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1948

Superior Seeds

FARM and GARDEN SUPPLIES



Manns

BALTIMORE-2. M.D.

ENSOR and FORREST STS.

AT BELAIR MARKET

MANNS' SUPERIOR SEEDS

Ensor & Forrest Sts.

At Belair Market
(South end of Greenmount Ave.)

Baltimore-2, Md.

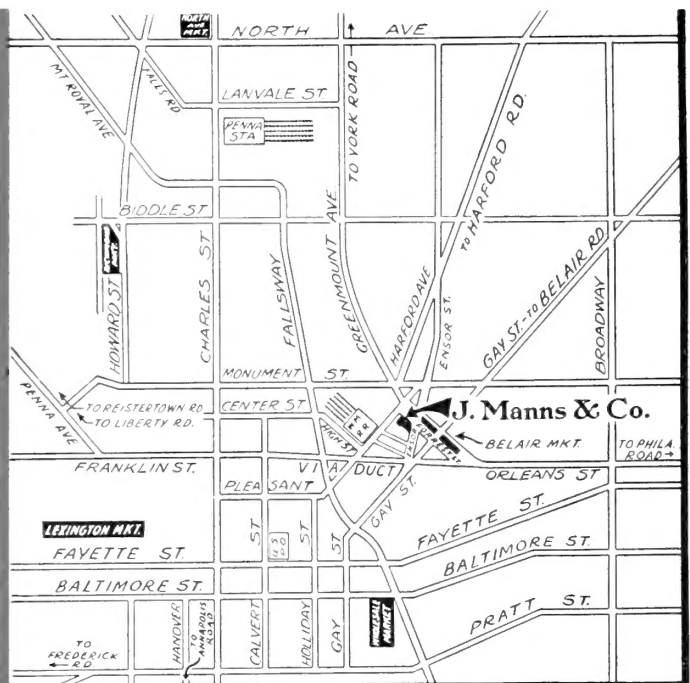


A Convenient, Complete, Modern Seed Store

Plenty of free parking space

Manns is the most accessible seed store in the city. Here you can conveniently buy **Superior Seeds**, Farm and Garden supplies at reasonable prices—backed by 60 years of reputable service.

ALWAYS EASY PARKING



QUANTITY

ARTICLES

PRICE

Amount Brought Forward,

MANNS' SUPERIOR SEEDS

Continuously Successful Since 1887

Our 61st Year

Serving Critical Market Gardeners and Florists

Varieties for Quick Freezing

Asparagus
Stringless Beans (Green and Wax)
Lima Beans, Fordhook 242, Impr. Challenger
Brussels Sprouts
Broccoli, Calabrese types
Carrot
Cauliflower
Corn, Hybrid yellow varieties
Peas, Wrinkled varieties
Rhubarb
Squash
Spinach

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Seeds, Bulbs, Plants, Farm and Garden Supplies Are Not Side-Lines With Us But the Very Items Which Determine Our Success. They Must Be Good. They Must Be Dependable. Sow the Best for Best Results.

Phone Plaza 1460 • Prompt, Courteous, and Intelligent Attention Always • Suburban Delivery

MAIL ORDERS: We pay Parcel Post or Express Charges on all vegetable and flower seeds, except Beans, Corn, Peas, and Seed Potatoes. This enables distant customers to use Manns' Superior Seeds at no additional expense.

PLEASE READ—Non-Warranty

It is very evident to anyone who gives the matter the slightest thought that it is to our best interests to send out only such stock as will grow and prove true to name and description. There are, however, so many contingencies to be encountered, entirely beyond our control, such as the weather, soil and other conditions that:

J. Manns & Company give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any Seeds, Plants or Bulbs we sell, and we will not be responsible for the crop. Our liability, in all instances, is limited to the purchase price of the Seeds, Plants or Bulbs.

Parcels may not exceed 70 lbs., nor measure more than 100 in. combined length and girth.

Domestic Parcel Post Rates Within the U. S. and Possessions		For First Pound	For Ea. Addit'l Pound
First Zone within	50 miles	\$0.08	\$0.01
Second Zone within	50 to 150 miles	.08	.01
Third Zone within	150 to 300 miles	.09	.02
Fourth Zone within	300 to 600 miles	.10	.04
Fifth Zone within	600 to 1000 miles	.11	.05
Sixth Zone within	1000 to 1400 miles	.12	.07
Seventh Zone within	1400 to 1800 miles	.14	.09
Eighth Zone over	1800 miles	.15	.11

Prices Subject to Change Without Notice

How and When to Plant Vegetables

VEGETABLES	SEEDS OR PLANTS TO PROVIDE FOR FAMILY OF FIVE	DATE TO SOW OR PLANT OUTDOORS		DEPTH TO COVER INCHES	SPACE BETWEEN ROWS	SET PLANTS OR THIN OUT TO INCHES	TIME REQUIRED TO PRODUCE CROP	NUMBER OF RUNNING FEET OF ROW FOR FAMILY OF 5	SPECIAL NOTES
		FIRST	LAST						
Asparagus	1 oz. or 50	Mar. 20	Aug. 1	Seeds 1 in.	3 to 4 ft.	12 in.	Seeds 4 years	50 ft.	A well-cared for bed improves with age and lasts for many years. Select, early, midseason and late in both green and wax podded kinds. Select early and late, green and wax pod.
Beans (Bush)	2 qts.	April 20	Aug. 15	Plants 4 in.	2 ft.	3 to 4 in.	Plants 2 years	200 ft.	
Beans (Pole)	½ pt.	May 5	Aug. 1	2 in.	3 to 4 ft.	3 ft. (hills)	90 to 120 days	80 to 100 hills	
Beet (Limas, see below)	2 oz.	Mar. 20	Aug. 15	½ to 1 in.	18 in.	2 to 3 in.	60 to 80 days	80 ft.	Select early, midseason and late kinds for winter storage.
Borecole or Kale	1 pkt.	April 20	Sept. 1	¾ in.	2½ ft.	12 in.	80 to 100 days	20 ft.	Sow during July for fall use.
Broccoli	1 pkt.	April 5	Aug. 10	½ to 1 in.	2½ ft.	24 in.	120 days	20 ft.	Handle exactly like Cauliflower.
Brussels Sprouts	1 pkt. or 15	May 5	Aug. 10	Seed ½ in.	2½ ft.	24 in.	120 days	20 ft.	The most delicate of all the cabbage tribe.
Cabbage	36	April 20	Sept. 15	Seed ½ in.	2 to 3 ft.	18 to 24 in.	100 to 150 days	60 ft.	Set out 2 doz. early, 1 doz. midseason and 2 doz. late kinds.
Chinese Cabbage	1 pkt.	July 20	Aug. 1	¾ in.	2½ ft.	12 in.	80 to 100 days	20 ft.	Sow only on August 1st for fall use only.
Carrot	½ oz.	Mar. 20	Aug. 1	½ in.	1½ to 2 ft.	2 to 3 in.	45 to 60 days	40 ft.	Sow short rows often. Sow on August 1st for winter storage.
Cauliflower	24	April 5	July 10	Seed ¼ in.	2 to 3 ft.	2 ft.	120 to 150 days	20 ft.	Treat very much like Cabbage.
Celery	½ oz. or 60	Mar. 20	July 15	2 in.	3 ft.	6 in.	100 to 120 days	60 ft.	Select an early and a late variety.
Corn (Sweet)	1 pt.	April 20	Aug. 5	¾ in.	4 to 5 ft.	12 in.	80 to 120 days	200 ft.	Sow in blocks of short rows, for perfect pol- lenization.
Cucumber	1 pkt.	April 20	Aug. 5	¾ in.	4 to 5 ft.	(3 to hill)	60 to 80 days	10 hills	When picking, cut stems; do not pull vines.
Eggplant	12	May 20	Aug. 5	¾ in.	2½ ft.	36 in.	100 to 120 days	20 ft.	Needs lots of heat and frequent hoeing.
Endive	1 pkt.	April 5	July 25	¾ in.	2 ft.	24 in.	60 to 80 days	20 ft.	To bleach, tie plants into cone shape.
Kohl-Rabi	1 pkt.	April 5	Aug. 10	¾ to ½	1½ to 2 ft.	12 in.	60 to 80 days	40 ft.	Should be used when roots reach a diameter of 2½ in.
Leek	1 pkt.	Mar. 30	July 15	½ in.	2 ft.	4 in.	100 days	20 ft.	Grow like Onions and hill to bleach stalks.
Lettuce	2 oz. (4 kinds)	Mar. 20	July 15	¾ in.	1½ to 2 ft.	10 to 12 in.	45 to 60 days	150 ft.	Should be thinned out to stand a foot apart.
Lima Beans (Bush)	1 pt.	June 1	July 10	1 in.	2½ to 3 ft.	2 ft. (hills)	100 days	100 ft.	
Lima Beans (Pole)	1 pt.	June 1	July 10	1 in.	3 ft.	3 ft. (hills)	120 days	100 ft.	
Melons	1 pkt.	May 10	Aug. 10	½ to 1 in.	4 ft.	4 ft. (hills)	100 to 120 days	10 hills	Select an early and a late variety in both classes.
Onions	1 oz.	Mar. 20	Aug. 20	¾ to ½ in.	18 in.	3 or 4 in.	80 to 110 days	80 ft.	See note on Cucumbers. Weeding and hoeing are their chief require- ments.
Onion Sets	1 qt.	Mar. 20	Aug. 10	¾ to ½	12 in.	2 in.	30 to 60 days	40 ft.	Seed requires 3 to 6 weeks to germinate.
Parsley	1 pkt.	Mar. 20	June 1	¾ to 1 in.	15 to 18 in.	4 in.	100 to 120 days	50 ft.	Cultivate well during the growing season.
Parsnips	1 pkt.	April 5	Aug. 10	2 in.	15 to 18 in.	2 to 4 in.	150 days	50 ft.	The early smooth seeded sorts may be sown a month before the later, wrinkled varieties.
Peas	3 pts.	Mar. 20	Aug. 10	2 in.	2½ ft.	1 in.	60 to 100 days	200 ft.	See note on Eggplants.
Pepper	12	May 5	Aug. 20	4 in.	3 ft.	2 ft.	100 days	20 ft.	Really a farm crop.
Potatoes	15 lbs.	Mar. 20	July 1	½ in.	3 ft.	6 in.	100 days	200 ft.	When storing, prevent bruising.
Pumpkin	1 pkt.	May 20	Sept. 15	½ in.	4 to 6 ft.	1 to 4 in. (hills)	100 to 120 days	12 hills	Spring sorts can be grown quite close. Sum- mer and fall varieties require more space.
Radish	3 pkts.	Mar. 20	Aug. 10	½ in.	18 in.	1 to 4 in.	30 to 60 days	50 ft.	Requires a lot of space and plenty of manure. Sow around August 1st for winter use.
Rhubarb	6	Mar. 20	Oct. 1	¾ in.	3 ft.	3 ft.	60 days	20 ft.	Can be stored for winter use or left in ground until spring.
Rutabaga	1 pkt.	Mar. 20	July 20	1 to 1½ in.	2 ft.	6 in.	90 to 100 days	40 ft.	Plant short rows often.
Salsify	½ oz.	April 5	June 1	1 in.	15 to 19 in.	2 to 4 in.	100 to 150 days	25 ft.	See note on Pumpkins. Treat like Beets.
Spinach	1 oz.	Mar. 20	Aug. 10	½ in.	12 in.	2 to 4 in.	60 days	75 ft.	For best results train to stakes or trellis.
Squash	1 pkt.	April 20	Aug. 10	½ to 1 in.	4 to 6 ft.	4 ft. (hills)	100 to 120 days	12 hills	
Swiss Chard	½ oz.	Mar. 20	Aug. 10	½ to 1 in.	1½ to 2 ft.	6 in.	90 to 100 days	40 ft.	
Tomato	1 pkt. or 43	Seeds Feb. 18 Indoors Plants May 5	Aug. 10	Seed ½ in.	3 to 4 ft.	3 ft.	100 to 120 days	150 ft.	
Turnips	1 pkt.	Mar. 20	July 1 Aug. 31	¾ in.	15 to 20 in.	2 to 4 in.	60 to 80 days	60 ft.	Sow again in August for winter use.

NUMBER OF WEEKS FOR CONTINUOUS HARVEST

Beans	4 weeks	Cucumbers	4 weeks	Kohlrabi	3 weeks	Sweet Corn	2 weeks	Radishes—Early	2 weeks
Beets	6 weeks	Endive	6 weeks	Turnips	6 weeks	Onion Sets	4 weeks	Radishes—Midseason	2 weeks
Carrots	8 weeks	Lettuce	4 weeks	Spinach	2 weeks	Peas	2 weeks	Radishes—Winter	6 weeks

In the vicinity of Baltimore many varieties are sown in hot-beds during February, March and April to be planted out about May 10th, or earlier in the case of some varieties where the plants may be hardened off.

Some vegetables, such as Cabbage, Lettuce and Spinach, are sown at varying dates, according to variety.

SOW MANN'S SUPERIOR SEEDS

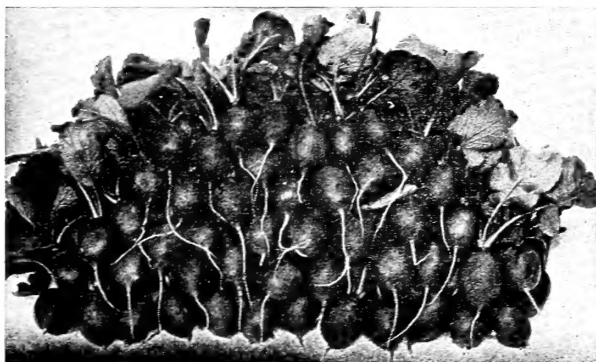
Varieties of Special Merit



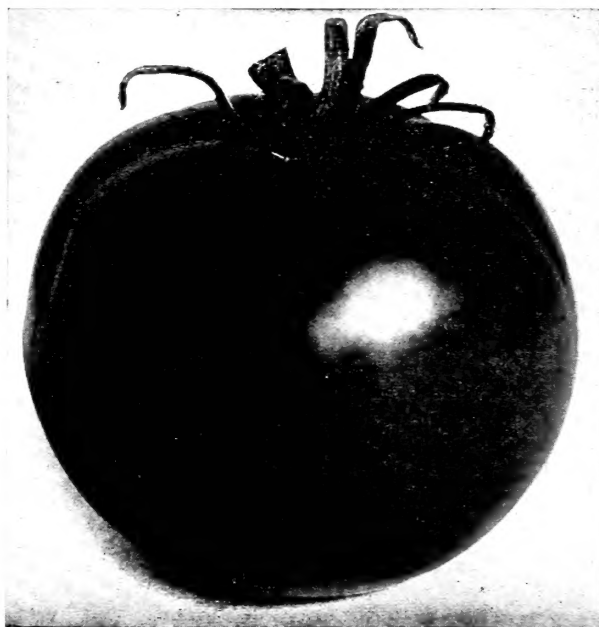
Beet—New Model



Cucumber—Marketer



Radish—Scarlet Globe No. 8



Tomato—Rutgers Certified

ARTICHOKE

GREEN GLOBE—Tender perennial producing edible flower buds the second year. Pkt., 10c; Oz., 85c.

ASPARAGUS SEED

MARY WASHINGTON—Resistant to disease, large, early and produces remarkably tender dark green stalks. Pkt., 10c; ¼ lb., 50c; lb., \$1.50.

ASPARAGUS ROOTS

From one to two years may be saved by planting roots.

MARY WASHINGTON—Choice, 2-year-old roots. 25 for 85c; \$2.75 per 100.

ASPARAGUS

1oz. to 60 ft.; 1 lb. per acre; 3,000 plants per acre

Sow in drills about 18 in. apart and two in. deep in light, rich soil. Thin to about one inch apart and give frequent and thorough cultivation during the summer.

Next season transplant roots to 4 in. deep and 18 in. apart in rows four feet apart. The following season the bed may be cut over two or three times. After the final cutting, give a good dressing of manure, or fertilizer.

Home gardeners are advised to snap off the shoots rather than cut them. A top dressing of nitrate of soda about March 1st promotes growth and increases yield.



Full Measure

New Stringless Green Pod (55 days) This new highly productive strain has many Full Measure characteristics bred into it. Its prolific nature, season of growth, length, roundness of pods and appearance, are definitely inherited and yet to these very desirable features has been added a wonderful degree of hardiness which helps New Stringless withstand adverse weather conditions better than its parent stock.

Tendergreen —See New Stringless Green Pod.

Dwarf Horticultural or Dwarf Cherry

(56 days) One of the best quality dwarf sorts for both snap and green shell beans for the home garden and market. As a green shelled bean it is equal to the lima in quality while any surplus crop can be kept for winter use. The pods are 5 inches long, stout, flat and stringless.

Longreen (56 days) Pods larger than New Stringless-Tendergreen, round, straight, dark green, stringless and of excellent quality. An outstanding canners variety.

Full Measure Stringless (60 days) A very prolific second early round-podded, stringless bean. The pods are straight, meaty, and dark green in color, entirely stringless and measure 6 to 8 inches in length.

FLAT GREEN PODDED

Bountiful (50 days) Extra early, good cropper, hardy, prolific; pods long, straight, thick-flat, entirely stringless, good quality.

Plentiful (53 days) An improved Bountiful, with longer, thicker, darker green pods. Two or three days later than Bountiful but much more prolific and resistant to two of the most troublesome forms of rust; an All-American Winner.

Increased yields result from Nitragin Inoculation

Bush Beans

1 pt. to 100 ft. of drill; 1 to 1½ bu. per acre

Beans are tender and should not be planted until the soil is well warmed. Sowing too early will often result in a poor stand and uneven ripening. Sow the seed 1½ to 2 inches deep in rows not less than 18 inches apart and firm the soil to assist germination. Allow the plants to stand 4 to 10 inches apart in the row according to variety.

Shallow cultivating and hoeing should be done frequently until the vines begin to blossom. Disturbing the roots after the blossoms are formed will cause them to drop resulting in a greatly reduced crop. To prevent blight do not cultivate deeply and avoid working them while the vines are wet. Beans grow best in warm, well-drained, sandy loam. For succession plant every two weeks until about August 15th.

ROUND GREEN PODDED Asgrow Stringless Black Valentine

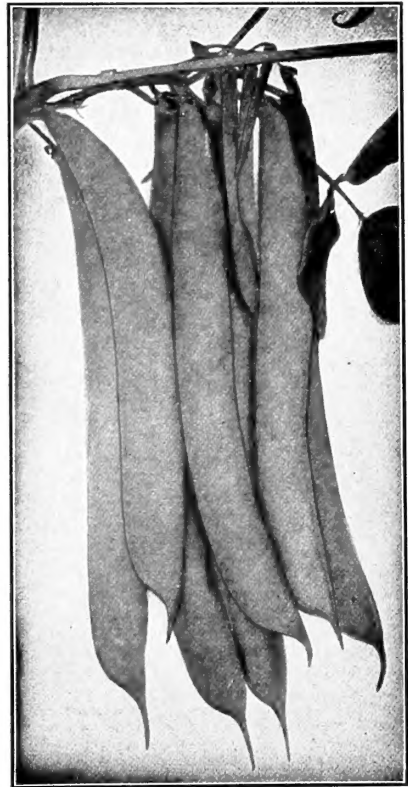
(Oval Pod) (50 days) Fully as hardy and early as the original Black Valentine but producing exceptionally long, oval or nearly round pods. Extremely prolific, entirely stringless, and of highest quality.

Streamliner (50 days) An oval-flat green podded stringless bean, not as flat as Bountiful and growing about 1 to 1½ inches longer. Outyields Bountiful in all tests. Seed white.

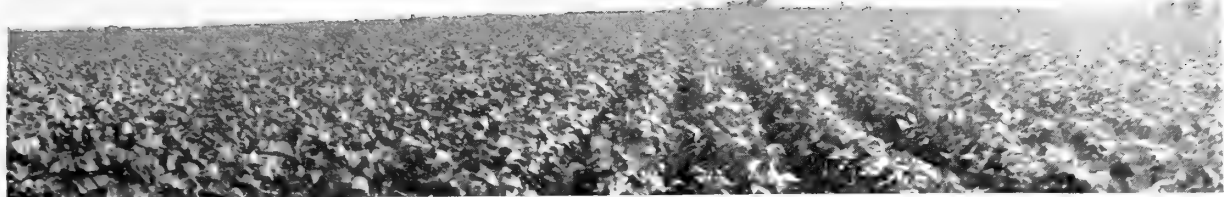
Black Valentine Stringless (Round Pod) (54 days) Produces strictly round, stringless pods. Not as early nor as prolific as the oval type and will not stand planting as early. Its real utility lies in the slenderness of its pods for canning.

Burpee's Stringless Green Pod (Improved)

(54 days) Very popular and can be profitably grown by either trucker or home gardener. It combines vigor, earliness and productiveness. The pods are produced in abundance and are handsome in appearance, being rich dark green in color, smooth, absolutely round, meaty, stringless, free from fiber, and of exceptionally delicate quality.



Burpee's Stringless Improved



Block of Selected Pedigreed Stock Seed on Idaho Breeding Farm

Bush Beans

USED AS SHELL BEANS

White Kidney (100 days) Excellent late variety, green, shelled or dry. Seeds are large, white, kidney shaped, and of fine quality.

White Marrowfat (100 days) This is a very prolific variety and has become a choice family sort suitable both for green shells and dry beans. Pods are broad, about 5½ inches long, medium green changing to yellow, having large, clear, white seeds which cook very dry and mealy.

Pole Beans

EDIBLE PODDED

For Cultural Directions See Pole Limas

Kentucky Wonder (65 days) This old standard variety is extremely productive and of finest quality. It is early and produces round, green pods about 9 inches long. Splendid for use as snaps for the home gardener as it continues to bear for a long period. Seed light brown.

White Kentucky Wonder (65 days) Bears stringless pods of excellent flavor, dark green in color. It resembles the Kentucky Wonder in form of pod but is more productive and bears longer. Seeds white, fine for baking.

Yard Long, Celestial (70 days) Somewhat of a curiosity and yet possessing excellent qualities. It is very prolific, absolutely rust proof and a rank grower. It will produce pods 13 to 24 and sometimes 30 inches long. An excellent table vegetable, the pods being tender, stringless and of a rich asparagus flavor.

Horticultural Cranberry (72 days) Also known as Pole Cherry, Corn Field or Wren's Egg. An old favorite, excellent both as a snap and shell bean. Medium early, producing large quantities of 5 and 6-inch pods which are broad, thick, and of fine flavor.

Lazy Wife (75 days) One of the best general purpose pole beans; of superior quality as a snap, green shelled or dried bean. Pods, which are borne abundantly throughout the summer, are very easily gathered and entirely stringless, brittle, light green in color and of mild, sweet flavor. Seed pure white, 6 to 8 in each pod.

Wax Beans

Pencil Pod Wax (55 days) A leading variety for home and market gardens. Vigorous grower and strongly productive. The golden yellow pods are round, fleshy, tender, entirely stringless and of finest quality.

Puregold (58 days) Golden yellow 6 in. slim, round pods, seed white with light brown color around eye. Excellent canning variety.

Round Pod Kidney Wax (62 days) (Brittle Wax.) An excellent early round-podded variety of handsome appearance. Pods are long, straight, brittle, meaty; entirely stringless and of exceptionally desirable quality. The best round-podded wax bean for the home garden, canning or freezing.

Sure Crop Wax (62 days) The most popular flat podded wax. Pods are of a rich yellow color, stringless at all stages of growth. Plant vigorous, hardy, and very productive.

