at the start. On clean, strong land it is possible to sow the seed broadcast and get satisfactory results. It requires 2 pounds of seed to an acre.



Purple Top White Globe Turnip

	Diameter inches	Days from planting to harvest
PURPLE TOP WHITE GLOBE ..... An all-purpose variety, extensively used for shipping; also for canning mixed vegetables. Our purebred strain is noted for its uniformity and productivity. Tops dark green, large, erect, strap leaved. Roots large, globe-shaped, very smooth, upper part purple-red, white below; flesh white, sweet, crisp and tender.	4 to 6	55 to 60

SEVEN TOP

A very hardy sort, grown principally for greens, and also for forage. Popular throughout the South. The young shoots are very tender. Used for canning turnip greens. Roots are tough and undesirable for food.

SHOGOIN or JAPANESE FOLIAGE

A rather recent introduction to America, already widely used in the South. Tops 18 to 20 inches tall, erect, bright green, strap leaved. Roots semi-globular, white throughout, mild and tender. Used for canning turnip greens.

RUTABAGA OR SWEDE TURNIP

A Turnip-rooted Member of the Cabbage Family

	Diameter inches	Days from planting to harvest
AMERICAN PURPLE TOP ..... Our Connecticut grown strain is noted for its uniformity of shape, and heavy yielding quality. A dependable variety for storage and for use in canning mixed vegetables. Roots large, round, with small neck and slight tap root; yellow with purple top; flesh light yellow, firm, sweet and tender.	5 to 7	88

The development of disease-resistant varieties is an important part of the Asgrow Program. In this breeding ground on "sick" soil the resistant strains of peas can be easily seen

THE ASGROW BREEDING AND DEVELOPMENT PROGRAM

Since it is concerned with the great number of varieties of different species described in this catalogue, the operations of the Program are obviously extensive.

Its first objective is the maintenance of the Asgrow parent stocks. Only by continual breeding and selection have these pedigreed lines been built up. Unrelaxing care is exercised to ensure the standards which canners and their farmer-growers have come to expect from Asgrow seeds.

Its second objective is the adaptation of these stocks to different growing areas, and to make them resistant to diseases and parasites. Since we have normally but one growing season each year this important work can only be accomplished gradually.

Its third objective is the development of entirely new and improved varieties. The better conditions of living to which as a people we have become accustomed are enhanced in no small measure by the increasingly higher standards, in quality and attractiveness of our foods. Some of the more recent results of this part of our program have been submitted to the critical trials of the impartial judges appointed annually since 1933 by the American Seed Trade Association and have achieved the following

ASGROW ALL-AMERICA RECORD

1933	Asgrow Stringless Green Pods Bean	Gold Medal
	Asgrow Black Valentine Bean	Award of Merit
	Asgrow Imperator Carrot	Award of Merit
	Clark's Special Cucumber	Award of Merit
1934	Asgrow Wonder Beet	Gold Medal
	Stowell's Evergreen Hybrid Corn	Special Mention
1935	Asgrow Scarlet Dawn Tomato	Gold Medal
	Asgrow King Pepper	Special Mention
1936	Asgrow Golden Colonel Corn	Award of Merit
	Asgrow Canner Beet	Award of Merit
1937	Asgrow Teton Pea	Award of Merit
	Asgrow Canner King Pea	Recommended

The scope of such a Breeding and Development Program calls first for technical personnel skilled in botany and genetics, in modern methods of agriculture and in understanding the needs and environmental conditions of our customers. We are fortunate in having associated with us just such a technical staff of experienced men. Extensive and widely diversified acreages are necessary; in all, over 1000 acres are taken up with our breeding and progeny work, the principal areas being as follows:

Milford, Connecticut

The species for which Connecticut is traditionally famous include sweet corn, onion, the beet family, the cabbage family and the turnip family. On these, which are cross-pollinated, and on some self-pollinated species, as tomato and pepper, our Eastern Department of Breeding is continually at work—during the summer on the breeding grounds and during the winter in the greenhouse.

Hamilton, Montana

Centered at Hamilton and with subsidiary stations at other advantageous points, our pea-breeding operations are carried on in the hardy climate and clean, fertile soil of mountain valleys. In addition to hybridization, individual plant selections on an extensive scale are made each year. From these but a few of the very best progenies are saved, to be carefully reproduced for five or six generations in well isolated fields.

Milpitas, California

At our Pacific Coast Department of Breeding in the Santa Clara Valley breeding work is carried on through the year, special attention being here given to pole and lima beans, carrot, celery, lettuce, melon, onion, and tomato.