PRICES

Let us quote large quantities

GREEN PODDED	Pt.	Qt.	Pk.
Asgrow—Black Valentine,			
Stringless, Oval	\$.45	\$.85	\$4.50
Black Valentine, Stringless,			
Round .....	.45	.85	4.50
Bountiful .....	.45	.85	4.50
Burpee's Stringless Improved...	.45	.85	4.50
Dwarf Horticultural or			
Dwarf Cherry .....	.60	1.20	...
Full Measure Stringless .....	.45	.85	4.50
Giant Stringless .....	.45	.85	4.50
Landreth's Stringless .....	.45	.85	4.50
Longreen .....	...	...	...
New Stringless .....	.45	.85	5.00
Plentiful .....	.45	.85	4.50
Streamliner .....	.45	.85	4.50
Tendergreen .....	.45	.85	5.00

WAX VARIETIES

Pencil Pod Wax .....	.45	.85	4.50
Puregold Wax .....	.50	1.00	5.50
Round Pod Kidney Wax .....	.45	.85	5.00
Sure Crop Wax .....	.45	.85	4.50
Unrivalled Wax .....	.45	.85	4.50

POLE BEANS

Horticultural Cranberry .....	.60	1.15	7.00
Kentucky Wonder .....	.45	.85	5.00
Lazy Wife .....	.45	.85	5.00
Potomac (All American Winner) .....	.45	.85	5.00
White Kentucky Wonder .....	.45	.85	5.00
Yard Long, Celestial Pkt., 10c; oz., 15c; lb., \$1.00			

BUSH BEANS

Red Kidney .....	.45	.85	5.00
White Kidney .....	.45	.85	5.00
White Marrowfat .....	.45	.85	5.00
White Navy .....	.45	.85	5.00

Bush Lima Beans

1 pt. to 100 ft.; 1 bu. per acre

These varieties require no support, are about two weeks earlier than the pole beans, and can be planted closer in the rows. They are therefore used by large growers and by gardeners who do not find it convenient to use poles. After danger of frost is past and the ground has become warm, plant in 3 foot rows dropping 3 seeds to a hill and the hills 15 inches apart or sow in a row and thin to 8 in. apart.

Baby Fordhook (70 days) Pods 2½ in. by ¾ in. plump, having 3 to 4 tightly packed beans, plant about 15 in., bushy, very prolific.

Fordhook 242 (75 days) Heaviest yielding high quality bush lima. Recent U. S. Dept. of Agr. tests at 15 locations throughout the country proved Fordhook 242 more prolific than any of the other four popular commercial varieties. The average yield was 8505 lbs. per acre, nearly 25% better than the second best and far ahead of all the other varieties.

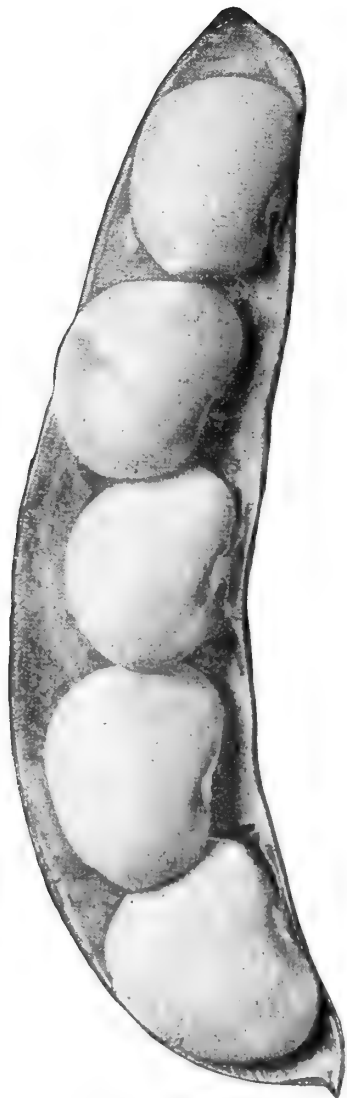
Burpee's Improved Bush

(76 days) A very prolific mid-season variety of very hardy, vigorous and true bush growth, bearing clusters of 5 to 8 pods measuring about 5 inches long. The pods are borne abundantly and well filled.

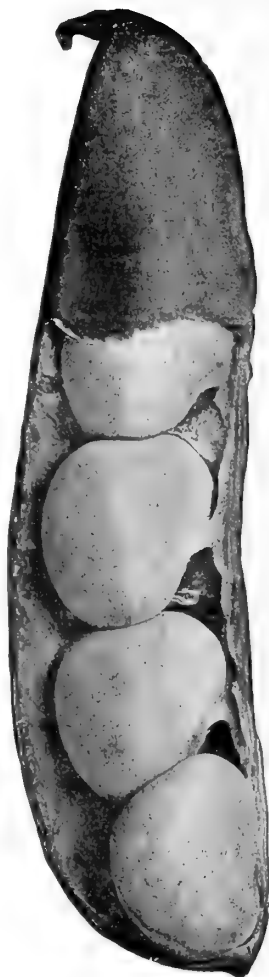
Pole Lima Beans

1 pt. to 100 ft.; 8 to 10 qts. per acre

Pole beans do not bear as early as the bush varieties but they are more productive, their bearing season is longer and they are more easily gathered. They succeed best in a warm sandy loam which has been enriched with well rotted manure. If poles are used they should be set about 2 feet apart, in rows 4 ft. apart. After the ground has become warm and dry, plant 4 to 6 beans to a pole and when well started thin out to 2 or 3 plants to a pole. By placing the seed eyes down they will germinate more quickly and for this reason are less liable to rot. Cultivate frequently but shallow.



King of the Garden Pole



Burpee's Improved Bush

Improved Challenger (95 days) Vigorous and very productive. Pods and beans resemble Fordhook Bush Limas. Therefore also known as Fordhook Pole. We quote Mr. Bruce H. Gallup who is a very successful gardener. "The best of all the pole varieties, giving one a plump, green bean, very succulent or moist, but with still enough meatiness to afford plenty of substance and carry their green color after they are cooked, with a delicious nutty flavor. As to their productiveness we are fully satisfied as we have picked as many as 87 large plump green pods off one pole at one time and this after the pole has been picked several times during the season."

King of the Garden (90 days) Popular main crop variety. Vines strong and vigorous; setting pods early and continuing to bear until frost. Is used extensively by market gardeners because of its very prolific nature and the immense size of the pods, which are very straight and handsome; of medium dark green color, broad, flat and filled with four or five large white beans of finest quality.

Giant Podded (95 days) The largest podded lima in cultivation; extremely vigorous in growth, mid-season. Pods are borne in clusters of 6 to 8 and measure 6½ inches long and 1¼ inches broad. The beans are extra large and of excellent quality.

PRICES			
BUSH LIMAS	Pt.	Qt.	Pk.
Baby Fordhook	\$.55	\$1.00	\$6.00
Burpee's Improved Bush.....	.55	1.00	6.00
Fordhook 242 Bush.....	.55	1.00	6.00
Wood's Prolific .....	.55	1.00	6.00
POLE LIMAS			
Burpee's Best .....	.50	.95	5.00
Improved Challenger .....	.50	.95	5.00
Giant Podded Pole.....	.50	.95	5.00
King of the Garden.....	.50	.95	5.00
Sieva (small white).....	.50	.95	5.00

Table Beets

1 oz. to 50 ft. of drill; 5 lbs. per acre

The soil for beets should be non-acid light, rich, fine and deeply cultivated. Smooth beets cannot be grown if fresh manure is used. If wanted very early, sow in hot beds and transplant, cutting off the outer leaves. For early outdoor crop plant the seeds about 1 inch apart and 1 inch deep in rows 1 to 2 feet part, firming the soil about the seeds. This should be done as soon as the ground can be worked and for table use, plantings should be made every three weeks. Thin the plants to 3 inches apart. For main crop sow in the early part of May while for winter use they may be planted up to August 1st.

MANNS' BEET SEED

is grown from transplanted roots which have been carefully selected as to both interior and exterior color, tops, shape and uniformity of size. It could be grown much cheaper if we were supplying our trade just ordinary commercial beet seed. Superior seeds can only be grown from specially selected parent stocks.



Detroit Dark Red

Detroit Dark Red—Long Top (68 days) Our stock is unsurpassed in quality and appearance. The tops are tall and strong and upright in growth and the roots are globular, of medium size, very smooth and of a wonderful dark red color throughout. Very desirable for canning.

Beets—Mangel (or Stock)

1 oz. to 100 feet of drill, 6 lbs. per acre in drills or 15 to 20 lbs. per acre if sown broadcast.

Mammoth Long Red (110 days) Attains enormous size, producing thirty to fifty tons per acre. The roots are straight, well formed and much thicker than other sorts. Grows well above the ground and is therefore easily gathered. The flesh is white tinged with rose. High feeding quality.

New Model (56 days) Perfect in shape with strong abundant tops for bunching and roots of a beautiful solid red color, very uniform in size, the entire crop maturing during the same week. This variety fills a definite need among market gardeners and has met with continuing success. Practical growers realizing the superior quality of this strain are ordering in 25, 50 and 100-pound lots, using this one variety throughout the entire season.
25 lbs. and 50 lbs., \$1.85 lb.; 100 lbs., \$175.00

Extra Early Flat Egyptian (54 days) One of the very earliest, excellent for forcing and extra early crop. Roots are distinctly flat, very dark red, have very small tap root and are of fine quality when young. They measure 2 inches in diameter when mature and have small tops.

Early Wonder (58 days) Popular bunching variety in some sections where a light-colored beet is desired, and white zones are not objectionable.

Green Top Bunching Tall (58 days) Roots round, smooth, glossy, slightly flattened when full grown, of fine texture, bright blood-red. Large tall green top.

Crosby's Egyptian (60 days) Smooth, flattened, globe shaped roots with small tap root. Color, deep purplish-red in the dark strain and bright crimson in the lighter strain. Tops large and tall.

Perfected Detroit (70 days) An All American Winner, of genuine quality and real beauty. Extremely dark red and not a purple or brown root in the lot. The most critical produce buyer will be pleased with its intense color, perfect shape and freedom from zones. It has plenty of top for bunching and is also an excellent canners variety.

Half Long Lentz (78 days) Bright red outside, flesh pale pinkish white, sweet, about 2½ by about 4 inches top shaped.

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.	10 Lbs.
Crosby's Egyptian— Dark	\$.10	\$.20	\$.50	\$1.50	\$14.00
Crosby's Egyptian— Light .....	.10	.20	.65	1.85	17.50
Detroit Dark Red (Long Top) .....	.10	.20	.50	1.50	14.00
Early Wonder (special) .....	.10	.20	.50	1.50	14.00
Extra Early Flat Egyptian .....	.10	.20	.50	1.50	14.00
Green Top Bunching Tall .....	.10	.20	.60	2.00	18.50
Lentz (Ex. Early Light Red) .....	.10	.25	.75	2.25	21.50
Mammoth Long Red..	.10	.15	.40	1.25	11.50
New Model .....	.10	.25	.75	2.25	21.50
Perfected Detroit ....	.10	.20	.50	1.50	14.00



Selected Heads of Golden Acre for Stock Seed Production

Cabbage

1 oz. for 2,000 plants; ¼ lb. per acre

Yellows Resistant Varieties marked*

Number of days indicates time from setting plants to heading.

CULTURE—The best results are obtained from a well-drained, deep rich loam. The very early varieties should be sown about September 15 and in 4 or 5 weeks transplanted to coldframes, from which they are transplanted to open ground from March 15 to April 15. If this is not done the seed should be sown in hotbeds in February; making plantings later of course according to variety and time crop is wanted. The earliest sorts should be set out in rows 2 feet apart and 18 inches apart in the rows.

If it is not especially desired to have early cabbage the seed may be sown in open ground and transplanted after 4 weeks. For second early crops sow in April and transplant in May; these will mature in July and August. The later varieties should be planted in May and transplanted in July to rows 3 feet apart and 2 feet apart in the rows; these will mature from September to November.

FIRST EARLY

(POINTED HEADS)

Selected Jersey Wakefield (63 days. 5 in. dia. 2½ lbs.) An improved strain of Early Jersey Wakefield, grown and selected with the greatest care; there is none better. Plant compact and erect or very slightly spreading, with few outer leaves. Stem short. Heads of medium size, very solid, uniformly pointed and of excellent quality.

***Jersey Queen** (66 days. 5 in. dia. 2½ lbs.) The yellows resistant Jersey Wakefield.

Charleston Wakefield (74 days. 6½ in. dia. 4 lbs.) Produces larger and heavier heads than Jersey. A week or two later in maturity.



Selected Jersey Wakefield

(ROUND HEADS)

Golden Acre (63 days. 6 in. dia. 3 lbs.) Matures as early as Jersey Wakefield, forming a large round, solid head. Very uniform and compact, having a few outer leaves which permits close planting. Golden Acre usually commands high prices because it is the first round head variety on the market.

Copenhagen Market (69 days. 6½ in. dia. 3½ lbs.) This very fine, large round headed variety is of Danish origin and has proven to be very valuable to the American grower. It is nearly as early as Jersey Wakefield. The heads average about 3½ pounds, and the stems are very short.

Detroit—Yellows Resistant Golden Acre (68 days) About a week later than Golden Acre. Plant slightly larger. Heads have creamy white interior.

Early Round Dutch (71 days. 7½ in. dia. 4½ lbs.) Nearly globe shaped, solid, of good quality, short stemmed. Relatively non-bolting. Splendid for home and market gardens.

Green Acre (73 days. 6½ in. dia. 3½ lbs.) A selection from Copenhagen Market for a more attractive deep green color and larger heads. Valuable for shipping as it holds a fresh appearance longer when marketed.

*YELLOWS RESISTANT VARIETIES

The State of Wisconsin and several other State Departments of Agriculture have for a number of years been working on the best commercial cabbage varieties, adapting them to resist yellows or wilt. It is now possible with these resistant stocks to grow cabbage successfully even on diseased land, by sowing seed which is grown under special conditions to make it resistant. While the cost of this seed is somewhat higher than non-resistant seed, there is the added advantage of securing stock which has been reselected for conformity to true type and heading quality. Therefore these improved varieties are most desirable for both diseased and clean ground.

Cabbage

SECOND EARLY

Glory of Enkhuizen (77 days. 8 in. dia. 5 lbs.) Large sure heading, dark green variety, globular, very hard and solid, few outer leaves, excellent quality. A desirable all-purpose mid-season variety for shipping, local markets and sauerkraut.

All Head Early (78 days. 9 in. dia. 6 lbs.) Remarkably solid and uniform in color as well as in shape and size, its sure heading qualities and tenderness make it a favorite. By reason of its compact growth, it is possible to produce 1,000 more heads per acre than many other good sized varieties. For winter use sow in July. Splendid sort for kraut making and shipping.

Early Flat Dutch (78 days. 9 in. dia. 6 lbs.) Excellent large early flat sort, producing good solid heads. The stem is short and it has comparatively few outer leaves.

***Marion Market** (79 days. 6½ in. dia. 4½ lbs.) Yellows Resistant Copenhagen.

***Wisconsin All Season** (90 days. 10 in. dia. 9 lbs.) Yellows Resistant. A reliable variety equally as good for fall and winter as for summer use. Shows considerable resistance to drought.

FALL AND WINTER

Pointed Head Winter (84 days. 6 in. dia. 3½ lbs.) Sow the seed in time to set out plants about July 15th. Dependable header, very solid, of fine quality, excellent keeper and shipper. Stands temperatures down to 24 degrees. Ready for market earlier than the Southern crop.

Chieftain Savoy (88 days. 8 in. dia. 6 lbs.) The finest and earliest of the Savoy class and very distinct from all other sorts. Best for either early or late crops. The leaves are heavily crimped or savoyed and grow closely about the medium size, solid, dark green heads. The flavor is far superior to that of other cabbages, and for this reason is very much in demand. It is an excellent keeper and very hardy.

Premium Late Flat Dutch (100 days. 12 in. dia. 12 lbs.) The earliest, most profitable late variety, possessing all the qualities a winter keeper should have. It is hardy, vigorous, and high in quality. The heads are flat, very large, heavy and keep well for winter use. A favorite with the private gardener as well as the trucker.



Golden Acre



Copenhagen Market

FALL AND WINTER—(Continued)

Danish Ball Head (103 days. 7½ in. dia. 6½ lbs.) A very hardy sure heading, heavy variety, which has proven to be the best keeper and the most desirable for distant markets. Exceedingly hardy, standing dry weather very well and may be stored successfully until late spring. Heads almost globe shaped, very hard, interior very compact, tender texture, of good flavor. Ideal for high quality kraut.

***Wisconsin Hollander Yellows Resistant** (105 days. 7½ in. dia. 8 lbs.) A disease resistant strain of the Danish ball head type, very large, hard, sure heading.

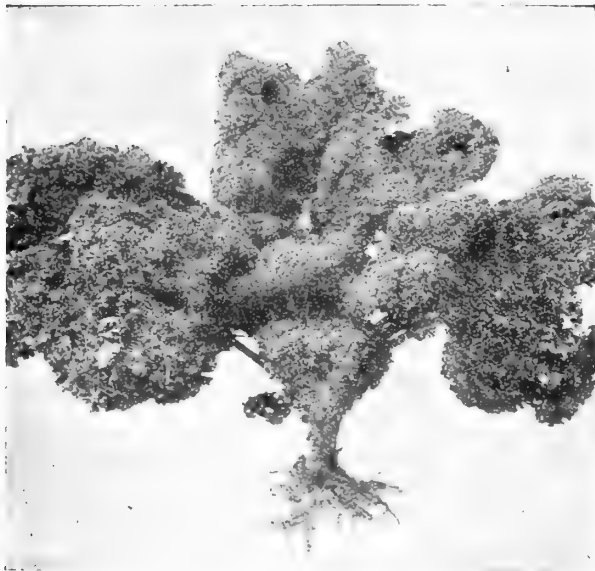
Penn State Ball Head (105 days. 7½ in. dia. 5½ lbs.) Hard flattened globe heads. Desirable for kraut and winter storage.

PRICES

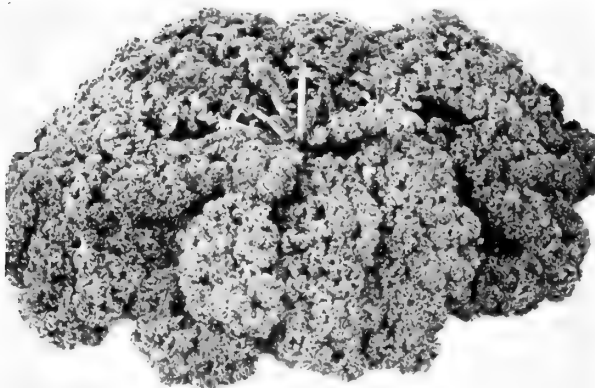
	Pkt.	Oz.	¼ Lb.	Lb.
All Head Early	\$.10	\$.30	\$.85	\$2.50
American Drumhead Savoy	.10	.45	1.35	4.00
Charleston Wakefield	.10	.30	.85	2.50
Chieftain Savoy	.10	.45	1.35	4.00
Copenhagen Market	.10	.60	1.00	3.00
Danish Ball Head	.10	.40	1.15	3.50
Early Flat Dutch	.10	.30	.85	2.50
Early Round Dutch	.10	.35	1.00	3.00
Glory of Enkhuizen	.10	.30	.85	2.50
Golden Acre (Original)	.10	.40	1.15	3.50
Green Acre	.10	.50	1.50	4.50
Jersey Wakefield (Selec'd)	.10	.30	.85	2.50
Large Late Flat Dutch	.10	.30	.85	2.50
Mammoth Rock Red	.10	.55	1.65	4.85
Penn State Ball Head	.10	.40	1.15	3.50
Pointed Head Winter	.10	.35	1.00	3.00
Premium Late Flat Dutch	.10	.30	.85	2.50

*YELLOW RESISTANT VARIETIES

All Head Select	.10	.45	1.35	4.00
Detroit (Resistant Golden Acre)	.10	.50	1.50	4.50
Jersey Queen	.10	.45	1.35	4.00
Marion Market	.10	.45	1.35	4.00
Globe (Resistant Glory)	.10	.45	1.35	4.00
Wisconsin All Seasons	.10	.45	1.35	4.00
Wisconsin Hollander No. 8	.10	.50	1.50	4.50



Borecole—Dwarf Green Scotch



Borecole—Curled Perfection



Borecole—Superior Extra Curled

Borecole Scotch Kale

1 oz. for 2,500 plants

Extensively grown in this section for marketing during the winter and early spring months, when other vegetables are scarce. Borecole should be grown like cabbage, the seed being sown from early spring to the middle of August. It is customary to pull off the lower leaves and let the plant grow on to furnish a continuous supply.

Blue Curled Scotch (55 days) Hardy as Hardy Winter and having very curly dark blue-green leaves.

Curled Perfection (55 days) An improved type, specially rogued and developed from a privately held American stock. Well curled and of a wonderful dark green color; winters well and commands top prices.

Dwarf Green Scotch (55 days) This excellent sort is low spreading and compact in its nature of growth, forming a mass of leaves which are beautifully curled. The color is an attractive bright green and the quality is excellent.

Hardy Winter (60 days) This variety is one of the most salable and profitable sorts for either the home or market gardener. The plant attains a height of 18 inches and produces an abundance of beautiful light green leaves, which are densely curled and crimped. It is extremely hardy and has the additional advantage of putting forth a second crop of leaves after the first have been gathered or have fallen off.

Superior Extra Curled Green Scotch (60 days) The leaves of this variety are very much more curled than the Dwarf Green Scotch, and many more bushels per acre can be cut due to the extremely vigorous growth, which is characteristic of this variety. Nearly as hardy as Hardy Winter, and very popular with many of our customers.

Brussels Sprouts

1 oz. will sow 500 ft. of drills or 3,000 plants

Sow in April for early crop or in early June for a late fall crop. Transplant to rows which are 3 to 4 feet apart, 18 to 24 inches apart in the rows. Will stand considerable frost without protection.

Early Morn (90 days) Found to be the best variety both in quality and productiveness. The sprouts develop very evenly over the entire stem, the lower sprouts being as tightly folded and as solid as those higher up.

Collards

Broadcast 1 lb. to 2 lbs. per acre—1 oz. to 300 ft. row

Cabbage or Heading (60 to 80 days) Produces compact plants 1½ to 2 ft. high. Large clusters of leaves often show a tendency to form a head.

PRICES				
	Pkt.	Oz.	¼ Lb.	Lb.
BORECOLE				
Blue Curled Scotch	.10	.20	.50	\$1.50
Curled Perfection	.10	.25	.75	2.25
Dwarf Green Scotch	.10	.20	.60	1.75
Hardy Winter	.10	.45	1.25	3.85
Superior Extra Curled	.10	.30	1.00	3.00
BRUSSELS SPROUTS				
Early Morn	.10	.55	1.60	5.00
COLLARDS				
Cabbage Collards	.10	.15	.30	.90
Georgia, Southern or Creole	.10	.15	.30	.90
Morris Improved Heading	.10	.30	.85	2.50
Winter Hardy	.10	.30	.60	2.00

Number of days indicates time from setting plants to first cutting



Broccoli

1 oz. to 2,000 plants

De Cicco (60 days) An extra early strain capable of producing large heads followed by quantities of side shoots excellent for bunching or freezing. Highly recommended as the earliest maturing Broccoli obtainable.

Calabrese Heading (80 days) Popular market gardeners variety making a good large central head and a fairly good crop of side shoots. Can be grown in the east as perfectly as any shipped into this section. There is now greater public demand for this delicious vegetable making it more than ever a profitable local crop.

40 Day Extra early foliage type used for spring crop "greens." Extensively grown in New Jersey for New York markets.

Italian Green Sprouting (Turnip Salad Broccoli.) Known in the South as Salad Broccoli, grows more "greens" than seven top turnip and is fairly hardy in Maryland, making a profitable cover crop. Sow in August broadcasting two to three pounds per acre and the sprouts will be ready for market during February or early March.



Broccoli Calabrese Heading

Cauliflower

1 oz. to 2,000 plants

For a successful early spring crop sow the seed during the last week in September. The young plants are shaded from excessive heat, protected from high winds and given just a moderate amount of moisture. Any plants showing signs of black stems or mildew are destroyed. When about 5 in. tall the plants are transplanted into 3" to 4" pots and protected from freezing until March. They are then removed to the field into rows 3 ft. apart and 2 ft. apart in rows, setting the plants so that the first leaf or eye is at ground level. As soon as the heads have attained a size of 2 to 2½ in. the surrounding leaves are gathered over the small heads and tied with a wooden peg or nail to keep them blanched a clean pure white. The crop is ready for home use or market about June 1st.

Some growers prefer to make their first sowing in hot-beds during January or February and transplanting them 2 to 3 in. apart, assuring vigorous growth before being set out in March.

A second sowing the first week in May transplanted to the field the last week in June will make a very satisfactory crop before heavy frost.

Sow SNOWBALL for Spring Crop and WHITE MOUNTAIN for Fall.

Early Snowball (55 days) Smaller than White Mountain, grown mainly for a late spring crop from seed sown in Fall or Winter. Sure heading if planted out very early in March.

White Mountain (60 days) The most dependable uniform heading variety for the vicinity of Baltimore. Produces 1½ to 2 lb. heads, 6½" to 7" in diameter about 60 days after setting plants. For best results sow seed May 15th to June 1st.

Cauliflower Plants See Page 39.

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
BROCCOLI				
Calabrese Heading	.....\$ .10	\$.30	\$.85	\$2.50
De Cicco (ex. early Calabrese)10	.50	4.50
Green Sprouting (Turnip Salad)10	.15	.45
40 Day10	.20	.60
CAULIFLOWER				
Early Snowball25	3.50	10.00
White Mountain25	3.50	10.00

Number of days indicates time from setting plants to first cutting

Carrots

1 oz. to 150 feet of drill; 4 pounds per acre

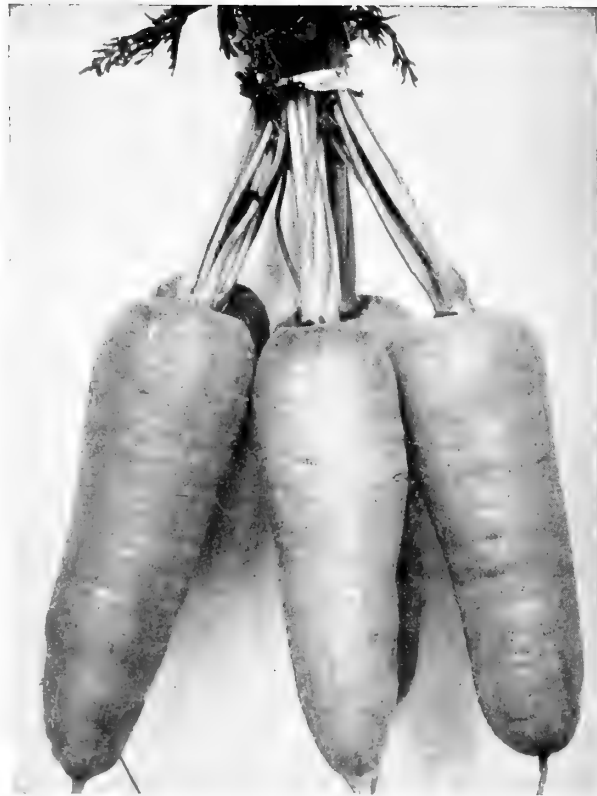
Our stock is grown from choice selected and transplanted roots only, and are of the truest type and richest color money can procure.

CULTURE.—Any good soil will grow this vegetable, but the most perfect roots, however, are developed in rich, friable, slightly alkaline soil, preferably sandy loam. The flavor and tenderness of the table varieties is secured by having a quick growth, which usually means good growing weather and proper cultivation. Sow as early as the ground can be worked or for late crop until the latter part of July, in drills 12 to 18 inches apart, finally thinning the plants to 2 to 3 inches in the drills. The seed is slow to germinate and if sown early or on moist soil, half an inch is deep enough. When sown during the hot summer months it is well to protect the seed bed with a thin layer of chips or straw as excessive heat will kill the vitality of the seeds before they germinate. After the seed has sprouted remove the covering, selecting the late afternoon for this work. Carrots are usually quite free from pests and diseases.

Coreless or Scarlet Nantes (68 days, 6 in. x 1 3/4 in.) The earliest of its type; size and shape uniform; bright orange in color; smooth skin; small top. Fine quality home garden variety.

Chantenay (Long) (70 days, 7 in. x 2 in.) A most excellent, medium early, half-long variety. Very uniform, stump-rooted but tapering slightly. Smooth, deep orange-red in color and the flesh very crisp and tender. Although a medium early sort the roots are suitable for use nearly as early as any, and will also prove very satisfactory if grown for winter use. Very easily harvested and bunched.

Danvers Half Long (75 days, 7 in. x 1 3/4 in.) This is an exceptionally fine carrot for private and market garden use. It is slightly longer than Chantenay and our strain produces uniformly smooth and evenly sized roots of handsome appearance. They are orange-red in color and the flesh is sweet, crisp and tender.



Chantenay

Sunrise (75 days, 7 in. x 2 in.) This variety has become a favorite with our market garden trade because of its fine quality, perfect shape and attractive color. Sunrise has been found to be specially valuable for medium and late use, an excellent keeper and thoroughly dependable. It is of most perfect form, pointed-rooted, with a broad, high shoulder. For main planting this sort has no superior, and when sown during June may be depended upon to produce the very best crop of roots to store for winter.

California Bunching (78 days, 7 in. x 1 1/2 in.) Developed especially as a bunching carrot for long distance shipping. Roots about 1 1/2 in. by 7 in. long, cylindrical stump rooted, deep orange color throughout, can be pulled before maturity or allowed to stand weeks later without becoming overgrown.

Improved Long Orange (85 days, 10 in. x 2 in.) A standard late variety, beautiful and uniform in shape, deep orange in color. The roots grow to a length of 12 inches and are of good quality for table use as well as for stock. They require a deep soil and if full size roots are wanted they should stand at least 8 inches apart in 18-inch rows.



California Bunching

PRICES

	Fkt.	Oz.	1/4 Lb.	Lb.
California Bunching	\$.10	\$.25	\$.75	\$2.25
Chantenay (Long)	.10	.20	.60	1.75
Danvers Half Long	.10	.20	.60	1.75
Imperator	.10	.20	.60	1.85
Improved Long Orange	.10	.20	.60	2.00
Louisiana Danvers	.10	.25	.75	2.25
Nantes Coreless (Special)	.10	.25	.75	2.25
No. 92—Large Busheling	.10	.25	.75	2.25
Oxheart	.10	.25	.75	2.25
Red Cored Danvers	.10	.20	.60	2.00
Sunrise	.10	.25	.75	2.25
Supreme Danvers	.10	.25	.75	2.25

Celery

1 oz. to 5,000 plants; 20,000 plants per acre

Celery seed is very slow to germinate and therefore should be started indoors in boxes from February to April or sown out of doors in a finely prepared seed bed during April. See that the seed is covered only about 1/16 inch and that the bed is kept moist, almost wet until the seeds germinate. When the plants are about two inches high thin out and transplant to a distance of two or three inches apart each way. These must be kept entirely free from weeds and when they are four inches high the tops may be cut off so that the plants will grow more stocky. The plants are usually set out in the permanent bed when five inches high and it is usually best to do this during July or the first of August. In some sections best results are obtained by transplanting in June.

The permanent beds should be thoroughly prepared and well enriched with rotted manure, which should be spaded in deeply, the rows being spaced 2½ to 3 feet apart. Cut off some of the root and set the plants 6 to 8 inches apart in the rows, firming the soil tightly, and cultivate them frequently for a period of six weeks. Celery needs plenty of moisture.

When the plants are nearly full grown they should be blanched. This is done by drawing the soil closely about the plants to about two-thirds of their height, being careful not to allow any of the earth to fall between the leaves. Repeat this process every few days until only the top of the leaves are visible. Do not disturb the plants while they are wet or the soil is damp as this is liable to result in injury from rust.

Number of days indicates time from setting plants. Add 60 days for days required from sowing of seed.

Cornell No. 19 (100 days) Developed and introduced by the New York State College of Agriculture and described as a cross between Golden Self Blanching and Utah. An early, easy blanching strain of outstanding quality. Is prevailing 10½ to 11 inches to joint with an overall height of 24 to 25 inches. Hearts long and comparatively full. Stems thick, rounded and of smooth texture. Combines the good qualities of the Pascal type with the early, easy blanching character and color of the Golden Self Blanching strains. Highly resistant to fusarium yellows.

Easy Bleacher (100 days) Blanches readily, vigorous in growth and a splendid keeper.

Utah Pascal No. 99 (125 days) Green midseason celery. Easier to blanch than Utah. Height 26 to 28 inches, stems 9 to 10 inches long; very heavy, rounded with narrow channel, slightly tapered from base to first joint. Stems numerous, forming compact head and hastening blanching of inner stems and hearts. Crystal smoothness and appearance when thoroughly blanched.

Winter Queen (130 days) Of medium height, an excellent winter keeping sort, producing thick, creamy white stalks which are broad, very solid and crisp. The hearts are large and it blanches well.

Giant Pascal (140 days) A superior quality and excellent keeping sort. The stalks are very large, thick, solid, crisp and of rich nutty flavor; it blanches very easily and quickly, and retains its freshness a long time. Fine home garden variety.



Golden Plume

Golden Plume (85 days) This new strain of Golden Self-Blanching, pronounced by authorities to be one of the best of all the early varieties. It matures two or three weeks earlier than other sorts, blanches more quickly and shows tendency to blight or crown-rot. The crisp, tender stalks are broad and the large full plumed centers are displayed to advantage.

Tall Non-bolting Golden Plume (90 days) Grows taller and faster than the original Golden Plume. Withstands low temperatures when planted out without bolting. It is the most satisfactory Golden Plume strain for an early crop.

PRICES				
CELERY	Pkt.	Oz.	¼ Lb.	Lb.
Cornell No. 19	.10	\$1.00	\$3.25	\$10.00
Easy Bleacher	.10	.95	2.85	8.50
Full Heart	.10	1.00	2.85	8.50
Giant Pascal (Special)	.10	.95	2.85	8.50
Golden Plume	.10	.95	2.85	8.50
Tall Non-bolting				
Golden Plume	.25	1.50	4.50	14.00
Utah Pascal No. 99	.10	.85	2.50	7.50
Winter Queen	.10	.85	2.50	7.50
CELERIAC (See Page 16)				
CELERY—LETTUCE				
Burpee's Celtuce, pkt., 15c;	¼ oz., 35c;	oz.,	\$1.25	

CELERY BLEACHERS			
No.	Size	Per 100	Per 500
B-3	7x14 in.	\$4.50	\$20.00

CELERY SETTERS	
No. H-2—Tin	\$1.35

CELERY PLANTS
 All Leading Varieties
 Ready During July and August
SEE PAGE 58

USE A FELINS VEGETABLE TYING MACHINE



Manns' No. 56—Note the low position of the ears, an evidence of extreme earliness

GROW HYBRIDIZED VARIETIES OF KNOWN ADAPTABILITY

The increased cost is only about \$2.00 more per acre, but the yield is increased 25% or more. All of the larger canning companies are now planting Hybrid Corn because of the certainty of a better yield and much better quality. It is important, however, to plant only seed grown by an expert hybridist as hybrid corn is not necessarily all desirable. The process is expensive, highly technical and requires the skill of a plant breeder. Buy hybridized corn; it has been grown by experts and has proven profitable for this section.

Please Note—It is useless to try to save seed from hybrid varieties of corn. They must be newly developed each year.

Lincoln Hybrid (83 days) All America winner for 1942—ears 7½ in. 12 to 16 rows, color bright yellow; stalks 6 ft.

Golden Cross Bantam (Hybrid) (85 days) Produces beautiful 8-inch ears having 10 to 14 rows of golden yellow kernels. It is resistant to wilt or Stewart's disease and is now the standard strain grown for the largest canners. As the crop matures very uniformly it should be planted at intervals of a week or ten days to assure a continuous supply.

Ioana Hybrid (87 days) Outstanding yellow hybrid developed by the Iowa Experiment Station, a few days later than Golden Cross. Ears about 8 inches long, 12 to 14 rowed, cylindrical, well fitted with medium narrow, light yellow kernels. Excellent canning and market garden variety. Very productive.

Stowell's Evergreen Hybrid (95 days) There are many Hybrids of the Stowell's Evergreen Variety but we have selected for you the most desirable and profitable hybrid based on Maryland Experiment Station tests, our own trials and reports of large growers. If you grow White Sugar Corn, be sure to plant Hybrid Stowell's. The ears are large, well filled, of beautiful appearance and excellent quality.

Corn

TABLE VARIETIES

1 quart to 200 hills; 1 peck per acre

Sugar Corn should not be planted until May, or when the ground is warm. For succession, plant about every two weeks until the last of July. All varieties may be either sown one inch deep in rows three to four feet apart, the seeds being placed about 8 inches apart in the rows, or they may be planted in hills at distances of three or four feet apart each way, allowing not more than 3 plants to a hill. The size of the variety and the richness of the soil should determine the distance of planting. Hybrid corn because of its deeper rooting character may be planted closer than open pollinated varieties. Cultivate frequently but shallow until the tassels appear.

Manns' No. 56 (65 days) The best most salable early market corn we have ever known. It can be planted extremely early without danger of rotting, which makes it possible to produce marketable ears at least five weeks ahead of Stowell's Evergreen. Resembles sugar corn, an excellent shipper, and a money maker.

Improved Early Adams (74 days) A distinct improvement over the Old Early Adams, fully as hardy; ears measure from 7 to 8½ inches in length, with 12 or more rows to the ear. Grains are narrow and deep, of good table quality.

Early Superior (83 days) This new variety is of remarkable size considering its earliness. The ears are 8 inches long and have 14 to 18 rows of rather narrow deep grains. The quality is excellent and the attractive appearance of the rich, tender, well-fitted ears make it a very desirable sort for the Market Gardener.

Early Evergreen (85 days) Ripens 10 to 12 days in advance of Stowell's Evergreen, and is equally as good in quality. Ears 6½ to 8½ in. Kernels sweet and tender; cob small, with irregular rows.

Stowell's Evergreen Extra Selected

(90-95 days) Grown more extensively than any other; a favorite with canners and market gardeners for late use. Ears of large size, 7½ to 9½ in., kernels very deep, tender and sugary, very productive and remains for a long time in fit condition for table use.

Country Gentleman (95 days) Very deep grains, small cob and exceedingly rich flavor. Often produces 3 to 4 6½ to 8 in. ears to the stalk. The grains are "staggered" on the cob, leaving no signs of rows.

White Evergreen (98 days) A pure white strain of the popular Stowell's Evergreen. Ears 7½ to 9½ in. Well filled from butt to tip with long, slender, pure white grains.

PRICES

	Pt.	Qt.	Pk.	Lbs.	50
Adams Early	\$.25	\$.45	\$2.00	\$6.00	
Black Mexican	.40	.75	4.00	12.50	
Country Gentleman					
(Shoe Peg)	.40	.75	4.00	11.00	
Early Evergreen	.40	.75	4.00	11.00	
Early Superior	.40	.75	4.00	12.50	
Golden Bantam	.40	.75	4.00	11.00	
Golden Evergreen	.40	.75	4.00	11.00	
Improved Early Adams	.25	.45	2.00	6.00	
Manns' No. 56	.50	.95	4.50		
Stowell's Evergreen Ex.					
Selected	.40	.75	4.00	11.00	
White Evergreen	.40	.75	4.00	11.00	
Pop Corn—South American Giant—25c lb.					

HYBRIDS

Golden Bounty	.65	1.25	6.25	22.50
Golden Cross Bantam				
Hybrid	.60	1.15	6.00	17.50
Golden Rocket	.65	1.25	6.25	22.50
Ioana	.65	1.15	6.00	20.00
Lincoln	.65	1.00	6.00	22.50
Marcross C6-13 (72 days)	.60	1.15	6.00	17.50
Stowell's Evergreen Hybrid	.65	1.25	6.25	22.50
Top Cross Country				
Gentleman	.65	1.25	6.25	22.50

Field Corn

We carefully follow Maryland Agricultural Experiment Station's reports in selecting for you the Hybrids best suited for Maryland



HYBRID CORN increases yield 15% to 25%, is resistant to smut, rust and wilt; has deeper and more vigorous root systems, therefore less affected by drought or severe wind.

OPEN POLLINATED VARIETIES

Clark's Early Smoky Dent The earliest Dent Corn in cultivation, maturing in 75 to 80 days; a good yielder, grows strong, quick, and has 7 to 8 foot fodder.

Iowa Silver Mine (90 days—Roasting ears 75 days) Deep grained, pure white, rough-topped, with a small white cob. Ears 9 to 12 in. long with 16 to 20 rows of pure white kernels. Stalks medium height, very leafy, with broad blades.

Lancaster County Sure Crop A favorite with dairy-men as a silage variety and also extremely valuable as a husking sort. Matures for silage in 90 days and for grain in 100 days producing long ears of deep large grains.

Pride of the North Maturing perfectly in 90 days, very hardy and prolific. A favorite among growers and planters needing a 90-day yellow variety. The ears are of medium size with very small cob. Kernels closely set, long and compact.

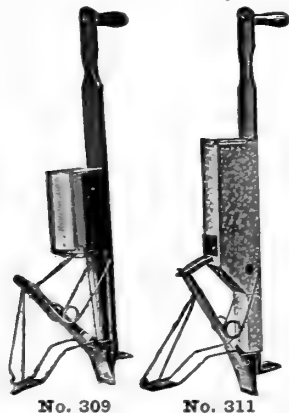
Ried's Yellow Dent (118 days) Probably the most popular open pollinated yellow variety.

HYBRID YELLOW VARIETIES

Iowa 939 (90-100 days) Plants are of medium height. The ears are rough, medium long, and have about 16 rows of medium deep reddish yellow grain. Yields well in average soils. Very popular with cattle feeders because of its non-flinty kernels.

U. S. 13 (100-110 days) Well adapted to this area and still used as the standard variety for comparing other hybrids. The deep green plants are tall, with medium high ears. Ears are large, carrying 20 to 22 rows of deep rich yellow medium soft grains. One of the highest yielding of all hybrids for both grain and silage.

Gold Line 378 (115-120 days) Dependable main crop. Variety somewhat resembling Ried's Yellow Dent. Ears 10 to 12 in. having 20 rows of rich golden yellow kernels. The strong, sturdy fodder stays green while the ears mature making it an excellent silage variety. Exceptional strong, sturdy root growth.



No. 311—Acme Segment Corn Planter

Automatic slide type, adjustable for number of Kernels and depth of planting. Has Chinese bristle brush cut-off. Can be used for beans. \$3.00.

No. 309—Acme Rotary Automatic Corn Planter

Full rotary Drop; having adjustable cast disk or seed plates, and depth gauge. Extremely accurate; also plants beans and peas. \$3.85.

PRICES

	Qt.	Pk.	Bu.
Clark's Early Smoky Dent.....	\$.35	\$1.75	\$5.85
Eureka Ensilage .....	.35	1.75	5.85
Iowa Silver Mine .....	.35	1.85	6.00
Lancaster County Sure Crop.....	.35	1.75	5.85
Leaming Improved Dent .....	.35	1.75	5.85
Pride of the North.....	.35	1.85	6.00
Ried's Yellow Dent.....	.35	1.75	5.85

HYBRIDS

Gold Line 378.....	.50	2.85	10.00
Iowa 939 (Certified) .....	.50	2.85	10.00
U. S. 13 (Certified).....	.50	2.85	10.00
Kentucky 203 (Certified) White..	.50	2.95	10.25



Chicory—Witloof

Chicory

1 oz. to 80 ft. of row; 4 lbs. per acre

Witloof (French Endive) (95 days) A very choice winter salad forced in hotbeds from roots previously grown outdoors; producing solid oblong heads blanched ivory white.

Chard (Swiss)

1 oz. to 150 ft. of row; 8 lbs. per acre

Sow seeds the same as ordinary beet seed but thin out at first to 6 inches apart, later to 1 foot apart.

Common Green (Spinach Beet) (55 days) Also known as Perpetual Spinach. Light green smooth leaves with small midrib. A particularly good garden item in hot weather when true spinach is out of season.

Fordhook Giant (55 days) The best Swiss Chard in cultivation, producing extremely large, heavily savoyed leaves of a beautiful glossy, very dark green color. Ribs broad, thick, white.



Swiss Chard—Fordhook Giant



Large Smooth Prague Celeriac

Celeriac

1 oz. to 200 ft. of row; ¼ lb. per acre

Sow seed and cultivate same as celery, with the exception that it is not necessary to blanch the plants. When the roots attain a diameter of two inches they are fit for use. To keep these through the winter, pack in damp earth or sand and store them in a cellar or leave them out of doors, covering with earth and straw for protection.

Large Smooth Prague (120 days) One of the largest, very smooth and almost round with very few side roots. Plants are vigorous, with large dark green foliage.

Chinese Cabbage

1 oz. to 150 ft. of row; 2 lbs. per acre

Chinese or Celery Cabbage belongs to the cabbage family but more closely resembles lettuce. For best results plant the seed in July or very early in August as spring plantings in this section are liable to bolt to seed. Plant the seed in the permanent bed and thin out to stand 12 to 15 inches apart.

Chihli (or Improved Peking) (75 days) A long slender type 3 to 4 in. thick, 16 to 18 in. long. Now the most popular strain in Baltimore, New York and Washington markets. Solid, crisp, well blanched, tender heads of excellent quality.

PRICES				
	Pkt.	Oz.	¼ Lb.	Lb.
CELERIAC				
Large Smooth Prague....	\$.10	\$.65	\$2.00	\$6.00
CHARD (SWISS)				
Common Green (Spinach Beet) .....	.10	.15	.40	1.25
Fordhook Giant .....	.10	.15	.40	1.25
CHICORY				
Witloof .....	.10	.50	1.50	5.00
CHINESE CABBAGE				
Improved Peking—Chihli .	.10	.20	.60	2.00

Cucumbers

1 oz. to 100 hills or 100 ft. of row; 2 lbs. per acre

Plant as soon as the weather becomes settled in hills 4 feet apart each way, with 8 or 10 seeds in each hill, cover half an inch deep, smoothing the hill off with the hoe. Keep the soil well stirred, and when the plants are out of danger of insects thin to 4 plants to the hill. Another very successful method is to sow the seed in rows, thinning to stand 12 in. apart in the row. For pickles, plant from the first of June to the first of August. Whether growing slicers or picklers the fruit should be gathered when large enough, for if left to ripen on the vines, it destroys their productive uses.

Packer (56 days) High yielding and very attractive uniform dark green pickler, 6 in. by 2½ in.

Gherkins or Burr (60 days) Very small, quite distinct from all others, grown exclusively for pickling, and should be picked when young and tender.

Klondike (64 days) An old favorite with market gardeners and shippers. The handsome dark green cucumbers average 7 inches long and 2 to 3 inches in diameter.

Early Fortune (65 days) Early, very productive, and having unusual disease-resisting ability. Fruits are 8 inches long with very dark green skin and thick, firm flesh which is crisp and tender. Excellent shipper.