Filer, Idaho

Our large bean-breeding farm at Filer is used exclusively for developing and maintaining pure pedigreed stocks of bush beans. Sixteen leading varieties of stringless beans have been originated by us and our predecessor firms.

Powell, Wyoming

At Powell, advanced generations of pure-line peas and beans are grown, each isolated increase block representing several years of intensive culture from individual plants, all deviation in progeny from the desired characteristics being scrupulously eliminated.

Many experimental crosses are made on our Corn Breeding Grounds each year in the evolution of hybrids. In this way outstanding combinations are proven

Greeley, Colorado

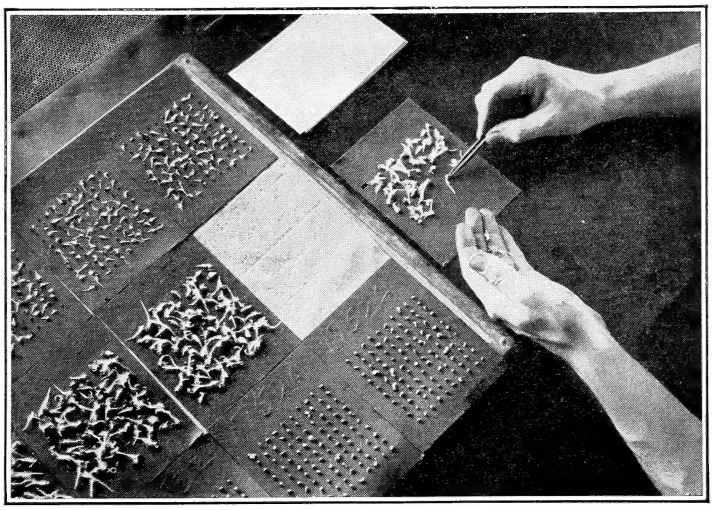
Here conditions are particularly suitable for the development of cucumber, squash and melon. Since each species of this group is highly cross-pollinated, the work at our Greeley breeding grounds involves special care in isolation and observation.

Indianapolis, Indiana

In the important market growing area adjacent to Indianapolis our breeding acreages are largely given over to the adaptation to Middle Western conditions of the varieties most generally in use there.

Baton Rouge, Louisiana

For certain varieties grown largely in the South and for the adaptation or development of others to suit Southern growing conditions, our newest station has been established.



Germination tests are made on all Asgrow Seeds

Laboratory Work

Laboratory work is an important supplement to these breeding grounds and it receives special attention at Milford, Milpitas, and Sheboygan, Wisconsin, where tests are made both in soil and in germinators. The purity and viability of Asgrow seed are our continual care and every practicable effort is made accordingly.

Research and Service

Incorporated in the program are our divisions of Research and Service which, we are glad to believe, have been of help to our customers in the canning industry. The facilities of our breeding grounds and laboratories are gladly made available for the solution of problems arising in connection with the growing of vegetable crops.

Comprehensive as is the scope of the Asgrow Breeding and Development Program and wide-spread as are its operations, its minute details receive meticulous attention and continuous vigilance. By the extensive and intensive care given to their production