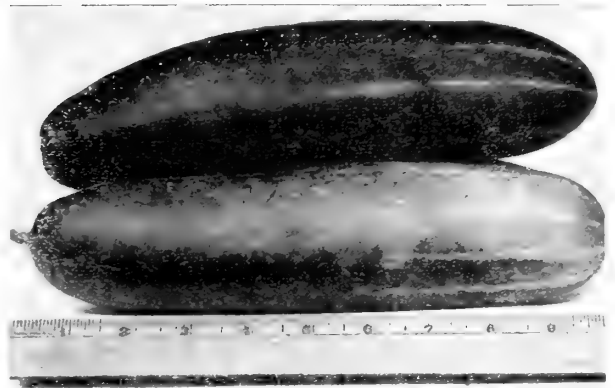
Marketer (65 days) Vines very vigorous and prolific; fruits very dark green, slightly tapered at ends. Notably uniform and attractive.

Straight 8 (66 days) All American Gold Medal Winner 1935, producing symmetrical fruits, well rounded at both ends. Regularly eight inches in length and from 1¾ to 2 inches in diameter, deep green and free from pale striping and tipping. Vines are vigorous and remarkably productive.

Long Green (Improved) (67 days) Under favorable conditions, produces fruit averaging from 10 to 12 inches in length. Skin is a deep rich green, flesh solid, crisp and of excellent quality.

A & C (68 days) An All American Winner in 1935, now a leading market and shipping variety. 9 to 11 inches long by 2¼ inch diameter, blunt at both ends, very dark. In some sections A & C has now replaced all other varieties.

Cubit (68 days) An All American Winner in 1935, crop variety of uniform dark green color. Long, blunt at both ends, crisp, and holds its fresh quality well for shipping or market.



A & C

Japanese Climbing (70 days) Vines are extra strong, vigorous; being a climbing sort, can be grown on trellises, etc.; valuable in small gardens. Very prolific. Fruit 2 in. by 7 in. of fair quality.

Longfellow Straight Pack (70 days) This variety was developed primarily for greenhouse culture; its quality, size and attractive appearance, however, have definitely established it as one of the best for outdoor production. The beautiful dark green cucumbers average 12 inches in length and are adaptable for packing in flats for the very highest class trade.

PRICES				
	Pkt.	Oz.	¼ Lb.	Lb.
A. & C.	\$.10	\$.30	\$.85	\$2.50
Black Diamond (or Stays Green) .....	.10	.25	.75	2.25
Boston Pickling or Green Prolific .....	.10	.20	.60	1.75
Cubit .....	.10	.30	.95	2.85
Davis Blend .....	.10	.35	1.00	3.00
Early Fortune .....	.10	.20	.60	1.75
Gherkins or Burr .....	.10	.20	.60	2.00
Japanese Climbing .....	.10	.20	.60	2.00
Klondike .....	.10	.20	.60	1.75
Longfellow or Straight Pack .....	.10	.25	.75	2.25
Long Green (Improved) ..	.10	.20	.60	2.00
Marketer .....	.10	.30	.90	2.75
National Pickling .....	.10	.20	.60	1.75
Packer .....	.10	.30	.90	2.75
Straight 8 .....	.10	.30	.85	2.50



Straight 8



Marketer

Egg Plant

1 oz. will produce 1,000 plants

Sow in March in hotbeds, and transplant when 2 inches high to 4 inches apart. When the weather becomes settled, transplant into the open ground 3 feet apart each way. Work the ground deep, make it rich with well-rotted manure and hoe often.

Black Beauty (80 days) Large globe to oval shaped fruits, smooth, glossy, very dark purple. Holds color well after picking.

Florida High Bush (85 days) Very vigorous and productive; resistant to drought and root rot. Of upright growth holding the fruit well off the ground; elongated, tapering toward stem, good shipper.

Chives

1 oz. to 150 ft.

Small hardy perennial ready for use in 85 days, resembling the onion in appearance and growing in clusters. Grown for the young leaves which give a mild onion flavor to sausage, salads and various dishes.

Cress

1 oz. to 150 ft. of row; 3 lbs. per acre

Dwarf annual and perennial plants of mild to pungent flavor used for salads and garnishing. They require moist soils, thrive during the cool seasons in well shaded places where an ample supply of moisture is constantly available.

Garden (Curled or Pepper) (42 days) Dwarf compact fast growing annual having finely curled deep green foliage.

American Upland (45 days) Dwarf plant with notched oval leaves of a mild flavor grown in this area as a fall and winter crop. Sown in July or August; requires a fertile moist soil.

True Water (100 days) Hardy perennial with long stems and small thick divided leaves having a sharp pungent flavor. Thrives along moist banks or in soil covered with shallow fresh water.



Endive—Full Heart



Black Beauty Egg Plant

Corn Salad

1 oz. to 20 sq. ft.; 6 lbs. per acre

Large Seeded Dutch (50 days) Used as a salad. Sown in the early spring in rows 1 foot apart, it is fit to use in 6 or 8 weeks. If wanted in early spring, sow in September and cover with straw as soon as cold weather sets in. Can also be grown in protected cold frames and used any time during the winter.

Dandelion

1 oz. to 200 ft.; 2 lbs. per acre

Arlington (95 days) The best market garden strain, forming large, glossy, stocky, thick-leaved plants, white-ribbed.

Endive

1 oz. to 100 ft. of drill; 3 lbs. per acre

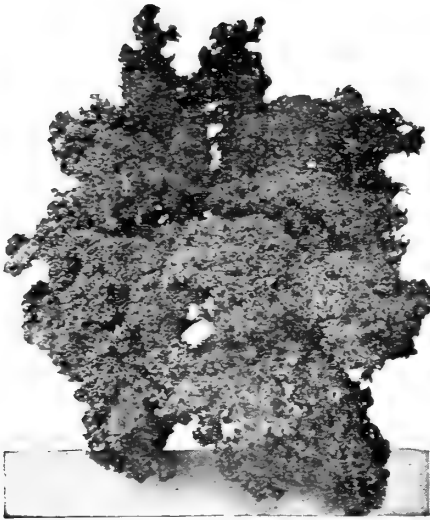
Full Heart Batavian (Escarolle) (90 days) The most widely used variety of Endive; an improved Broad Leaved Batavian with thicker and broader heads; matures slightly earlier, requiring only 90 days from sowing of seed to heading.

Green Curled (95 days) This is the hardest variety, and very desirable for the home and market garden. The deep green leaves are beautifully cut and curled, easily blanched, and become very crisp, tender and fine-flavored.

Fennel

Florence (Finocchia) (110 days) In great demand with Italian trade. The leaf stalks are clustered in a bulb-like formation, and when these are about 1½ inches wide, the plants should be hilled up to about half their height.

	PKT.	Oz.	¼ Lb.	Lb.
PRICES				
CHIVES	\$. 10	\$1.50	...	...
CORN SALAD				
Large Dutch .....	.10	.35	1.00	3.00
CRESS				
American Upland .....	.10	.20	.50	1.50
Garden (Curled or Pepper) .....	.10	.20	.60	2.00
True Water .....	.10	.90	2.75	5.25
DANDELION				
Arlington .....	.10	.60	2.00	6.00
Italian (Ciccoria Catalogna) .....	.10	.50	1.50	4.50
EGG PLANT				
Black Beauty .....	.10	.60	2.00	7.00
Florida High Bush .....	.10	.60	2.00	7.00
ENDIVE				
Full Heart Batavian .....	.10	.20	.50	1.50
Green Curled .....	.10	.20	.50	1.50
FENNEL				
Florence .....	.10	.20	.50	1.50



Kale, Extra Curled—Long Standing



Monstrous Carentan Leek



Early White Vienna

Kale (Siberian)

Broadcast, 2 to 3 lbs. per acre; 1 oz. to 200 ft. of drill

The Kales are more hardy than Cabbage, and make excellent greens for winter and spring use. For early spring use, sow broadcast in September. For later use sow in April or May.

Extra Curled Long Standing (65 days) An improvement on the well-known German Extra Curled Kale; beautifully curled, of strong, vigorous habit, perfectly hardy and slow-shooting to seed.

Extra Early Siberian (60 days) Ready for cutting earlier in spring than Long Standing.

Manns' No. 640 (65 days) The longest standing of any Kale we know, beautifully curled and having a distinct bright green color.

Spring Smooth Leaf or Hanover Salad (30 days) Quick-growing, very hardy smooth leaf sort, tender when young.

Scotch Kale, Borecole SEE PAGE 10

Kohlrabi

1 oz. will produce 1,500 plants

This forms a bulb above the ground, and has a distinct fresh green delicious flavor. Sow in April in rows 18 inches apart, thinning out to 8 inches between the plants. Also grown as a fall crop by sowing August 1st.

Early White Vienna (55 days) Excellent for forcing and of fine quality. The bulbs grow to the size of an apple when ready for use, and are a pale whitish-green.

Triumph-Prague (50 days) Extremely early forcing variety, winner in "All-American" trials.

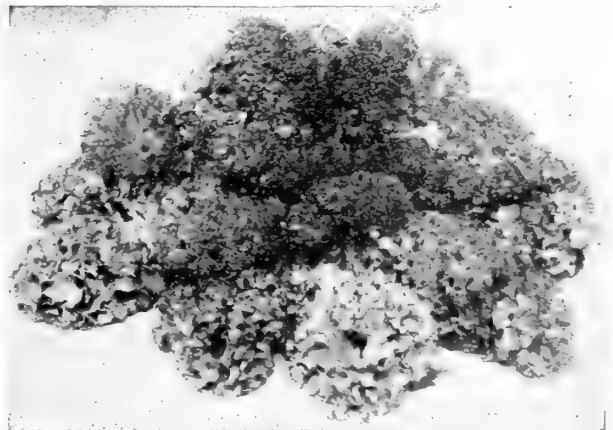
Leek

1 oz. to 150 yds. of drill; 4 lbs. per acre

Sow early in the spring in drills 1 inch deep and 12 inches apart, when about 6 inches high transplant into deep, rich soil, 5 inches apart; use a dibble and plant deeply, close to their leaves.

Monstrous Carentan (150 days) OF SCOTCH CHAMPION. size; leaves fan-shaped, dark green; the edible stem is 6 to 8 inches long and 3 inches in diameter.

Special Big No. 7 (150 days) Improved large variety with unusually long thick white stalk.



Kale—Early Siberian

PRICES

HERBS

	Pkt.	¼ Oz.	Oz.	¼ Lb.	Lb.
Caraway	\$.10	\$.25	\$.15	\$.40	
Chives	.10	.25	.75	2.50	
Dill, extra large, lb., \$1.25	.10		.15	.40	
Marjoram, sweet	.10	.20	.60	2.00	
Sage, lb., \$6.00	.10	.20	.60	2.00	
Summer Savory	.10	.20	.60	2.00	
Thyme, lb., \$12.00	.10	.30	1.00	3.50	

KALE

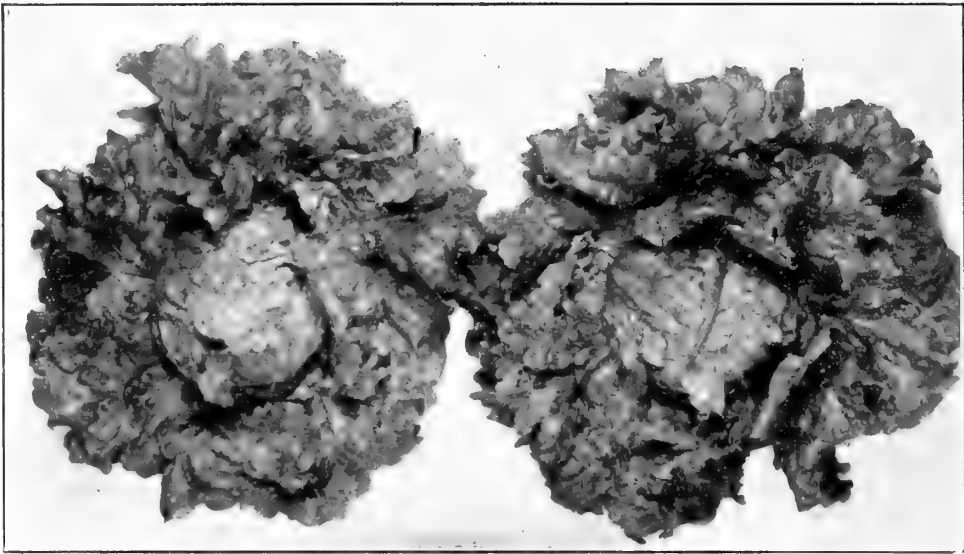
	Pkt.	Oz.	¼ Lb.	Lb.
Extra Curled Long Standing	\$.10	\$.25	\$.75	\$2.25
Manns' No. 640	.10	.30	.85	2.50
Siberian Kale (Extra Early)	.10	.15	.40	1.25
Spring Smooth Leaf (Hanover)		.10	.20	.50
Hanover Late Seeding	.10	.15	.25	.75

KOHLRABI

Early White Vienna	.10	.50	1.35	4.00
Triumph-Prague	.10	.50	1.35	4.00

LEEK

Large American Flag	.10	.55	1.65	5.00
Monstrous Carentan	.10	.55	1.65	5.00
Special Big No. 7	.10	.60	2.00	6.00



Imperial Iceberg No. 847

Lettuce

1 oz. to 2,500 plants; 3 lbs. per acre

Days given represent time for growing marketable heads from date of sowing seed.

Lettuce to be at its best should be grown rapidly, hence the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For early crop sow in a seed-bed in September or October and protect through the winter with cold frames, which should be removed as soon as danger of severe freezing is past. Lettuce in the open ground will stand some freezing but is killed by prolonged frost or frequent freezing and thawing. The seed may also be sown in hotbeds in March, and the plants, if well hardened, may usually be set in the open ground in April, maturing a crop much earlier than complete open ground cultivation would produce. If, however, it is not convenient to get the plants started either in the fall or early spring in hotbeds, the seed may be sown in open ground from the middle of April until July, selecting varieties suitable for the season.

The plants should stand 8 to 16 inches apart in the rows according to variety and the rows should be about 18 inches apart. Heading varieties particularly should be well spaced to afford plenty of air circulation which helps materially in preventing bolting to seed.

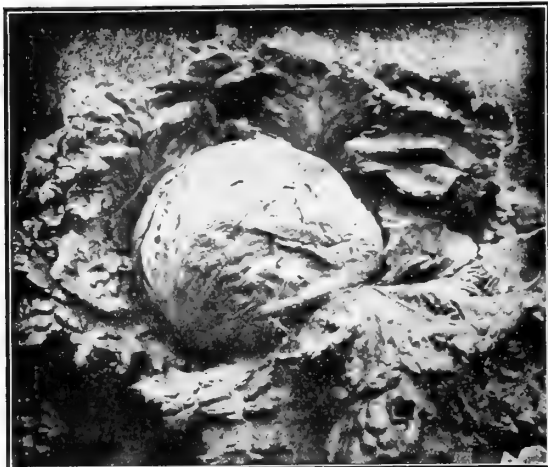
Grand Rapids (43 days) Popular loose-leaf garden lettuce being replaced by Slobolt.

Slobolt (45 days) An excellent high quality, crisp loose leaf variety developed by the U. S. Dept. of Agr. A Grand Rapids type, remaining in perfect edible condition for a long period.

Bibb (57 days) Finest quality home gardeners extra early head lettuce; forms small very dark green head. Must be grown to head very early in summer or very late as it readily bolts to seed in hot weather.

May King (65 days) Extremely early, compact, forming very firm heads of medium size and excellent quality. Color light yellowish-green, tinged with reddish-brown when mature. Inner leaves blanch rich golden-yellow, very tender and buttery.

All Seasons (70 days) One of the best all-head Lettuces, standing the hot sun to a remarkable degree, slow to seed. The outer leaves are a bright soft green; the finely-blanchd inner leaves are a rich golden-yellow, tender and mild in flavor. The heads are broad and nearly flat at the top, they continue to increase in size for about two weeks after they are ready for use.



Imperial Iceberg No. 44

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
All Seasons	.10	.20	.60	2.00
Bibb	.10	.45	1.25	3.75
Big Boston	.10	.20	.60	2.00
Cos, or Romaine (White)	.10	.20	.60	1.75
Cos, Extra Dark Green	.10	.20	.60	2.00
Grand Rapids	.10	.20	.60	1.75
Great Lakes	.10	.50	1.65	5.00
Iceberg	.10	.40	1.00	3.40
Imperial No. 44	.10	.40	1.00	3.40
Cornell No. 456	.10	.60	1.85	5.50
Imperial Iceberg No. 847	.10	.40	1.00	3.40
May King	.10	.20	.60	2.00
Oakleaf	.10	.40	1.15	3.50
Slobolt	.10	.45	1.25	3.75
Unrivalled	.10	.20	.60	1.75
White Boston	.10	.20	.60	1.75



Manns' Lettuce Seed is used by the largest commercial growers

Lettuce

Unrivalled (75 days) Medium sized, nearly globular heads; outer leaves pale green, interior nearly white, tender and sweet. A dependable header.

White Boston (75 days) A very light green type somewhat similar in size, shape and uses to Unrivalled and Big Boston. Entirely free from red edge and gaining in popularity among market gardeners.

Cornell No. 456 (80 days) A very sure heading Imperial type, resistant to early bolting and to tip burn. Frame and head slightly smaller than Great Lakes and of lighter color. Particularly adapted for muck soils.

Great Lakes (82 days) One of the most satisfactory of the Imperials. Large and vigorous, attractive color, resistant to tip burn and stands up well in hot weather.

Imperial Iceberg No. 44 (82 days) Developed in California by Dr. Jagger of the U. S. D. A. primarily as a sure heading, disease resistant variety for shipping to the eastern markets. Its adaptability to many various growing centers and a wide range of climatic conditions make it one of the most dependable and sure heading types of Iceberg for this section.

Imperial Iceberg No. 847 (84 days) Black seeded strain grown successfully in the east and south for several years. Produces large size, solid, well rounded heads under conditions where other Iceberg types do not succeed.



White Boston

COS (ROMAINE) LETTUCE

White Cos (68 days)

Grows to very large size, producing long - pointed, compact bunches. The outer leaves are closely folded about the center and interior is well blanched.



Cos Lettuce

Cos, Extra Dark Green (68 days) Similar to White but darker in color.

LETTUCE PLANTS

FRESH DAILY IN SEASON—See Page 58

Muskmelon

CANTALOUPE

1 oz. for 50 hills; 3 lbs. per acre

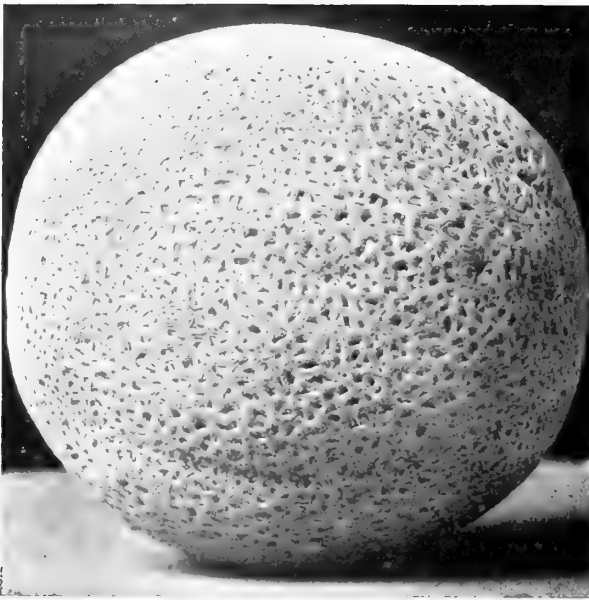
The most suitable soil for melons is a warm, sandy loam, well worked and enriched with rotted manure. After danger from frost is over, sow ten to twelve seeds to a hill, about 2 inches deep; the hills being six feet apart each way. When the plants have the second pair of leaves and danger from insects is past, thin out to four plants to a hill. Many large growers produce potted plants in hotbeds, thereby assuring an earlier crop to set out in May or earlier under Hotkaps. Cultivate frequently, deeply away from the plants and shallow close to them. When hoeing, remove the crust from around the plants and replace with fine, loose soil.

GREEN FLESHED VARIETIES

Knight's Early Maryland (82 days) An extremely early medium sized melon. Fruit oblong, skin deep green, turning to golden at maturity, well covered with a close gray netting and distinctly ribbed; flesh fairly thick and very sweet; color medium green blending to light pink near the center. The earliest high quality green flesh melon and a good shipper.

Jasper (90 days) Our stock of this Anne Arundel County variety is a definitely established fixed type which is well netted, uniform in size and shape and of excellent quality. It is prolific, medium early and in general a profitable variety to grow.

Improved Rocky Ford, Jr. (90 days) A large will resistant type of Rocky Ford. Fruit oval, slightly ribbed, densely covered with coarse netting. Flesh light green, very thick and highly flavored.



Texas No. 1

Long John (100 days) Very large, oblong, green fleshed, sweet.

Honey Ball (105 days) Possesses characteristics that make it one of the finest melons that has ever been offered to the grower, the shipper and the consumer. Exceedingly prolific, individual plants producing as many as fifteen to twenty 5 in. dia. cantaloupes to the plant.

Honey Dew (112 days) A melon of the Cassaba type. The fruit is large, oval in form, about 10 inches long and 8 inches in diameter; thick flesh is light green in color, ripening to the rind, very tender, with an extreme sweetness. The vines are vigorous and set 6 to 10 melons to the hill. An excellent shipper, will keep for several weeks even when fully ripe.

SALMON FLESHED VARIETIES

Hale's Best Jumbo (83 to 88 days) A leading variety for market gardeners and shippers. Fruits oval, about 7½ x 6 inches, weighing 5 to 6 lbs., heavily netted and with ribbing somewhat prominent. Flesh is thick, sweet and of excellent quality.

Hale's Best No. 45 (85 to 90 days) An important shipping and home garden variety, resistant to powdery mildew, having thick, firm, sweet flesh with very small seed cavity. Fruits oval about 6½ x 5 inches and weighing 3 to 4 lbs., indistinct ribs, can be picked for shipment when nearly full ripe.

Sugar Rock (85 days) A valuable distinct type. Sweet as sugar and solid. Has marvelous flavor and can be thoroughly ripened before picking. A remarkably heavy yielder.

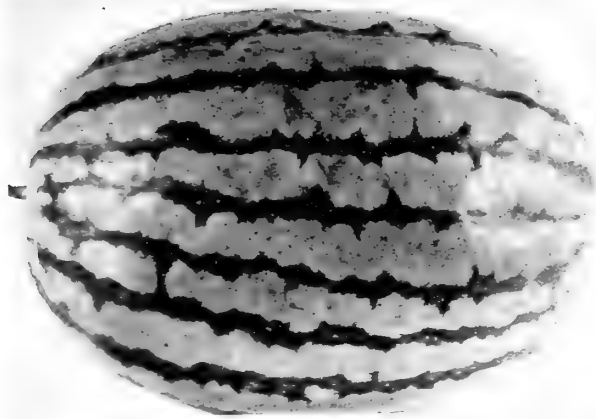
Texas No. 1 A cross between Porto Rican Rocky Dew and Hale's Best, developed by the Texas Exp. Sta.; extremely prolific, resistant to downey mildew and aphids, fruits about 7 in. long by 6 in. in dia. with very thick flesh.

PRICES

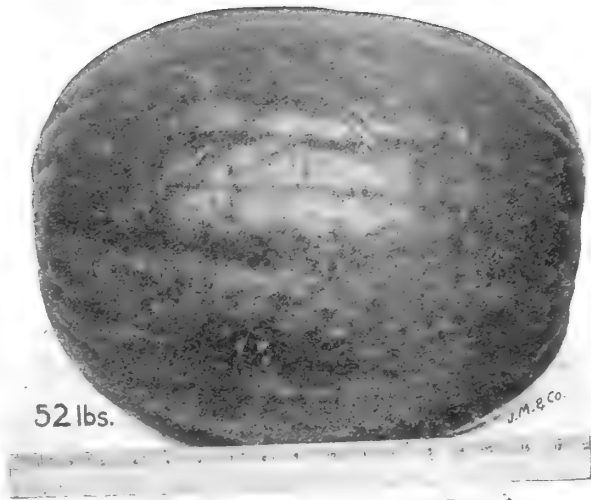
	Pkt.	Oz.	¼ Lb.	Lb.
Benders Surprise	.10	.20	.60	2.00
Golden Honey Dew	.10	.20	.65	2.00
Hale's Best Jumbo	.10	.20	.65	2.00
Hale's Best No. 45	.10	.20	.65	2.00
Honey Ball	.10	.20	.60	1.75
Honey Dew	.10	.20	.60	2.00
Jasper	.10	.30	.85	2.50
Knight's Early Maryland	.10	.20	.60	2.00
Long John	.10	.30	1.00	3.00
Pride of Wisconsin	.10	.30	.85	2.50
Rocky Ford Improved, Jr.	.10	.35	1.00	3.00
Schoon's Hard Shell	.10	.25	.80	2.40
Sugar Rock	.10	.25	.75	2.25
Texas No. 1	.10	.40	1.15	3.50



Imperial—Hale's Best



Dixie Queen



Stone Mountain

Watermelon

1 oz. for 30 hills; 3 or 4 lbs. per acre

Cultivate exactly as for Cantaloupe, except that the hills should be 8 to 10 feet apart.

Early Canada (75 days) Perhaps the earliest good quality melon, usually about 9 inches in diameter, nearly round.

Blacklee (85 days) Developed at Florida Exp. Sta. Vigorous, very resistant to Fusarium Wilt. Fruits long dark green, flesh bright red of sweet flavor. Weight 35 lbs.

Dixie Queen (85 days) A fine-flavored, early round melon; skin striped dark green and greenish ivory, flesh bright red, solid and sweet. Shipped as White Seeded Cuban Queen. Weight 30 lbs.

Kleckley's Sweet (85 days) This very popular melon is one of the best for nearby markets. Fruits are medium size, oblong, of a dark green color and have very thin rind. Flesh bright scarlet with solid heart, crisp, sugary and melting, and entirely free from stringiness. Weight 30 lbs.

Stone Mountain (90 days) The outstanding introduction in the last few years. Can be shipped long distances and its edible qualities are distinctly superior to any other shipping variety. Weight 35 to 40 lbs.

Florida Giant (95 days)—Vigorous and prolific; fruits very large, nearly round, flesh bright red, crisp and sweet. Weight 40 to 50 lbs.

Tom Watson (95 days) A large long melon with dark green rind and light crimson flesh of excellent quality, and a splendid shipper. Weight 35 to 40 lbs.

Mushrooms

Anyone with a fair understanding of the cultural requirements can grow Mushrooms successfully in any climate and in any season where the following conditions obtain:

1. Good spawn, procured from a reliable source.
2. A properly prepared bed with reasonable protection against weather extremes.
3. A temperature not greatly exceeding 60° F. nor much lower than 50° F.
4. A fairly moist temperature, avoiding the too frequent and direct application of water to the beds.
5. A gradual renewal of the air, avoiding draughts.

One brick will seed an area of 8 to 10 square feet. One quart bottle will seed an area of 35 to 40 square feet, depending on the size of piece planted. Full cultural directions free with purchase of spawn.

Bricks 30c ea., 10 bricks \$2.75, bottle spawn \$1.00 ea.

PRICES

MUSTARD	Pkt.	¼ Lb.	Lb.	10 Lb.
Fordhook Fancy	\$.10	\$.30	\$1.00	\$9.00
Giant Southern Curled	.10	.30	.85	7.50
Tendergreen (Mustard Spinach)	.10	.30	1.00	9.00
WATERMELON	Pkt.	Oz.	¼ Lb.	Lb.
Blacklee (Wilt Resistant)	\$.10	\$.30	\$.85	\$2.50
Dixie Queen	.10	.30	.85	2.50
Early Canada	.10	.25	.75	2.25
Florida Giant	.10	.20	.60	2.00
Garrison (90 days)	.10	.35	1.00	3.00
Kleckley's Sweet	.10	.20	.60	2.00
Stone Mountain	.10	.20	.60	1.75
Tom Watson	.10	.20	.50	1.50

Mustard



1 oz. to 200 ft. of drill; 4 lbs. per acre

Sow the seed early in the spring thinly in rows about a foot apart. For fall use sow in August.

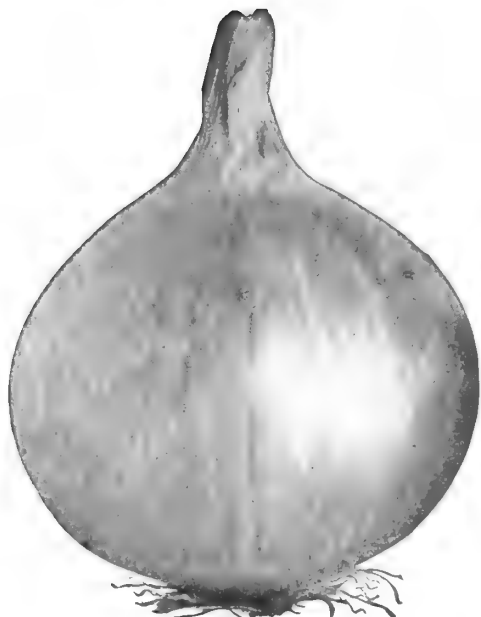
Fordhook Fancy (65 days) Darker green and leaves more curled at the edges than any other sort.

Giant Southern Curled (65 days) The largest variety, forming a mass of finely curled leaves of good flavor; hardy and vigorous.

Onions

To grow large bulbs 1 oz. to 100 ft. of drill; 4 to 5 lbs. per acre. To grow sets 10 oz. to 100 ft. of drill; 50 lbs. per acre.

The Onion must have a clean and very rich soil. Use well rotted manure freely, and get the seed in as early as possible in the spring, no matter if it is cold and unpleasant. If onions do not get a good growth before hot, dry weather, the crop is sure to be a failure. Keep the soil mellow and clear of weeds. Sow in shallow drills, not less than a foot apart nor more than half an inch deep. As onions grow on top of the ground, they may be allowed to remain pretty thick, no matter if they crowd each other. In hoeing, destroy weeds and keep the ground mellow; do not cover the young bulbs with earth. Harvest while tops are partially green and just after they fall over. This is indication of proper maturity for best storage results.



White Silver Skin Onion

White Queen (90 days) Used extensively for a bunch onion, solid flesh of a mild flavor.

Early Yellow Globe (100 days) Matures medium large uniform globe-shaped bulbs which keep exceptionally well.

White Silver Skin, or Portugal (100 days) Used for growing sets and picklers. It is a good keeper. The bulbs grow to good size, ripening early and quite evenly. The flesh is mild and sweet, the thin skin a clear silvery white, of handsome appearance if the bulbs are gathered as soon as ripened and carefully dried under shelter away from the strong sunlight. When seed is sown at the rate of 20 to 25 pounds per acre, it makes bulbs of suitable size and most desirable for pickling.

Southport White Globe (110 days) Pure white, true globe form with very crisp flesh, exceedingly mild and fine grained.

Yellow Globe Danvers (110 days) Grows to a good size, slightly flattened globe shape, with thin yellow skin, white flesh, fine grained and excellent quality. Ripens early, keeps well and is very productive.

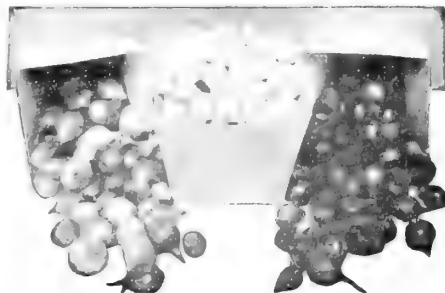
Prizetaker (115 days) Produces extra large, well-ripened bulbs the first season from seed; flesh white; crisp and mild in flavor. The skin is thin, of a bright straw-yellow; form nearly a perfect globe. Under ordinary cultivation this variety will yield bulbs nearly three times as large as the Globe Danvers, while under special cultivation specimen bulbs have been raised to weigh from 4 to 5 pounds each.

Golden Globe (Bottle Neck) (118 days) Very good storage or market type, medium light, deep globe bottle neck shape, skin dark golden, flesh creamy yellow, crisp, firm and mild.

Use a

FELINS TYING MACHINE

FOR BUNCHING SPRING ONIONS



ONION SETS

FINE QUALITY MARKET GARDENERS STOCK

25c qt.—Pk. (8 lbs.) \$1.50

Subject to change. Postage Extra

Let Us Quote Larger Quantities

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
Danvers—Yellow Globe ..	.10	\$.40	\$1.15	\$3.50
Early Yellow Globe.....	.10	.50	1.50	4.50
Golden Globe .....	.10	.55	1.65	5.00
Prizetaker .....	.10	.45	1.35	4.00
Southport White Globe...	.10	.55	1.65	5.00
White Bunching .....	.10	.60	2.00	6.00
White Queen .....	.10	.55	1.65	5.00
White Silver Skin, or Portugal .....	.10	.45	1.35	4.00
Yellow Sweet Spanish ...	.10	.55	1.65	5.00



Early Yellow Globe



Okra

Okra or Gumbo

1 oz. to 30 ft.; 10 lbs. per acre

Sow in drills during April and May. Thin plants to 12 inches apart and draw earth to the stems for support.

Clemson Spineless (55-60 days) Introduced by Clemson Exp. Sta. An All-American Winner. Plant about 3 foot tall, extremely prolific producing straight tender spineless deep green pods of excellent quality.

Dwarf Green Prolific (50-55 days) A distinct variety, growing about 14 inches high; very prolific.

Parsley

1 oz. to 150 ft. of drill

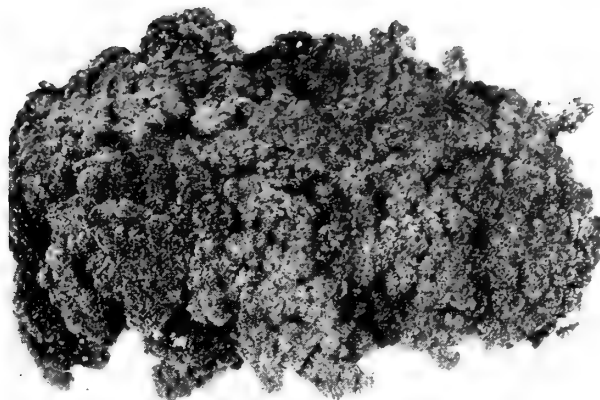
Sow in rows 1 foot apart and 1 inch apart in the row. The seed is slow to germinate, and should be given the most favorable conditions. A deep, rich loamy soil is required. For winter use a few plants placed in a box in the cellar will give a supply.

Champion Extra Dark Moss Curled

(70 days) The large leaves are very heavily crimped and curled. Very productive and most attractive, dark green color and fine mossy appearance.

Green Castle (85 days) An extremely hardy, late or main crop variety which grows rather slowly early, but is tall and densely curled.

Hamburg or Turnip-Rooted (90 days) The large fleshy root, which resembles the root of a Parsnip, and is highly esteemed for flavoring soups, stews, etc.



Champion Extra Dark Moss Curled



Parsley grown in N. J., under Irrigation



Hamburg Parsley

PRICES

OKRA OR GUMBO	Pkt.	Oz.	¼ Lb.	Lb.
Clemson Spineless	.....\$ .10	\$.20	\$.50	\$1.50
Dwarf Green Prolific				
Longpod	..... .10	.15	.40	1.25
White Velvet (60 days)	..... .10	.15	.40	1.25
PARSLEY				
	Pkt.	Oz.	¼ Lb.	Lb. 10 Lb.
Champion Extra Dark Moss Curled	.....\$ .10	.15	.40	\$1.25 \$10.00
Green Castle	..... .10	.15	.40	1.25 10.00
Paramount	..... .10	.15	.40	1.25 10.00
Plain or Single (72 days)	..... .10	.15	.40	1.25 10.00
Hamburg	..... .10	.15	.50	1.50 13.00

Peas

1 quart to 100 ft. of drill; 1½ bushels per acre

Peas grow best on a light, rich, mellow soil under cool and moist weather conditions. Fresh manure and very rich or wet mucky soil should be avoided.

The extra early varieties are very hardy and should be planted as soon as the ground can be made ready, while the larger wrinkled varieties, which are not as hardy but of superior quality, may be planted when the soil has become slightly warmed, as the seed will rot if planted too early.

For private use, sow the seed in double rows, 18 inches apart and 3 inches apart in the row; for market, in single rows 2 to 3 feet apart and 1 inch apart in the rows. The peas will give quicker returns if covered only one inch deep, and where earliness is most important they may be treated this way. Larger pods and greater quantity will be produced if the seed is planted in trenches three to six inches deep and covered with only one to two inches of soil. When the plants are five or six inches high, fill the trench level with the surface. This will result in deep rooting, prevent mildew and prolong the bearing season. If the peas are covered to the full depth at first, or if water is allowed to stand in the trenches the seed will not germinate or grow well. The crop should be gathered as fast as it becomes fit for use, as even a few ripe pods left on the vines tend to retard the development of the young pods and prevent the formation of new ones.



Early Bird

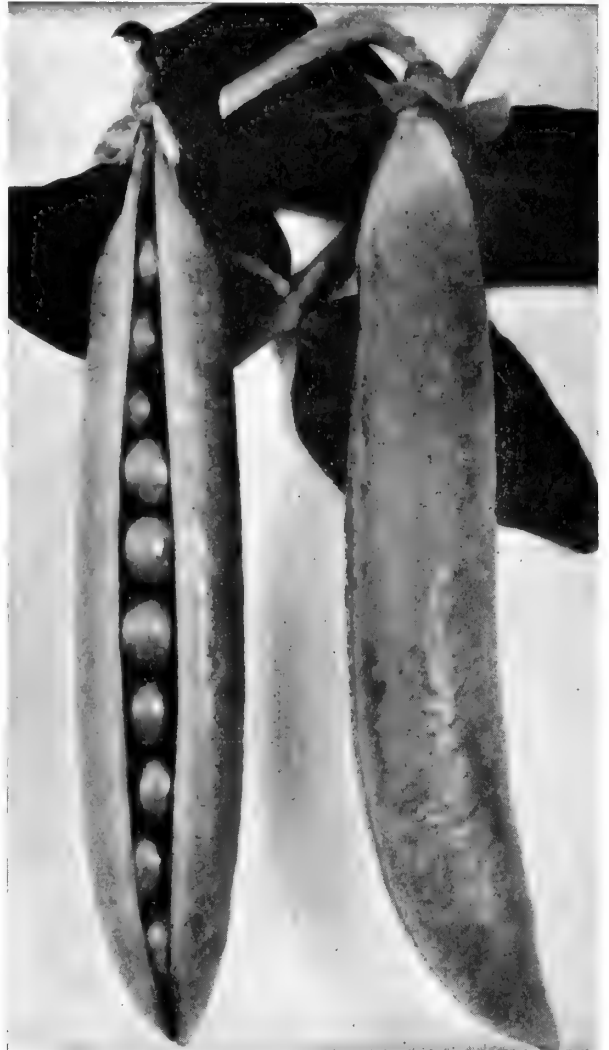
FIRST EARLY SMOOTH VARIETIES

Extra Early Alaska (57 days) Vine strong and vigorous, 2 to 2½ feet high, of a peculiar light green color, pods 3 to 3½ inches long, straight and blunt at the end. Seed round, blue, slightly pitted. Matures crop very evenly.

Early Bird (60 days) The most used and best extra early, large podded Dwarf now on the market. Very desirable for market gardeners and truckers. Seed is practically smooth, dark green in color, can be planted as early as the Alaska. Produces a strong, vigorous vine, dwarfed in length. Pods produced in profusion and are long, large, pointed and well filled with good sized peas. Is an excellent cropper and has replaced practically all other extra early varieties.

Long-Podded Alaska (60 days) A favorite with truckers and shippers to Northern markets, producing a very early crop of large, broad- well-filled, dark green pods. Equally as hardy as Extra Early Alaska and much larger. The vines usually grow three feet high and the crop will remain fresh a long time after picking.

Mammoth Podded Extra Early (60 days) An exceptionally early, large podded variety. Matures practically with Alaska and much more productive. Height 3 feet, pods 4 inches long, very dark, broad and round.



California Mammoth

PRICES

Variety	Pt.	Qt.	Pk.
Alaska—Wilt-resistant	\$.35	\$.65	\$3.00
Early Bird .....	.40	.75	4.00
Extra Early Alaska .....	.35	.65	3.00
Long Podded Alaska .....	.35	.65	3.50
Mammoth Podded Extra Early ..	.35	.65	3.50

Peas

WRINKLED VARIETIES

Gradus (Prosperity) (62 days) Produces long pointed pods, well filled and of fine table quality. Vines from 2½ to 3 feet in length. Considered one of the most desirable for the market garden or home use.

Laxtonian (62 days) This is one of the finest dwarf early peas. The vines grow 18 to 20 inches high and produce an enormous crop of 4 in. dark green pointed pods.

Little Marvel (62 days) An ideal home garden and early market variety, popular for years for its outstanding quality and yield. Vine: stocky, medium height. Pods: blunt, plump, dark green, 3 in. long, well filled.

Thomas Laxton (62 days) One of the highest quality freezing and garden varieties. Pods blunt, dark green, 3½ in. long. Vine 2 ft., slim.

Blue Bantam (63 days) An improved strain of the Laxtonian type. Very early and produces pods a little darker than the Laxtonian. Vines are 16 to 18 inches high.

Freezonian (63 days) All American Winner. Improved Thomas Laxton type, 3½ in. dark green blunt pods, wilt resistant.

Early Wonder (65 days) An extra early variety of excellent quality, producing an abundance of dark green pods 4 to 5 inches long, very broad and well filled. The earliness, quality and the wonderfully prolific characteristics of this variety make it a very profitable sort for market gardeners.

California Mammoth (70 days) Medium early profuse bearer of large handsome dark green pointed pods. Can be very profitably grown by commercial growers and home gardeners as a succession to Early Bird and the Laxtonian types.

Alderman (75 days) One of the best long vined, main crop varieties. Hardy, prolific producing vines 3½ to 4 feet in length. Pods large, pointed dark green in color.

Dwarf Telephone (75 days) A second early, of robust but remarkably even growth. From 16 to 18 inches high. The stout plants are fairly loaded with large, bright green pods. Each pod contains from 7 to 9 large peas of a light bright green color, tender and well flavored.

Dark Green Telephone (75 days) A tall-growing, late sort, 3½ to 4 feet in height, having beautiful dark green pods of very large size, containing 6 to 7 large peas of delicious flavor. Continues in bearing for quite a long time.

EDIBLE PODDED PEAS

Mammoth Melting Sugar (75 days) This is by far the largest and finest of the true sugar or edible podded Peas.

PEANUTS

Virginia Bunch (145 days) Earliest, most prolific and easiest cultivated variety. Lb., 35c; 10 lbs., \$3.00.



Gradus (Prosperity)

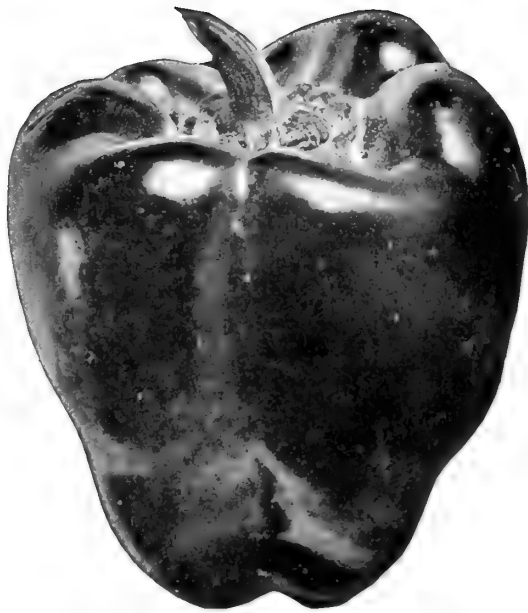
	Pt.	Qt.	Pk.
Alderman—Wilt resistant	\$.40	\$.75	\$4.00
Black Eyed Peas (100 days)	.45	.85	5.00
Blue Bantam	.40	.75	4.00
California Mammoth	.40	.75	4.00
Dark Green Telephone—W.R.	.40	.75	4.00
Dwarf Market	.40	.75	4.00
Dwarf Telephone—W.R.	.40	.75	4.00
Early Giant (66 days)	.40	.75	4.00
Early Wonder	.40	.75	4.00
Freezonian	.45	.85	4.50
Gradus (Prosperity)	.40	.75	4.00
Laxtonian (Hundredfold)	.40	.75	4.00
Little Marvel	.40	.75	4.00
Mammoth Melting Sugar	.50	.95	5.75
Thomas Laxton	.40	.75	4.00
World's Record (58 days)	.40	.75	4.00

Peppers

1 oz. to 1,500 plants

6 to 8 weeks to produce plants

Peppers should be sown either indoors or in hotbeds early in April and transplanted to the permanent beds when about 3 inches high in two foot drills and two feet apart in the drills. The seed can also be sown in open ground when danger from frost is past but the crop will naturally be much later. A top dressing of fertilizer or poultry manure well mixed with the soil when the plants are about 6 inches high will materially aid in the production of a big crop.



World Beater

Long Red Cayenne (70 days) The pods are long and slender; bright red color and very pungent. This is an old-time favorite and is used extensively for bunching with pot-herbs.

World Beater (70 days) This splendid pepper is a cross between Chinese Giant and Ruby King, and combines the size of one and the earliness of the other. It is exceedingly mild, very large, four lobed and the color good. The flesh is very thick, making distant shipment possible.

California Wonder (75 days) Its large, smooth, extremely heavy, very mild, thick flesh, make this variety truly a wonder. Combining the excellent quality of the Pimento and the size of Crimson Giant, California Wonder is being grown for all purposes. Plants are sturdy, productive and slightly spreading, bearing five to nine large glossy fruits to a setting, averaging one-half pound each. Deserves the attention of every pepper grower.

Pimento or Perfection (75 days) A medium early, prolific, perfectly mild variety with extremely thick flesh. On account of its thick flesh it will hold up for a long time, and is an excellent sort for canning whole.

Chili, Small (80 days) Red conical pod, about 2 inches long, very hot. Fine for pepper sauce and seasoning.

Cherry Red (82 days) Fruit small, round, color rich scarlet, very hot.

Chinese Giant (85 days) This desirable variety is one of the largest sweet peppers ever offered. The flesh is quite thick, very mild and remarkably sweet.

Pepper Plants See Page 58.



Chinese Giant



California Wonder

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
California Wonder	.10	\$.30	\$2.50	\$7.50
Calwonder (67 days)	.10	.80	2.50	7.50
Chinese Giant	.10	.80	2.50	7.50
Cherry Red (Hot)	.10	.60	2.00	6.00
Chili, Small (Hot)	.10	.60	2.00	6.00
Half Long Cayenne	.10	.60	2.00	6.00
Long Red Cayenne (Hot)	.10	.60	2.00	6.00
Pimento or Perfection	.10	.80	2.50	7.50
Sunnybrook or Cheese	.10	.60	2.00	6.00
World Beater	.10	.60	2.00	6.00

Parsnips

1 oz. to 150 ft.
4 lbs. per acre



All American Hollow Crown

Sow in early spring in deeply prepared well drained soil. Thin to stand 3 to 4 in. apart. It is sometimes sown late in the summer for early spring use.

Parsnips are well known as a delicious table vegetable but their value for the purpose of feeding cattle and stock is but little appreciated. The parsnip is rich in saccharine food which adds greatly to the richness of the milk when fed to cows. The roots can be left in the ground all winter and improve in quality by the continued freezing.

Special Market Garden Strain (110 days) A smooth perfectly shaped selection privately held for many years. It produces roots nearly 100% true hollow crown, an extremely important characteristic always indicating highest edible quality.