ASGROW SEED ARE BRED — NOT JUST GROWN

PLANTING TABLE

Species	Seed required for 50 ft. of row	Seed required to sow an acre	Seed to produce a given number of plants	Distance between rows inches	Distance apart in row inches	Depth of planting inches
Artichoke, Globe	¼ oz.	6 to 8 oz.	1 oz. to 500	40 to 48	18 to 24	1
Asparagus	½ oz.	4 lbs.	1 oz. to 700	14 to 24	3 to 6	1
Beans, Bush	½ lb.	50 to 60 lbs.		24 to 30	2 to 3	1½ to 2
Beans, Lima	½ lb.	30 to 50 lbs.		24 to 36	3 to 6	1½ to 2
Beans, Pole	½ lb.	30 to 35 lbs.		36 to 48	6 to 8	1½ to 2
Beet	½ oz.	8 to 14 lbs.		14 to 24	3 to 4	½ to 1
Beet, Mangel and Sugar	½ oz.	6 to 10 lbs.		18 to 24	6 to 9	½ to 1
Swiss Chard	½ oz.	6 to 10 oz.		18 to 24	10 to 12	1
Broccoli	¼ oz.	4 oz.	1 oz. to 4000	20 to 36	16 to 22	½ to 1
Brussels Sprouts	¼ oz.	4 oz.	1 oz. to 4000	20 to 36	16 to 22	½ to ¾
Cabbage	¼ oz.	4 oz.	1 oz. to 4000	18 to 36	14 to 24	½
Cardoon	½ oz.	5 oz.		20 to 32	20 to 30	½ to 1
Carrot	¼ oz.	3 to 4 lbs.		16 to 24	1 to 3	½
Cauliflower	¼ oz.	4 oz.	1 oz. to 4000	24 to 30	20 to 24	½
Celery	⅛ oz.	4 oz.	1 oz. to 8000	24 to 40	4 to 6	¼
Chicory	½ oz.	4 to 5 lbs.		20 to 36	2 to 3	½ to 1
Collard	¼ oz.	5 oz.	1 oz. to 4000	24 to 30	14 to 18	½
Corn, Pop	3 oz.	6 to 8 lbs.		34 to 40	6 to 8	1
Corn, Sweet	4 oz.	10 to 14 lbs.		30 to 42	9 to 12	1
Corn Salad	2 oz.	10 to 12 lbs.		14 to 18	3 to 4	¾
Cress	1 oz.	10 lbs.		12 to 18	2 to 4	½
Cucumber	½ oz.	3 to 4 lbs.		48 to 60	12 to 36	½ to ¾
Dandelion	¼ oz.	5 to 6 lbs.		18 to 22	6 to 10	½
Dill	½ oz.	5 lbs.		20 to 36	4 to 6	½
Egg Plant	⅛ oz.	5 to 6 oz.	1 oz. to 2000	24 to 36	18 to 24	½
Endive	½ oz.	4 to 5 lbs.		18 to 24	8 to 12	½
Fennel	½ oz.	3 to 4 lbs.		24 to 32	5 to 8	¾
Kale	½ oz.	4 to 5 lbs.	1 oz. to 4000	24 to 32	14 to 22	½
Kohl Rabi	¼ oz.	4 to 5 lbs.		14 to 24	4 to 6	½
Leek	¼ oz.	4 lbs.		14 to 36	2 to 3	¾
Lettuce	¼ oz.	3 lbs.		12 to 18	4 to 12	¼
Melon, Musk	½ oz.	3 to 4 lbs.		70 to 80	36 to 60	¾
Melon, Water	½ oz.	3 to 4 lbs.		72 to 96	72 to 96	¾
Mustard	¼ oz.	4 lbs.		14 to 24	6 to 9	½
Okra	1 oz.	8 to 10 lbs.		24 to 40	18 to 24	1
Onion	¼ oz.	3 to 4 lbs.		18 to 24	3 to 4	¾
Onion (for sets)		60 to 85 lbs.		12 to 14	Not thinned	¾
Parsnip	½ oz.	3 to 4 lbs.		18 to 24	3 to 4	½
Parsley	¼ oz.	3 to 4 lbs.		12 to 20	6 to 8	½
Peas	¾ lb.	100 to 250 lbs.		24 to 36	1 to 2	1 to 2
Pepper	⅛ oz.	1 to 2 lbs.	1 oz. to 1000	20 to 30	18 to 20	½
Pumpkin	2 oz.	3 to 4 lbs.		96 to 110	60 to 84	¾
Radish	½ oz.	10 to 12 lbs.		12 to 18	1 to 2	½
Rhubarb	½ oz.	3 lbs.		24 to 42	20 to 24	¾
Rutabaga	½ oz.	2 to 4 lbs.		18 to 24	4 to 7	½
Sage	½ oz.	4 to 5 lbs.		20 to 24	6 to 10	½
Salsify	¾ oz.	7 to 8 lbs.		18 to 24	2 to 3	¾
Sorrel	½ oz.	4 to 5 lbs.		12 to 22	2 to 3	½
Spinach	¾ oz.	10 to 20 lbs.		14 to 18	3 to 5	¾
Squash, Bush	1 oz.	4 to 6 lbs.		42 to 48	42 to 48	1
Squash, Vining	1 oz.	4 lbs.		72 to 90	60 to 90	1
Sunflower	1 oz.	7 to 8 lbs.		48 to 70	10 to 12	1
Tomato	⅛ oz.	2 oz.	1 oz. to 2000	40 to 60	36 to 40	½
Tobacco		2 oz.	1 oz. to 4500	36 to 48	24 to 36	½
Turnip	½ oz.	2 to 3 lbs.		12 to 20	2 to 4	½


Asgrow