PRICES

PARSNIPS	Pkt.	Oz.	¼ Lb.	Lb.
All American				
Hollow Crown	\$.10	\$.15	\$.40	\$1.25
Special New Market				
Garden Strain	.10	.30	.85	2.50
PUMPKINS				
Connecticut Field	.10	.15	.40	1.25
Cushaw, or Crookneck	.10	.25	.65	1.85
King of Mammoths	.10	.20	.60	2.00
Sugar Pie Pumpkins	.10	.25	.65	1.85

All American Hollow Crown (110 days) A specially selected stock, developed for uniform well-shaped smooth roots of excellent quality.

Pumpkins

1 oz. to 15 hills; 4 lbs. per acre

Sow in good soil in May, when the ground has become warm, in hills 8 to 10 feet apart each way, or in fields of corn about every fourth hill; always avoid planting near other vines, as they will hybridize.

Cushaw, or Crookneck (110 days) Grown for pies and stock feeding. Fruits 2 feet in length, with long, solid neck. Flesh rich, creamy yellow, tender and of exceptionally fine flavor. Weight 15 to 25 lbs.

Sweet Potato (110 days) Excellent for pies, pear-shaped, creamy white, sweet and delicious; first-class keeper. Weight about 15 lbs.

Sugar Pie Pumpkins (115 days) Best of all Pumpkins for pies. Small to medium size, solid and fine grained, and a splendid keeper.

King of Mammoths (115 days) Enormous, deep yellow. Often weighs 75 to 100 lbs.

Squash Pumpkin—Boston Marrow

See Squash, Page 33.



Sugar Pie Pumpkin

Radishes

1 oz. for 100 ft. of drill; 10 lbs. per acre.



Extra Early Scarlet Globe Outdoor Forcing

Light, sandy soil, rich in organic matter is essential to produce crisp and tender radishes. For an early crop sow the seed as soon as the ground can be worked, in drills 6 to 10 inches apart, covering the seed half an inch deep. When the plants are well started, thin out to one inch apart in the drills. Frequent watering in dry weather is very beneficial as high quality is largely dependent upon rapid growth. For a continuous supply, successive plantings should be made at intervals of 10 days to two weeks, selecting varieties best suited for the season.

Extra Early Scarlet Globe No. 8

(23 days)

From Specially Selected Transplanted Roots

A reselected strain so uniform in its maturity that each sowing can be entirely gathered and bunched at one pulling, with practically no waste. This means more bunches per row, more time saved in bunching, and the ground ready for the next crop a week earlier. This equalized maturity also permits sowing this crop between rows of beans, corn, etc., as a "catch crop." This is the market gardener's favorite as a forcing Radish, very early; mild and crisp, juicy and tender; ample top, will stand heat without becoming pithy. One of the best selling and most attractive Radishes on account of its bright scarlet color and handsome shape. Our stock of this is the very best, selected with special care as to size, shape, color and earliness. Market gardeners find it a money maker, as it is just right in every respect.

Comet (24 days) Distinctly a round or ball shaped sort of longkeeping quality. Has outstanding brilliant crimson color, with extra good tops for bunching. An All-American winner.

Sparkler (Round White Tipped)

(25 days) One of the most attractive for early planting outdoors. Color very deep scarlet with 1, 3 white at the tip; flesh white and of the best quality.

White Icicle Radish (27 days) Planted in spring the young Radishes are ready for use in 25 to 27 days from sowing and their long, slender form and pure paper-white skin are most attractive when bunched for market. Flesh: clear white, brittle and of a mild flavor.

Greenhouse Scarlet Globe (22 days) This strain has been especially bred to meet the very exacting requirements of greenhouse cultivation, producing quickly a highly marketable crop of uniformly shaped radishes of fine quality.

Extra Early Scarlet Globe (23 days Outdoor Forcing) The popular commercial variety often called "Button Radish." Roots olive shaped, bright scarlet, flesh white and crisp. By selecting the most desirable type of this variety based on market demands we offer a strain having correct uniform shape and color plus exceptionally good tops for bunching.

PRICES

	Pkt.	¼ Lb.	Lb.	10 Lb.
Comet	\$.10	\$.30	\$1.00	\$9.50
Crimson Giant	.10	.30	1.00	9.00
Greenhouse Scarlet Globe	.10	.30	.90	8.00
Long Black Spanish	.10	.40	1.25	11.50
Long Scarlet	.10	.30	.90	8.00
Round Black Spanish	.10	.40	1.25	11.50
Scarlet Globe	.10	.30	.90	8.00
Scarlet Globe Round	.10	.30	1.00	9.50
Scarlet Globe No. 8	.10	.30	1.00	9.00
Scarlet Turnip	.10	.30	.90	8.00
Sparkler	.10	.30	.90	8.00
White Chinese or Celestial	.10	.50	1.50	14.00
White Icicle	.10	.30	1.00	9.00
White Strasburg	.10	.40	1.25	11.50



White Strasburg

Radishes

Crimson Giant (28 days) A variety combining earliness and extra size. It does not become pithy even when fully twice as large in diameter and a week older. Crimson-carmine; turnip-shaped; flesh firm, crisp and tender.

Long Scarlet (28 days) This is the standard extra early long scarlet market variety, short top, long scarlet roots; crisp, fine flavor.

White Strasburg (40 days) A very desirable summer variety. Skin and flesh both white. Of excellent quality and a quick grower.

WINTER VARIETIES

Long Black Spanish (55 days) Roots tapered cylindrical 7 to 10 in. long and about 2 1/4 in. in diameter. Skin black, flesh white, exceptionally good keeper, strong pungent flavor.

Round Black Spanish (55 days) Characteristics similar to Long Black Spanish, except that it grows top-shaped, 3 to 4 in. in diameter.

White Chinese or Celestial (55 days) Large, stump-rooted radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition, mild in flavor, brittle, and never woody.



Long Scarlet

Rhubarb or Pie Plant

Sow in April or May, in drills 1 foot apart; when 3 or 4 inches high, thin out in rows 6 to 10 inches apart. Transplant the ensuing fall or spring in rich soil. Set out the roots 3 to 4 feet apart each way; the following spring it will be fit to use.

Crimson Winter Crimson stems of the finest color and quality, very early and continuing bearing over a long period.

RHUBARB ROOTS—See Page 58.

Sorrel

BROAD LEAVED (60 days)

A hardy plant grown for its leaves, which are used as boiling "greens" or salad. Seed should be sown thinly in drills early in spring. When well started thin out to stand 4 to 6 inches apart in the row. The leaves can be gathered for use at any time after the plants are well started in growth, and the roots will continue to produce a further supply. The plant is entirely hardy, and, starting into growth early the following spring, will afford a large supply of fine "greens" quite early.



White Icicle

Salsify

OR OYSTER PLANT

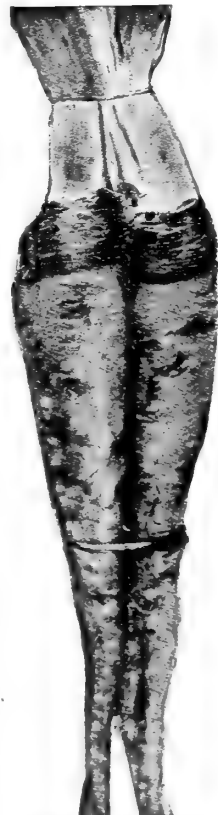
1 oz. for 50 feet of drill

Slow growing, hardy; requires 150 to 180 days; better if frosted.

Requires a well enriched, mellow soil, which, previous to sowing the seeds, should be stirred to a depth of 18 inches. Sow early in the spring in drills 15 inches apart; cover the seed with fine soil 1 1/4 inches in depth, and when the plants are strong enough thin out to 6 inches apart. As the leaves resemble grass, be careful they are not mistaken for it when weeding.

Mammoth Sandwich Island

A new and improved type, producing roots of nearly double the size and weight of the old varieties; mild and delicately flavored.



Mammoth Sandwich Island Salsify

PRICES

RHUBARB				
	Pkt.	Oz.	1/4 Lb.	Lb.
Crimson				
Winter	.. \$	.10	\$.50	\$1.50 \$5.00
SALSIFY				
Mammoth				
Sandwich				
Island10	.50	1.50 5.00
SORREL				
Broad				
Leaved	..	.10	.50	1.50 4.50

Seed Potatoes

LET US QUOTE PRICES ON HIGHEST QUALITY SEED ON BASIS OF LOWEST MARKET VALUE

Potatoes will adapt themselves to various soil conditions as easily as most vegetables. A better crop will be produced however, on a sandy loam which contains a quantity of well rotted vegetable matter. A clover sod, vetches turned under in the fall, or land which was heavily manured for a previous crop supply ideal conditions.

In preparing the seed the eyes should be cut so that the largest part of the surrounding flesh is situated toward the stem end, because the eyes of a potato always have a root system running toward that end and for that reason the sprouts cannot draw moisture from the opposite direction. If the ground you intend to use has produced a scabby crop previously or the seed shows any trace of disease, the pieces should be disinfected as a preventative.

For a very early crop, run off furrows about three feet apart and about four inches deep. Drop the pieces about 15 inches apart in the furrows and cover to a depth of about 1½ inches, gradually filling in the furrows to level as the vines grow larger. For main crop it is just as well to cover the eyes with four inches of soil at once. If fertilizer is used, apply it either in the row or broadcast before planting and be sure that it is thoroughly mixed with the soil so that the seed is not burned. Fresh stable manure will cause the potatoes to become scabby.

Just before the sprouts have appeared above the ground run a light harrow over them to kill the weeds and break up the crust. Continue weeding and harrowing until there is danger of breaking off too many sprouts. Cultivate thoroughly and frequently, being careful not to cut any of the roots, continuing until the vines have attained full growth and begin to spread.

Spraying for insects and blight is very necessary. Red River Potato Mix will give very satisfactory results in controlling insects and diseases.

The size and quality of the crop and the ability to resist disease is directly dependent upon the seed planted and no amount of cultivation or attention will offset the uncontrollable results of poor seed. Be sure of your crop and plant only the best.

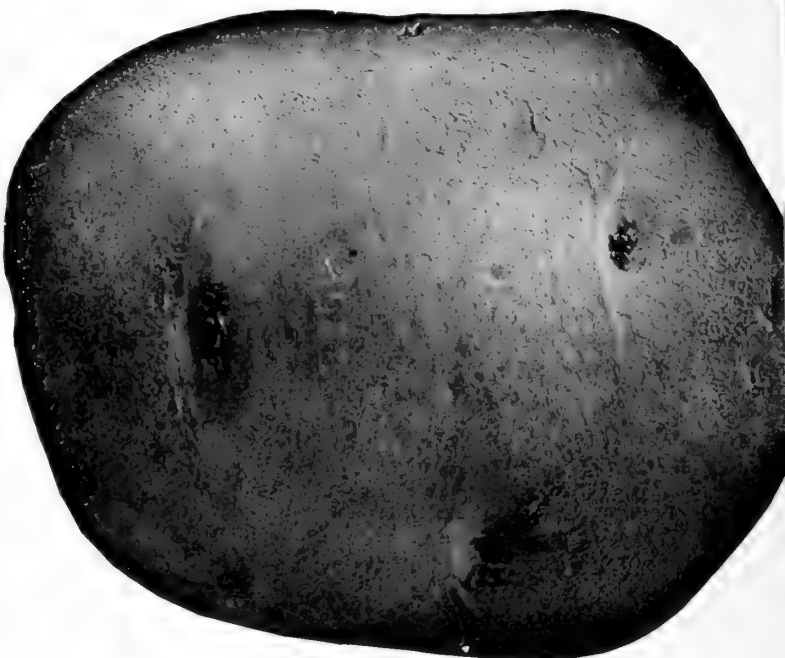
Chippewa Introduced by the U.S.D.A. Seven to ten days later than Irish Cobblers. Disease resistant and a heavy yielder of medium size tubers, very uniform, oblong in shape, shallow eyes, skin smooth and clean white, excellent cooking quality.

Red Bliss, or Bliss Triumph The tubers are round and uniform in shape, eyes slightly depressed and of a beautiful bright red color, very hardy and vigorous, maturing with extra earlies.

Cobblers Popular early white, disease resistant, excellent quality. Medium to large in size, smooth, nearly round in shape, blunt ends, eyes very strong. A good keeper and a heavy cropper.

Green Mountain A dependable medium late main crop variety. Yields big crops of large, smooth white skin tubers of flatish oval form. Ripens slowly and is a good keeper. Cooks white, dry and mealy.

Kathadin Developed by the U.S.D.A. Matures a little earlier than Green Mountain, of oval shape, white skin and white flesh, shallow eyes. Very productive and a good keeper.



Sebago A cross of Chippewas and Kathadins developed by the U.S.D.A. Disease resistant, tubers are large, oval to oblong in shape. Ivory white, thin-skinned with shallow eyes. Excellent early shipper.

Seed Sweet Potatoes

Prices subject to market fluctuation—Let us Quote

Elzey's Improved Grows well in light sandy soil. This variety is a good yielder and keeper. It is a dry potato with light-yellow skin and flesh.

Maryland Golden The most popular of all yellow varieties on the market. Has golden yellow skin and flesh which is a deep yellow at the stem end. It has a moist flesh and is moderately sweet.

Sweet Potato Plants See Page 58.

NEW IMPROVED SEMESAN BEL
1 oz. treats 5 bushels



This instantaneous dip treatment for both white and sweet potatoes is fast replacing all formerly practised methods of seed potato disinfection. Semesan Bel exerts an invigorating effect upon plant growth by removing disease handi-

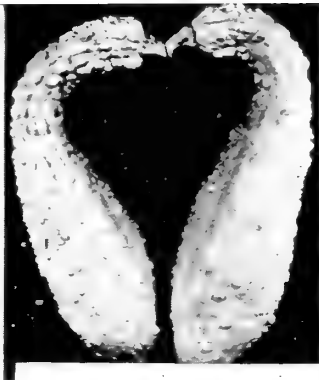
caps and repelling the attacks of soil-borne organisms so that yields are greatly increased.
2 ozs., 35c; 1 lb., \$1.83; 4 lbs., \$6.33.



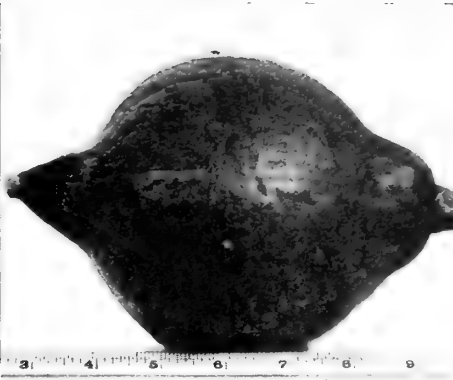
Increase Your Profits
Dust or Spray with
RED RIVER POTATO MIX
With D.D.T.
(1 to 1½ lbs. make 12½ gallons
or as dust)
Lb., 55c; 4-lb. bag, \$1.75



Green Warted Hubbard



Golden Summer Crookneck



Boston Marrow

Squash

1 oz. of bush sorts to 40 hills; large seeded 15 hills.
2 lbs. of bush sorts to acre; large seeded 3 to 4 to acre.

Squashes, like other vines, are partial to a light, dry, rich soil. Plant bush varieties 4 ft. apart and the running varieties in hills 7 to 10 feet apart each way; thin out to three plants in a hill. Cultivate frequently until the vines commence running, after which do not work the soil deeply.

Early Prolific Straightneck (50 days) Produces an abundance of ten inch fruits in a week after blossoming. Very prolific, exceeding all other varieties in early production. Color, lemon-yellow. Vine about half the size of other varieties which permits close planting. An ALL AMERICAN Selection.

Green Tinted Bush Scallop (50 days) Preferred by many market gardeners by reason of true decided light green color, even when fully matured.

Early Golden Summer Crookneck

(52 days) A superior strain of summer crookneck, heavily warted, of a very deep orange color, 9 inches long, of excellent quality and highly productive.

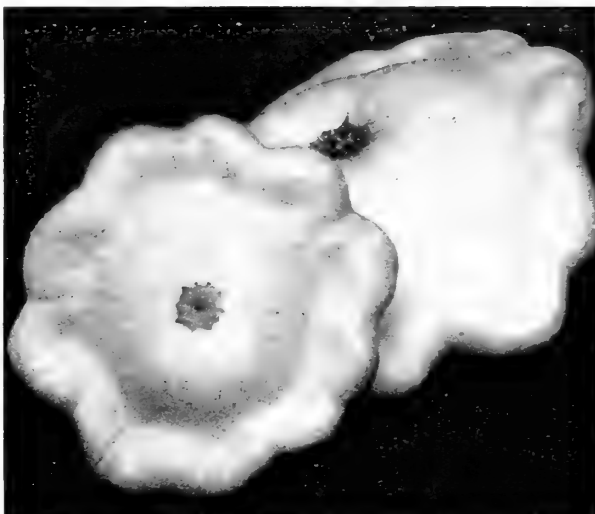
Cocozelle Extra Long Italian (65 days) Produces fruit alternately striped dark and light green in the edible stage becoming dark green at maturity, about 20 inches long and 3 to 4 inches in diameter; very straight.

Table Queen or Acorn (New Mammoth Type) (80 days) Dark green, thin shelled, smooth, ribbed fruits with yellow flesh; favorite variety for baking.

Boston Marrow (or Squash Pumpkin)

(95 to 100 days) The fall and winter variety most widely used for canning and for pies. Fruits oval, pointed, deep orange color, weight 6 to 5 lbs. Very productive.

Green Warted Hubbard (110 days) Densely warted, much larger than Golden Hubbard; flesh exceptionally thick, deep orange, dry and of excellent quality.



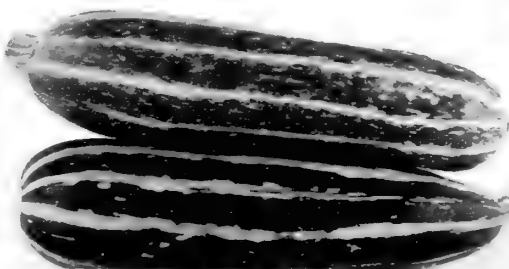
Green Tinted Bush Squash

PRICES

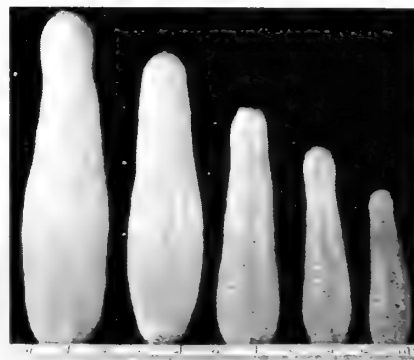
	Pkt.	¼ Lb.	Lb.
Acorn or Table Queen (Mammoth)	\$.10	\$.50	\$1.50
Blue Hubbard	.10	.60	2.00
Boston Marrow	.10	.40	1.25
Boston Marrow A & C	.10	.50	1.50
Butternut	.10	1.15	3.50
Cocozelle, Extra Long Italian	.10	.50	1.50
Cocozelle, Vining	.10	.50	1.50
Early Golden Summer Crookneck	.10	.50	1.50
Early Prolific Straightneck	.10	.60	1.75
Golden Hubbard	.10	.60	2.00
Green Tinted Bush Scallop	.10	.50	1.50
Green Warted Hubbard	.10	.60	2.00
Jersey White Bush Scallop	.10	.50	1.50
Top of the Market	.10	.60	2.00
Zucchini (Extra Dark)	.10	.50	1.50



Table Queen



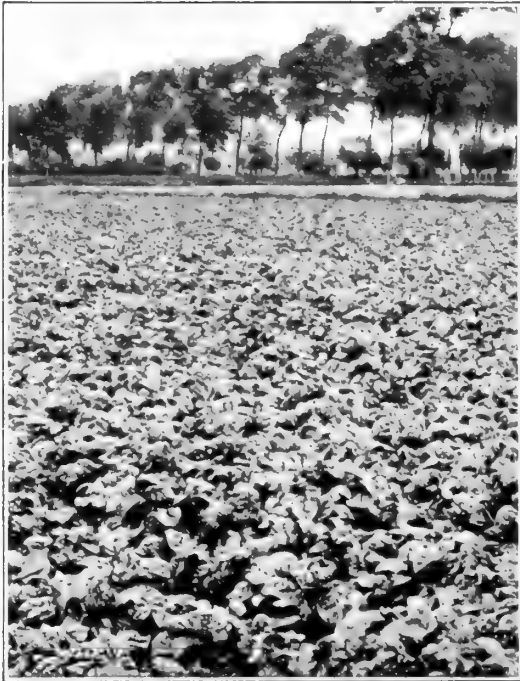
Cocozelle



Early Prolific Straightneck

Spinach

1 oz. to 100 ft. of drill; 12 to 15 lbs. per acre.



Extra Dark Green Savoy

Virginia Blight Resistant (39 days) A strain of Bloomsdale Savoy especially developed by the Virginia Experimental Station for the purpose of resisting the disease commonly called yellows. Used extensively in the vicinity of Norfolk and in other sections where blight is encountered. It matures very quickly and is therefore preferred for early fall sowing.

Reselected Bloomsdale Savoy (40 days) For either fall or late winter sowing, a truly reselected strain developed by a Holland Plant Breeder for uniformly curled large heavy plants.

Old Dominion (41 days) Developed at the Virginia Experimental Station as a later seeding yellows resistant variety by crossing King of Denmark and Virginia Savoy. The plants are large, dark green, heavily crumpled and fast growing. It is one of the most hardy varieties for wintering over and therefore is well suited for either an early fall crop or for fall sowing to be cut in early spring.

Select a rich piece of ground, the richer the better; and for late spring and early summer use, sow the seed during February, March and April in drills one foot to 20 inches apart, one-half to one inch deep. When the plants are well started, thin out to 4 to 6 inches apart, or sow the seed thin and allow all the plants to stand.

For winter and early spring use, sow either in drills or broadcast during August, September and October. A top dressing of Nitrate of Soda will make a vast improvement in the earliness, size and quality of the crop.

Number of days indicated shows time required from sowing to earliest cutting date. Long Standing varieties remain in marketable condition 10 days to 2 weeks longer.

Extra Dark Green Savoy (42 days) About two days later than Reselected, but the plants are larger, less liable to bolt to seed, more heavily crumpled and of more upright growth. The very dark green color, however, is its chief advantage and in making the selections for this deep color the plant breeder has also improved the strain in its savoyed characteristics and absolute freedom from smooth leaved plants.

Presto Savoy (42 days) A prickly seeded variety possessing outstanding merits over the round seeded Bloomsdale, which it resembles identically. Presto is the earliest and quickest growing sort of spinach. It is much harder than any other variety and will stand cold and unfavorable weather conditions better than round seeded sorts.

PRICES						
	1/4	10	25	100		
	Oz.	Lb.	Lb.	Lbs.	Lbs.	Lbs.
Extra Dark						
Green	.10	.25	.75	\$5.00	\$10.00	\$35.00
Heavy Pack	.10	.25	.75	5.00	10.00	35.00
Long Standing	.10	.25	.75	6.00	12.50	40.00
Old Dominion	.10	.25	.75	5.00	10.00	35.00
Presto	.10	.30	.85	7.50	15.00	48.00
Reselected	.10	.25	.75	5.00	10.00	35.00
Special Summer						
Savoy	.10	.25	.75	6.00	12.50	40.00
Virginia B. R.	.10	.25	.75	5.00	10.00	35.00
New Crop Seed Available about September 1 } LET US QUOTE						
				Pkt.	Oz.	1/4 Lb. Lb.
New Zealand				.10	.15	.45 \$1.25
Tampala (Burpees)				.10	(1/4 oz. 25c)	



Special Summer Savoy



Field of Early Long Standing Savoy for Seed

Early Long Standing Savoy (42 days) Nearly as early as Reselected Savoy but has the very valuable advantage of standing in perfect condition, without bolting to seed, 10 to 14 days longer. This feature is worth thousands of dollars to spinach growers, for with this variety it is possible to market the crop when it is convenient and advantageous for the grower to do so. Many severe losses have been incurred because cutters were not available, weather conditions unfavorable, or prices were too low, but Early Long Standing will wait for cutters, for weather, and for prices.

Heavy Pack (44-46 days) A leading canning variety. Very vigorous, large spreading plants with broad thick heavy leaves. Very productive and extremely slow in bolting to seed.

Special Summer Savoy (50 days) Stands warm weather without bolting to seed better than any other Savoy leaved type. A great improvement even on Bloomsdale Long Standing. Very dark green and heavily crumpled leaves. Very slow grower and should be sown so as to mature during warm weather.

New Zealand (70 days) (TETRAGONIA EXPANSA) Not related to regular spinaches but forming larger spreading plants producing fleshy brittle tips and leaves which are used as spinach. Of delightful flavor and practically ever-bearing.

J. Manns & Co.,
Baltimore 2, Md.

Dear Sirs:

We made two summer plantings of your Long Standing Savoy Spinach this year. One came in the end of June and the other the end of August. Both times the spinach withstood excessive heat and humidity and stayed green longer under these conditions.

Both the buyers and other growers noted the largeness of the individual plants and large crumpled leaves stating that it resembled Adirondack spinach.

Very truly yours,
H. Lindner & Sons,
Long Island, N. Y.



Spinach, Isolated Plants Caged for Stock Seed



Improved Advance

Tomatoes

1 oz. to 2,000 plants; ¼ lb. per acre.

All our tomato seeds are grown from stocks, exclusively for seed purposes, by the originators, experienced growers and experts. We are fully convinced of the merit of all varieties before offering them in our catalog, and can strongly recommend our strains as being absolutely reliable.

For early, the seed should be sown in hotbeds during February or the first week in March, in drills 5 inches apart and half an inch deep. Later sowing may be made until the last of April. When the plants are 3 or 4 inches high they should be set out 4 or 5 inches apart in another hotbed or cold frame, or removed into small pots allowing a single plant to the pot. Expose to the air as much as possible to harden. Water freely at time of transplanting, and shelter from the sun a few days until the plants are established. Set out May 5th to 10th according to weather (or 3 weeks earlier if protected with Hotkaps) spacing 3 to 5 ft. apart. Cultivate thoroughly as long as the vines will permit, but the last two or three workings should be very shallow or the crop may be badly injured, especially if the cultivator is run too near the plants.

Days indicated represent approximate time from setting of plants to first picking. It takes 4 or 5 weeks to grow plants.

Improved Advance (64 days) An extra early, large tomato of high quality, round or slightly flattened shape, and exceptionally smooth for such an early variety. As early and hardy as Earliana and yielding more fruit both in the first and subsequent pickings. It is more shapely, more free from cracks and shows less green about the stem than other extra early sorts. With Improved Advance the grower can produce a crop which will stand superior in appearance and quality, in competition with the other extra early ones and command the fancy prices of an early market.

Scarlet Dawn (70 days) Winner of a Gold Medal in the 1934 All American Trials. This cross of Clark's Early with Marglobe has the shape and structure of Marglobe, but a brighter scarlet color and very prolific. Excellent shipping variety and also desirable for home growing.

Sioux (70 days) Developed at Nebraska Exp. Sta. from cross of All Red and Stokesdale. It is extra early, globe shaped, medium size, thick walled and juicy. Plant relatively open with finely divided leaves; ripens uniformly. Does well in hot dry seasons.

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
Beef Steak	\$.10	\$1.00	\$3.00	...
Bounty .....	.10	1.00	2.85	\$8.50
Earliana .....	.10	.85	2.50	7.50
Early Red .....	.10	.50	1.50	5.00
Garden State .....	.10	1.35	4.00	12.50
Greater Baltimore (Ind.) ..	.10	.50	1.50	4.50
Improved Advance .....	.10	.65	2.00	6.00
Jubilee Golden .....	.10	1.50	...	...
Marglobe (Certified) .....	.10	.65	2.00	6.00
Oxheart .....	.10	1.50	4.50	...
Pan America .....	.10	.75	2.25	7.00
Ponderosa .....	.10	1.00	3.50	10.00
Pritchard's Scarlet Topper ..	.10	.65	2.00	6.00
Rutgers (Certified) .....	.10	.65	2.00	6.00
Scarlet Dawn .....	.10	.50	1.50	5.00
Sioux .....	.10	1.00	2.85	8.50
Stokesdale (Certified) .....	.10	.65	2.00	6.00
Stone (Improved) .....	.10	.50	1.50	4.50
Valiant .....	.10	.75	2.50	7.50

SMALL FRUITED

Pear Shaped Yellow .....	.10	.75	2.50	...
Red Cherry .....	.10	1.15	3.50	...
Red Plum .....	.10	1.35	4.00	...
San Marzano (Paste) Red ..	.10	1.50	4.50	...
Yellow Plum .....	.10	.75	2.50	...



Marglobe Certified

Tomatoes

Stokesdale Certified (70 days) Similar to Rutgers in shape and color, with fruits averaging slightly larger. Plant is open in habit with medium heavy foliage. Recommended for home gardeners, canners and shippers. Produces large crops when fertilized liberally.

Valiant (70 days) One of the best early round, large, smooth varieties. Very profitable where it can be matured without too much danger of sunburn.

Marglobe Certified (75 days) Our stock of this popular variety is far superior to the average and we have received many unsolicited testimonials complimenting us on its excellent quality.

It produces heavy yields of large smooth, globular, meaty, red fruits. They have a delightful flavor, and are covered with a thick skin which hinders cracking. Moreover, the plants shade the fruits well and thus protect them from sun-scald.

Pritchard's Scarlet Topper (75 days) Introduced by the U. S. Dept. of Agr. All American Gold Medal award 1934. Extremely productive, especially on heavy soils; wilt resistant. Fruits large, firm, globe shaped and of fine quality.

Garden State (80-85 days) A main crop canner's variety, developed by Campbell Soup Co., partially resistant to fusarium wilt and late blight. Somewhat similar to Rutgers in size and season with fruits slightly flatter and the vines more compact and upright. It ripens uniformly, scarlet red throughout, firm, thick walled, mild and of a very desirable quality.

Indiana Baltimore (80 days) Large, smooth, solid, bright scarlet; second early Tomato; a very prolific bearer and fine canning variety.

Rutgers Certified (80 days) Developed under the direction of Prof. L. G. Schermerhorn of the New Jersey Agr. Experiment Station. The fruits begin ripening at the center, are highly colored throughout and have a thick wall structure with very small seed cavity. In comparison with Marglobe they are slightly more flattened at the stem end and will average much larger. Very prolific and desirable for canning, market or the home garden.

Improved Stone (85 days) One of the most productive of the large flat varieties; fruits bright scarlet, smooth and solid. Fine market or canners variety.



Pritchard's Scarlet Topper

Rutabagas

1 oz. to 150 feet of row; 1 lb. per acre.

Rutabagas require about four weeks longer to mature than ordinary varieties of turnips, but are more solid, of firmer flesh and therefore keep later into the spring. They are for this reason more desirable for storage, while turnips are better adapted for the early market. Sow during July either in drills or broadcast.

New Canadian (90-100 days, 5 in. dia.) Our strain of this excellent variety has become a favorite because of its hardy and productive nature. The flesh is sweet and solid, excellent for table use or stock feeding.

Special Market Gardeners (90-100 days, 5 in. dia.) Grown for a number of years in the North and held very closely by private individuals, the seed of this variety has always been extremely difficult to procure in a true and reliable type and most profitable. After years of searching and checking in our trial grounds, we have found the correct strain and offer it with every assurance that it is the best Rutabaga to grow in this section.

Turnips

1 oz. to 150 feet of row; 1 lb. per acre.

Being primarily a cool weather vegetable, turnips thrive best when planted in early spring or in the fall. For spring crop sow the seed early in April, while for fall and winter use, plantings should be made from July to August. Sow in rows not less than 18 inches apart and one-half to three-quarters of an inch deep. A very popular method, however, is to broadcast the seed between rows of corn or in the cultivated orchard.

Autumn King (75 days, 4½ in. to 6 in. dia.) A high quality stock feed variety, also very popular with Market Gardeners because of its excellent table quality when young. Roots smooth, globular, clear yellow with bronzy green tinged top, flesh pale yellowish white, fine grained, sweet and tender.



Turnip—Autumn King

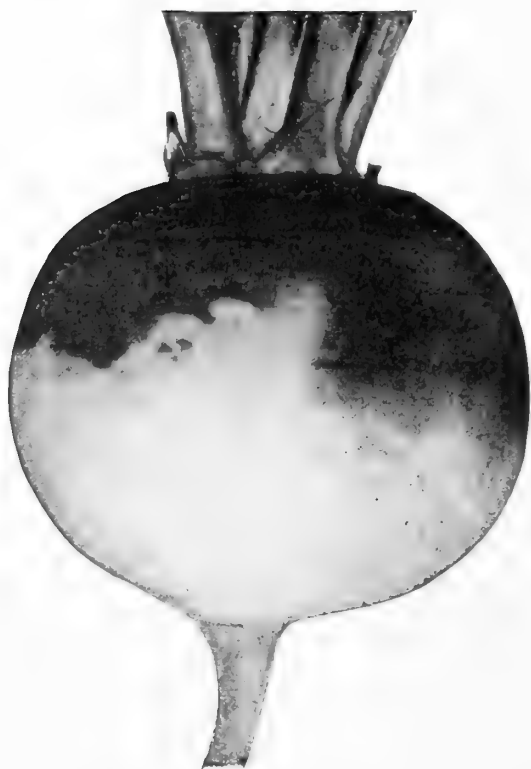
Double Duty (30-40 days) Roots approximately 3 x 2 in. tops 18 in. tall, strap-leaved fast growing heavily set, practically aphid resistant and of excellent quality. Grown chiefly for its abundance of tops, surpassing Seven Top in production and quality. Also forms a pure white semi-globe root, which is sweet and tender.

Purple Top White Globe (55-60 days, 3 in. to 6 in. dia.) This excellent turnip is decidedly the most popular variety and more extensively grown than any other. The roots are globular, very handsome and of superior quality; either for table use or stock feeding purposes. It is a heavy producer, early, or rapid growth, and one of the best for winter storage.

Golden Ball (60-65 days, 3½ in. dia.) One of the best yellow varieties for general crop; flesh firm and sweet; splendid for table or stock.

Seven Top This variety planted exclusively for the green tops which are produced very abundantly. They are excellent for table use and for stock grazing.

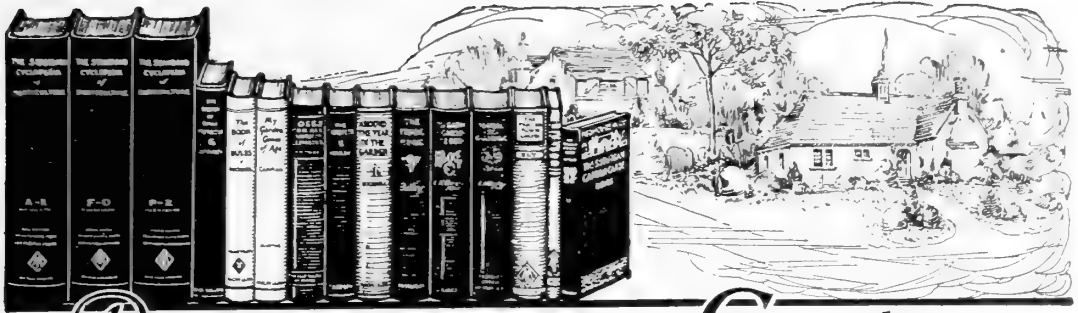
Turnip Greens—See Broccoli—Page 11.



Purple Top White Globe Turnip

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
RUTABAGA				
Neckless Purple Top.....	\$.10	\$.15	\$.30	\$1.00
New Canadian .....	.10	.30	1.00	2.85
Special Market Gardeners ..	.10	.55	1.65	5.00
TURNIP				
Autumn King .....	.10	.15	.35	1.00
Double Duty .....	.10	.15	.35	1.00
Early Snowball .....	.10	.15	.35	1.00
Golden Ball or				
Orange Jelly .....	.10	.15	.35	1.00
Mammoth Shogoin .....	.10	.15	.35	1.00
Purple Top White Globe..	.10	.15	.35	1.00
Seven Top .....	.10	.15	.20	.60
Yellow Aberdeen Purple				
Top .....	.10	.15	.35	1.00



Books for better Gardens

THE STANDARD CYCLOPEDIA OF HORTICULTURE

Edited by L. H. Bailey. This is the one universal and invaluable authority on every horticultural question. Makes a compact but thorough presentation of the kinds, characteristics and methods of cultivation of the plants grown in the United States and Canada for ornament, for fancy, for fruit, and for vegetables. Formerly in 6 volumes, but now in three. 4,176 illustrations, 3,639 pages, 3 volumes, fabrikoid binding. **\$30.00.**

BOOK OF PERENNIALS

By Alfred C. Hottes. Among amateur gardeners there is a decided preference for perennial plants, because they require but little care. For those desiring a continuous show of color from early spring to early frost in their gardens, this book will be extremely valuable, discussing over 125 separate species individually, with their culture and requirements. 280 pages, 103 illustrations. **\$2.50.**

GARDEN GUIDE

By 23 Authorities. One of the most practical and informative garden books ever published for the average home owner. Every phase of gardening in connection with the home grounds is covered, including flowers, fruits, vegetables, a fine lawn, shrubs and trees; also related subjects, insects, diseases, bees, birds, fish, etc. 576 pages, over 300 illustrations. **\$2.75.**

BOOK OF ANNUALS

By Alfred C. Hottes. The author opens up many new possibilities to garden makers in this book, which is exceedingly complete and a most useful manual dealing with annual flowers. Over 100 separate species of annuals are described, with full directions for their culture and uses. 180 pages, 158 illustrations. **\$2.00.**

GARDEN AND GREENHOUSE CHRYSANTHEMUMS

By Alex Laurie and D. C. Kiplinger. A revised, rewritten and reset edition of "Chrysanthemums Under Glass and Outdoors." Covers the culture and care of 'Mums for both commercial and amateur growers. Based on practical experience, experimental work, and personal observations of the author. 124 pages, 26 illustrations. **\$2.00.**

THE WOMAN'S FLOWER GARDEN— INDOOR AND OUTDOOR

By Jane Leslie Kift. The person with only a plant or a vine or two, the one with a wee garden attached to some window ledge, or the owner of a suburban garden, have all been kept in mind by the author in this practical and entertaining book. 160 pages, 15 illustrations. **\$1.50.**

THE GARDEN ENCYCLOPEDIA

Completely revised and contains many new features. Three hundred fifty thousand copies have been sold of the older edition.

\$4.00

VEGETABLE ENCYCLOPEDIA AND GARDENER'S GUIDE. 307 pages,

by Victor A. Tiedjens **\$1.00**

FLOWER ENCYCLOPEDIA AND GARDENER'S GUIDE. 525 pages, by

Albert E. Wilkinson **\$1.98**



COMMERCIAL FLORICULTURE

By Fritz Bahr. Contains full information and advice on every advancement that have been made in recent years, particularly in growing the various florist flowers, together with a full discussion of such subjects as cloth and sash houses, electrical heating of hotbeds, sterilization of soils, effects of gas on plants, artificial light, timing greenhouse crops, common plant enemies and their control, etc. Part I embraces Methods while Part II consists of a Cultural Manual in which explicit cultural directions are given covering well over 500 commercial plants. 646 pages, 6 x 9 in., 308 illustrations, cloth. **\$6.00.**

PLANNING AND PLANTING YOUR OWN PLACE

By Louis Van de Boe. The most satisfactory guide to what a small-home owner can accomplish on his grounds without the help of a landscape architect. This is a thorough and readable text for amateur's use. 209 pages. **\$2.95.**

GARDENER'S HANDBOOK

By L. H. Bailey. This comprehensive, one-volume, encyclopedic manual of gardening is now available at half its former price and with a beautiful, new four-color jacket. This handbook, on ever phase of growing flowers, shrubs, vegetables and fruits, indoors and out, from Abutilon to Zinnia, is as easy to use as it is satisfactory. It also has special advice on such topics as annuals, borders, rock-gardens, lawns, window-gardens, glass houses, hotbeds and control of insects and diseases. 292 pages. **\$1.98.**

HOW TO GROW ROSES

By Pyle and McFarland. Makes every step in the culture and care of roses so clear that any grower can understand it and succeed with them. A completely rewritten edition of America's most popular rose book. 132 pages, 32 pages full color illustrations. **\$2.00.**

LANDSCAPING THE HOME GROUNDS

By L. W. Ramsey. Step by step, with photographs and plans, this book shows just how to develop your home grounds for greatest beauty. **\$2.00.**

QUICK FREEZING AND FAMILY FOOD GARDENING

By Gordon Morrison. Here's the book home gardeners have been waiting for ever since the advent of Quick Freezing. Shows you exactly how to garden, grow and freeze so efficiently that your family can enjoy more nutritious, delicious meals all year 'round. Contains 220 pages, scores of photographs, many step by step drawings, tables, charts and diagrams. **\$2.75.**



Manns' Superior Farm Seeds

Variety	Lbs. per Bu.	Sow—Lbs. per Acre	Date of Sowing	Fertilizer Requirements per Acre	Uses	
Alfalfa	60	15-20	August or April	400 lbs. or more 4-12-4 at seeding. For sandy soils increase potash. Top dress with 0-14-6 every other year. Heavy user of lime.	Hay, soil improvement, pasture.	Inoculation important, sow broadcast on firm seed bed. Harvest when basal shoots are 2 in. high. Do not cut late in fall.
Barley	48	72-96	About Oct. 1st.	Lime moderately helpful. 300 to 400 lbs. 4-12-4 at seeding. Top dress in spring.	Stock feed, malt, breakfast foods, flour, early spring grazing.	Does best on well drained loam or clay soils. Seed should be treated against smut and the harvested crop protected from weevil.
Bent Grass	....	10 (3 lbs. per 1000 sq. ft.)	March or Sept.	Requires acid forming plant food. Injured by lime.	Lawns and putting greens or pasture on acid soils.	Does not yield as much hay as Red Top. Needs plenty of moisture. Thrives only on acid soils.
Blue Grass Kentucky	14 to 25	30-40	Late summer early spring	On pastures—300 lbs. superphosphate every spring for three years. Adding nitrogen for quick results. For new seedings, 400 lbs. 4-12-4. Lime helpful applied 50 lbs. per 1000 sq. ft. about every 5 years.	Permanent pastures, lawns and fairways.	Best results when seeded in mixtures as it requires about 3 years to establish a sod. Gives good early grazing, languishes in late summer but flourishes again in fall. Thrives best on well drained heavy soil, rich in organic matter and all fertilizing elements.
Blue Grass Canada	14 to 20	15 in mixtures	Late summer early spring	Same as Kentucky Blue but adapted to thinner soils.	Pasture with other perennial varieties.	Darker blue than Kentucky Blue, produces running rootstocks and forms dense sod. Leaves short. Best variety for stiff clay soils or poor fertility.
Buckwheat	48	36-60	May 15 to July 15	150 to 300 lbs. 2-12-6 heavy phosphorus and potash feeder. Best on moderately acid soil.	Flour, stock and poultry feed, bees, summer cover and green manure crop.	Likes cool, moist climate, a poor land crop. Harvest between time first seed fully formed and the time they mature.
Corn Field	56	14	May July	200 to 500 lbs. 3-12-6 in row at planting. Side dress when 40 days old with 200 lbs. nitrate of soda.	Grain, ensilage and hogging down.	Harvest when kernels well glazed and dented, shuck and bottom leaves dry and upper leaves $\frac{1}{4}$ to $\frac{1}{2}$ green. For ensilage harvest in early glaze stage, shucks yellow.
Clover Alsike	60	5-8	Aug.-Sept. Feb.-Apr.	200 to 400 lbs. 4-12-4 except if seeded on well fertilized grain, when no additional fertilizer is required. Responds readily to lime.	Hay, pasture, soil improvement.	Better on wet, poor or acid soils than any other clover. Inoculation helpful.
Clover Crimson	60	15	August	200 to 300 lbs. superphosphate. Responds to lime but not very sensitive to acid.	Green manure, and to some extent for hay and pasture winter annual.	Best suited to coastal plain soils but not to wet soils. Commonly sown at last working of corn or on small grain stubble. If not making sufficient growth, supply nitrogen fertilizer. Graze same if growth is too rank.
Clover Red	60	10-15	March April or August	200 to 400 lbs. 4-12-4 $\frac{1}{2}$ to 1 ton hydrated lime is beneficial.	Primarily a forage crop. Largely used in hay mixtures but frequently sown by itself for hay.	For hay, cut when just past full bloom stage and handle to save as many leaves as possible. May be expected to yield 1 to 3 tons per acre.
Clover Sweet (Biennial)	60	10-15	March April	300 lbs. 0-12-5 or superphosphate. High lime requirement, not less than 1600 lbs. hydrated.	Pasture hay, soil improvement, honey plant, and in pasture mixtures.	Grows well on poor soil (except sands) provided lime and inoculation are supplied. Sow on grain in March or April and harrow in or sow on frozen ground.
Clover White Dutch	60	5-8	Spring or late summer	500 lbs. superphosphate once in 4 or 5 years as a top dressing. Some potash on sandy soil.	Pasture, furnishes early grazing.	Use about 2 lbs. per acre in pasture mixture. Tolerant to acid soils but responds to lime.
Cowpeas	60	1 $\frac{1}{2}$ to 2 bu.	May 15th July 15	300 lbs. superphosphate and add potash for sandy soils. Lime not necessary but beneficial.	Black-eye, for human food; other varieties for hay, soil improvement and pasture.	Must be protected from weevil. Will grow on poor soils but does best on sandy loam. Harvest for hay when most of the pods are full grown and a few are ripe. Racks are a help in curing as it cures very slowly.
Fescue Chewings	14	30 (3 lbs. per 1000 sq. ft.)	March April August Sept.	Complete plant food—abundant nitrogen. Lime not necessary.	Lawns principally; also as pasture.	Withstands more shade than most grasses, especially suited to sandy soils. Leaves bright green, creeps by underground stems
Fescue Meadow (English Blue-Grass)	24	20-30	March May August Sept.	300 lbs. 4-12-4	Hay and pasture mixtures, gives early spring and late fall grazing.	Adapted to practically all but sandy soils. Does as well as any grass on wet soils. Harvest (Hay) as it comes into bloom. Yields of two tons per acre are not exceptional.
Lespedeza Korcan (Annual)	25	25-30	February May	200 to 300 lbs. superphosphate; for sandy soils use 0-14-6. Lime not necessary but responds readily.	Hay, pasture and soil improvement.	For hay sow on fertile moist land. If second growth is allowed to go to seed, Korean will reseed itself.

Variety	Lbs. per Bu.	Sow—Lbs. per Acre	Date of Sowing	Fertilizer Requirements per Acre	Uses	
Lespedeza Sericea (Perennial)	64	25-30	May 15th to July 1st	Same as Korean.	Same as above.	Very slow grower and may be killed by late spring frost after new growth starts.
Millet Golden	50	25-30	May to July	Fertilizer not usually profitable. Responds to 200 lbs. superphosphate or 0-14-6. Lime unnecessary.	Mainly as a "catch" hay crop.	Requires at least 60 days from seeding to maturity. Sow broadcast and cover lightly. Cut hay just after blooming. Has about same feeding value as timothy but may become injurious if used as a continuous ration for horses.
Oats Winter Spring	32	2 to 2½ bu.	Winter Sept. 15 Spring Feb.-Mar.	200 to 400 lbs. 4-12-4 at seeding. Top-dress as growth begins in spring where straw is likely to be too short.	Chiefly as grain for horses and other live stock; cut for hay and also used for human food.	Well drained moderately rich soil is best. Harvest grain in hard dough stage; for hay cut in early milk stage. Fall sown oats mature 2 to 3 weeks earlier than spring oats.
Orchard Grass	14	14 to 25	March to May August to October	200 to 400 lbs. 4-12-4 for fall application or 6-8-6 for spring application.	Hay and pasture.	Long-lived deep rooted perennial bunch grass. Does best on heavy soils such as clays and clay loams. Cut in bloom stage, as it quickly becomes woody after blooming. Serves best when sown in mixtures with red clover, alsike, tall meadow oat grass.
Peas Canada Field	60	1½ to 2 bu. per acre	February March	200 to 300 lbs. superphosphate. Moderate liming helps.	Hay, early pasture, green manure, and as human food.	Clay loam soils suit best. Does well mixed with oats Drill 2 to 4 in. deep. Cut hay when most of the pods are well formed.
Rape Dwarf Essex	56	6-10	Mar.-Apr. Aug.-Sept.	Heavy feeder and responds to manure and fertilizer. Requires lime for best results.	Pasture for hogs and sheep.	Thrives on rich, moist loamy soil.
Red Top Grass	32	5-10	August-Sept.	Seems to do better on "Sour" soils.	Hay and pasture.	A perennial grass with a creeping habit of growth making a coarse loose turf. For hay harvest a little before or during full bloom. Suited to wet soils.
Rye	56	1 to 1½ bu.	August-November	At seeding 200 to 400 lbs. 4-12-4. Top dress in spring when growth begins. Not necessary but helps some.	Grain, winter and spring pasture, soiling and as cover crop. (Usually with winter vetch.)	Does better than wheat, on poor soils. Suitable to any well drained soil.
Rye Grass Domestic Italian	24	30-40	Early Fall	Usual Grass requirements.	Annual hay crop, temporary pasture or in lawns for a quick covering.	Not an annual but little of it lives more than one year. Grows rapidly and in bunches. Fall seeding usually makes a good crop of hay by June. More drought resistant than Perennial Rye Grass.
Rye Grass Perennial	20	30	Feb.-May Aug.-Oct.	Complete plant food.	Very similar to above.	More persistent than Domestic Rye Grass.
Sorghum	50	Drill 8-10 Broadcast 60-75	May-July	150 to 400 lbs. 4-12-4 at planting, top dress (or side dress if in rows) with 100 to 200 lbs. nitrogen fertilizer when 40 days old.	Syrup, fodder, hay, soiling and silage.	Any well drained corn or wheat land is suitable. Is heavy feeder and hard on land. For syrup or silage cut when seeds are in hard dough stage. When pastured or fed green there is danger of poisoning to live stock.
Soy Beans	60	Drilled 45-60 Broadcast 60-90	May 15th to July 15th	200-300 lbs. superphosphate or 0-14-6 fertilizer. Lime not necessary, but helps especially on heavy soils.	Hay, green manure, hogging off silage and seed.	Responds well to inoculation. Plant very shallow (about 1 in.) and if crust forms on land before they come up, break it with a harrow. For hay, cut when lower leaves begin to turn yellow and pods about half filled.
Sudan Grass	35	15-30	May July	200 to 300 lbs. superphosphate.	Catch hay crop, soiling, silage and grazing.	Does well on any soil except those that are cold and wet, good with cowpeas or soybeans. Cut hay just after it is beginning to head. Drought resistant and produces well in dry seasons.
Tall Meadow Oat Grass	11	30-40	Mar.-Apr. Aug.-Sept.	Responds to soil improvement and fertilizer.	Hay and pasture, of most value in a mixture of Red Clover, Alsike and Orchard Grass.	One of the best poor land grasses and especially adapted to well drained sandy soil. Does not like shade. Very drought resistant, perennial bunch type variety. Cut for hay about the time of blooming.
Timothy	45	.....	Mar.-Apr. Aug.-Oct.	200-400 lbs. 4-12-4 except where it follows a well fertilized grain crop. Lime helps and should always be applied when clover is sown with timothy. If land is poor top dress with 100 lbs. each nitrogen fertilizer and superphosphate when spring growth begins.	Primarily for hay. Does not stand grazing well.	Semi-bunch growth. Adapted to heavy soils such as clays and loams. Usually seeded in mixture with sipping clover, or with wheat in the fall and the clover on the wheat in spring. Cut hay when in full bloom or slightly after.
Vetch Winter	60	20-40 with 1 bu. Rye	Aug.-Oct.	200-400 lbs. superphosphate, add potash on sandy soils. Responds to lime but will grow on fairly acid soil.	Hay, pasture and soil improvement.	Best annual winter legume cover crop. Adapted to most any well drained soil. Inoculation necessary.
Wheat	60	1 to 1½ bu.	Oct.	200-400 lbs. 4-12-4 at seeding, additional superphosphate on better soils. Top dress in spring where straw is likely to be too short. Responds to use of lime in rotation.	Human food, hay or cover crop.	Does best on heavy loams of good fertility. Seed should be treated. Harvest when stalk is brown and grain in dough stage.

Inoculate all Legume Seeds with

NITRAGIN

1898—A HALF CENTURY OF SERVICE—1948
When ordering, Always state name of seed.

ALFALFA (A)

Swt., Bur, Hubam Clovers
Size Retail
1 bu. each...\$.50
2½ bu. each... 1.00

CLOVERS (B)

Red, Alsike, Crimson, White, and Ladino.
1 bu. each...\$.50
2½ bu. each... 1.00

LESPEDEZA (L)

100 lb. size (Inoculates up to 100 lbs.) ..\$.50

PEAS, VETCHES (C)

(All Varieties)
100 lb. size (Inoculates up to 100 lbs.) ea.\$.50
1200 lb. size ea. 5.70 (12-100 lb. cans)

LUPINES (All Varieties)

100 lb. size (Inoculates up to 100 lbs. seed) ea. \$.50
GARDEN SIZE—Peas, Beans, Sweet Peas, Lupines, Lima Beans and Edible Soybeans
Enough for 8 lbs. seed — Retail Price 10c each

SOYBEANS (S)

Size Retail
Small, (Inoculates up to 120 lbs. seed) \$.30
5 bu. each..... .55
25 bu. each..... 2.50
(One can)
30 bu. each..... 3.25
(6-5 bu. cans)

BEANS—Navy, Pinto, Wax, String, Kidney and Great Northern
1 bu. each\$.35

PEANUTS, COW PEAS (E)

Small, (Inoculates up to 120 lbs. seed) \$.30
5 bu. each..... .55
25 bu. each..... 2.50
(One can)
30 bu. each..... 3.25
(6-5 bu. cans)

This chart compiled from Handbook of Agronomy—Va. P. I. and U. S. D. A. Cooperating

BIRD SEED

FRESH, RECLEANED STOCK
Postage Extra

Canary .. 1b. 20c	Lettuce Seed .. 1b. 25c
Rape .. 1b. 25c	Mixed Canary Seed .. 1b. 20c
Millet .. 1b. 15c	Cuttle Fish Bone ¼ lb. 40c
Hemp .. 1b. 30c	
Sun-flower 1b. 30c	
Wild Bird Seed, 1b., 15c; 25 lbs., \$3.00; 100 lbs., \$10.50.	

MANNS' PERMANENT PASTURE MIXTURE

\$10.09 Per Acre

10 VARIETY SPECIAL (UPLAND)

Contains recleaned seed of high vitality in ten nutritious varieties properly proportioned to give continuous pasture from early spring until late fall, quickly becoming permanently established. Sow 30 lbs. per acre. **1b., 38c; 100 lbs., \$33.65.** (Low Lands—sow 25 lbs. plus 5 lbs. Red Top per acre.)



Cyclone illustrated\$3.50

MANNS' SUPERIOR FLOWER SEEDS

12 Packages \$1.00 - Your selection - pages 43-55



Flower Seeds for Particular Purposes

BORDER AND EDGING

- Ageratum
- x Alyssum, Saxatile
- x Arabis, Alpina
- x Bellis Perennis
- Calendula
- x Campanula, Carpatica
- Candytuft
- Centaurea
- x Cerastium
- x Dianthus, Barbatus
- x Iberis, Sempervirens
- Lobelia
- Nasturtiums
- Marigold
- x Nierembergia
- Pansy
- x Papaver, Nudicaule
- Petunia
- x Phlox, Subulata
- Portulaca
- x Sedum

FRAGRANCE

- Ageratum
- Alyssum, Sweet
- Antirrhinum
- Candytuft
- Centaurea
- x Dianthus
- Heliotrope
- x Iris
- Mignonette
- Nasturtium
- Nicotiana
- Pansy
- Petunia
- Scabiosa
- Stock
- Stock, Virginian
- Sweet Peas
- Verbena

x Perennial Varieties.

EVERLASTINGS

- Globe Amaranth
- Helichrysum
- Linaria
- Statice

PARTIAL SHADE

- Alyssum, Sweet
- x Anchusa Italica
- x Anemone
- Antirrhinum
- x Aster, Hardy
- x Candytuft, Iberis
- Centaurea
- China-Aster
- Clarkia
- x Foxglove or Digitalis
- x Hibiscus, Moschata
- x Lathyrus
- Lupinus
- Myosotis, Forget-me-not
- Nicotiana
- Pansy
- Petunia
- x Primula, English Cowslip
- x Rudbeckia
- Schizanthus
- x Violas

MOIST PLACES

- x Heliotrope
- Mimulus
- x Viola
- x Wallflower

ROCK GARDENS

See Annuals and Perennials
Marked *

DRY PLACES

- x Aster
- California Poppy
- x Coreopsis
- x Dianthus
- Dimorphotheca
- x Gypsophila, Paniculata
- x Helianthus
- x Iris
- Mesembryanthemum
- Mimosa
- x Papaver, Nudicaule
- Phlox, Annual
- x Phlox, Hardy
- x Statice, Latifolium

CUT FLOWERS

- Ageratum
- Arctotis
- Asters
- Babysbreath
- Calendula
- Cornflower
- Cosmos
- Dianthus
- Gaillardia
- Larkspur
- Marigold, African
- Mignonette
- Nasturtium
- Nigella
- Phlox, Drummondii
- Salpiglossis
- Scabiosa
- Snapdragon
- Stocks
- Strawflower
- Xeranthemum
- Zinnia

TALL VARIETIES

- Amaranthus, Caudatus
- x Campanula, Pyramidalis
- x Coreopsis
- Cosmos
- x Dahlia
- x Digitalis
- x Hollyhock
- Marigold, African
- Nicotiana
- Ricinus

WINDOW BOXES

- Ageratum
- Alyssum
- Begonia
- Centaurea
- Lobelia
- Nasturtium
- Pansy
- Petunia
- Phlox
- Portulaca
- Salvia Splendens
- Thunbergia
- Vinca
- Zinnia, Lilliput

POOR SOIL

- Alyssum, Sweet
- Amaranthus
- Balsam
- California Poppy
- Calliopsis
- Cornflower
- Four-O'Clock
- Marigold
- Nasturtium
- Poppy
- Portulaca

Annual Flower Seeds

The ease of cultivation and the quickly effective results obtained from Annuals make them indispensable, as they are adaptable to an almost endless variety of arrangement.

Even in perennial borders, beds and rock gardens, annuals are very essential to bridge the span between periods of bloom of the perennials and to give desired color effects which are possible only with annuals. Many varieties can be started indoors early and transplanted giving continuous bloom from early summer until frost. Some sorts are very easily grown in late summer to produce plants for the sun-parlor or conservatory where they will blossom during the winter.

For very vigorous young plants in early spring the following may be sown outdoors in November: *Ageratum*, *Alyssum*, *Baby's Breath*, *Calendula*, *Calliopsis*, *Candytuft*, *Clarkia*, *Cornflower*, *Cosmos*, *Cynoglossum*, *Dianthus*, *Larkspur*, *Nigelia*, *Shirley Poppies*, *Snapdragons* and *Sweet Peas*.

Annuals bloom more profusely than biennials or perennials, but it is advisable to cut the flowers before going to seed so that the plants continue to bloom freely.

For Variety, Color, Fragrance, Economy Sow Annuals

AGERATUM

Splendid for bedding or pot culture, covered from June until frost with a mass of very attractive flowers of a tufted appearance. Very effective when contrasted with geraniums. **Large-flowered Mixed.** Height 1½ feet. **Pkt., 10c; ½ oz., \$1.00. Dwarf Blue or Dwarf Mixed.** Height 6-8 inches. **Pkt., 10c; ¼ oz., \$2.00.**

ALYSSUM

LITTLE GEM. Very popular border flower, coming into bloom six weeks after sowing seed and requiring the least attention of all flowers. Very erect and dwarf, its white flowers greatly enhancing the beauty of any bed or border. Height 4 inches. **Pkt., 10c; oz., \$1.50.**

PROCUMBENS SNOW-CLOTH. Compact mass of pure white flowers. 3-4 inches high by 8 inches wide. **Pkt. 10c; ¼ oz., 40c.**

VIOLET QUEEN. Dwarf compact free flowering rich violet; does not fade in hot weather. Height 4 inches. **Pkt., 10c; ¼ oz., 55c.**



Crego Aster

Varieties marked * suitable for Rock Gardens.

POTTED PLANTS

The following varieties are usually available at our store after May 10th. Regret we cannot mail, deliver or ship potted plants.

<i>Ageratum</i>	<i>Pansy</i>
<i>Alyssum</i>	<i>Petunia</i>
<i>Aster</i>	<i>Phlox</i>
<i>Calendula</i>	<i>Scarlet Sage</i>
<i>Cannas</i>	<i>Snapdragon</i>
<i>Coleus</i>	<i>Stock</i>
<i>Coreopsis</i>	<i>Summer Poinsettia</i>
<i>Dianthus</i>	<i>Verbena</i>
<i>Geranium</i>	<i>Vinca</i>
<i>Heliotrope</i>	<i>Wallflower</i>
<i>Lantana</i>	<i>Zinnia</i>
<i>Lobelia</i>	
<i>Chrysanthemums</i>	—See page 52

ANTIRRHINUM OR SNAPDRAGON

(Rustproof)

This border and bedding plant of long blooming season is one of the best perennials suitable for flowering as an annual. Very desirable for cutting as the blooms are borne well above the dark glossy leaves and keep fresh for a long time.

TALL MIXED. 2½ to 4 ft. **Pkt., 10c; ¼ oz., \$1.65.**

SEMI-DWARFED MIXED. 1 to 1½ ft. **Pkt., 10c; ¼ oz., \$1.25.**

ASTERS (Wilt Resistant)

Very popular because of their beauty and ease of culture. The varieties listed represent the finest Asters of the early, midseason and late types and will give a profusion of bloom from July to late October. Asters require good rich soil and during the growing period should be well supplied with water.

AMERICAN BEAUTY. Plants grow nearly 3 feet tall, coming into bloom in September and lasting into October. **Mixed, pkt., 10c; ¼ oz., 75c.**

AMERICAN BRANCHING. A handsome and very distinct variety resembling Japanese Chrysanthemums. The plants grow 2 feet in height and width and the large full petaled blossoms are borne on long stems or branches. Comes into flower in July or early August. **Mixed, pkt., 10c; ¼ oz., 50c.**

CREGO. Flowers of immense size, 4 to 5 inches in diameter with very long stems during late summer and fall. Plants are of strong branching growth, 2 to 2½ feet high. **Separate colors, pkt., 10c; ¼ oz., 50c. Mixed, pkt., 10c; ¼ oz., 50c.**

CALIFORNIA SUNSHINE. Flowers measure 4 to 5 inches in diameter, are half double and exhibit all the grace and beauty of the single Aster. The golden yellow ground tone of the quilled petals contrasts wonderfully with the outer petals. Fine for cutting midseason, height 3 ft. **Mixed, pkt., 10c; ¼ oz., \$1.25.**



Centaurea

AMARANTHUS

Very useful in borders among shrubs, or in centers of large beds. Thrives best in a warm, sunny location and a soil that is not too rich but contains an ample supply of lime. Blooms June to frost.

CAUDATUS. (Love Lies Bleeding.) Plants of erect growth 2½ feet high producing numerous feathery sprays of rich crimson color. **Pkt., 10c; ¼ oz., 25c.**

MOLTEN FIRE. Very ornamental and beautiful; 3 feet tall; easily grown, leaves dark bronze, top of plant brilliant Poinsettia red. **Pkt., 10c; ¼ oz., 65c.**

ARCTOTIS (Blue-Eyed African Daisy)

GRANDIS. White petals tinged lilac with centers steel blue. A splendid and easily grown flower, 2 feet tall. Good for cutting, June to October. **Pkt., 10c; ¼ oz., 80c.**

ANCHUSA (Summer Forget-Me-Not)

BLUE BIRD. Vivid indigo blue, plants compact and of even growth. 18 in. Blooms throughout the summer. **Pkt., 10c; ½ oz., 60c.**

BALSAM OR LADY SLIPPER

Quick growing annual, producing numerous flowers resembling tiny roses. Blooms throughout the summer and early fall. An old favorite for beds and borders. 2 feet. Splendid double mixed, **pkt., 10c; ¼ oz., 40c.**

BARTONIA (Golden Yellow)

AUREA. Large, showy flowers, 3 inches in diameter; deep golden yellow. Blooms early, 18 inches. **Pkt., 10c; oz., \$1.00.**

CANDYTUFT

Hardy annual clusters of small flowers, beautiful and useful for beds, borders, rock gardens and cutting. Height 12 inches. Blooms May to July.

FINEST HYBRID MIXTURE OF ALL COLORS.
Pkt., 10c; ½ oz., 50c.

CALENDULA—POT MARIGOLD

Effective in beds or potted; showy, free-flowering, hardy annuals. Blooms continuously from June until frost. 15 to 24 inches.

EXTRA DOUBLE ORANGE KING. Rich orange red. **Pkt., 10c; ½ oz., 50c.**

FINEST MIXED. **Pkt., 10c; oz., 60c.**

BALL'S, IMPROVED GOLDEN ORANGE. Long stemmed extra double, excellent for forcing. **Pkt., 10c; ¼ oz., 30c.**

LEMON QUEEN. Light golden-yellow flowers, light center, showy for bedding and borders. **Pkt., 10c; ½ oz., 50c.**

ORANGE SHAGGY. Very distinct type having long narrow fringed petals. Flowers 3 in. across. Somewhat resembling rich deep orange Chrysanthemums, long stems, grows 18 in. high. **Pkt., 10c; ½ oz., 50c.**

RADIO. Medium sized, clear orange, closely set petals, attractively quilled. **Pkt., 10c; ½ oz., 50c.**

CAMPANULA—CANTERBURY BELLS

An old-fashioned favorite, stately, showy, and easily grown. Bell-shaped flowers on long upright stems. Plants form perfect pyramids about 2 ft. high and bloom in early summer. **Mixed, pkt., 10c; ¼ oz., 50c.**

CARNATION (Margaret)

Easily grown as an Annual producing large double blooms 4 or 5 months after sowing seed. Very fragrant. (See **Perennials.**)

CELOSIA OR COCKSCOMB

Excellent for cutting. Blooms June to frost.

PLUMOSA. Feathered varieties, fiery red, yellow or mixed, height 2 to 3 ft. **Pkt., 10c; ¼ oz., 50c.**

DWARF EMPRESS COCKSCOMB. Dark-leaved, bright crimson. Height 10 in. **Pkt., 10c; ¼ oz., 75c.**

TALL EMPRESS COCKSCOMB MIXED. Height 1½ ft. **Pkt., 10c; ¼ oz., 30c.**

CHILDSII. (Chinese Woolflower.) Crimson. Height 2½-3 ft. **Pkt., 10c; ¼ oz., \$1.00.**

CENTAUREA

CENTAUREA CYANUS; BACHELOR'S BUTTON OR CORN FLOWER. Charming old-fashioned flowers. Free flowering habit, reseeding itself year after year. Useful as a cut flower, as well as a garden decoration. **Double mixed.** Height 2-2½ ft. Blooms from mid-summer until frost. **Pkt., 10c; oz., \$1.00.**

CENTAUREA MOSCHATA OR SWEET SULTAN. Beautiful, sweet scented flowers borne on long stems, when cut will last for several days. Height 2½-3 ft. **Mixed. Pkt., 10c; oz., \$1.00.**

CORNFLOWER, JUBILEE GEM—Dwarf plants, 1 foot, freely blooming, vivid blue. **Pkt., 10c; ¼ oz., 50c.**



Calendula

Varieties marked * suitable for Rock Gardens.



Arctotis



Didiscus



Dianthus

CHRYSANTHEMUM

The annual Chrysanthemums are free-blooming, easily grown plants, having large flowers in a variety of brilliant colors, fine for cutting. Height 2 ft. Blooms from summer until frost.

Single, Mixed. Pkt., 10c; ¼ oz., 25c.

CLARKIA

Very pretty, profuse flowering annuals. Useful for hanging baskets. Height 2 ft. Blooms June until frost.

Double mixed. Pkt., 10c; ¼ oz., 50c.

CALLIOPSIS

Showy plants with numerous flowers, excellent for bouquets. Thrive well in any soil. Height 2-3 ft. Blooms all summer. Pkt., 10c; ¼ oz., 30c.

COSMOS

One of the most satisfactory hard annuals, flowering in late summer. Fine for cutting and easily grown. Can be sown anywhere and transplanted.

EARLY KLONDIKE ORANGE FLARE. Bright vivid orange, very free flowering. 2-3 ft. Pkt., 10c; ¼ oz., 25c.

RADIANCE. All American Winner 1948. A striking new color combination never before seen in Sensation Cosmos. Deep rose petals overlaid with large well-defined zone of rich crimson. Pkt., 10c; ¼ oz., \$1.30.

SENSATION. (White and Shades of Pink Mixed.) Extremely early free blooming, flowers 4 to 5 inches, plants 4 ft. with rather heavy foliage. Pkt., 10c; ¼ oz., 50c.

DOUBLE EARLY FLOWERING MIXED. Blooms 3 in. Height 4 ft. Pkt., 10c; ¼ oz., \$1.00.

DIANTHUS OR PINKS

These very beautiful and popular biennials flower freely the first year from seed, and in most locations they are quite hardy and produce larger flowers the second year.

***HEDDEWEGI.** Hybrids, very large double flowers. Plants 10-12 inches. Bloom all summer. Pkt., 10c; ¼ oz., 40c.

DIDISCUS—Blue Lace Flower

COERULEUS. Lavender, blue, lace-like flower; heads blooming profusely from June to September; 1½ feet tall. Pkt., 10c; ¼ oz., 75c.

DIMORPHOTHECA

***AURANTIACA (African Daisy).** Very showy flowers for bed or border. Orange-gold daisy-like blooms on long stems. Bushy plants 12-15 inches tall. Bloom until frost. Pkt., 10c; ¼ oz., 80c.

EUPHORBIA

VARIEGATA (Snow on the Mountain). Bright green foliage veined and margined with white, top leaves snow white. Height 2 ft. Pkt., 10c; ¼ oz., 50c.

GILIA

Exceedingly graceful and attractive, with tiny, single starlike flowers, borne profusely on plants 12 to 15 inches tall; especially valuable for bees. Charming in flower border; a good cut flower. Blooms from July until frost.

Tall mixed. Pkt., 10c; ¼ oz., 25c.

GLOBE AMARANTH-GOMPHRENA

One of the best "Straw flowers." Perfect globe shape. Fine for borders and cutting. Height 2 ft. Blooms mid-summer until frost. Mixed colors. Pkt., 10c; ¼ oz., 30c.



Cosmos Radiance

Varieties marked * suitable for Rock Gardens.



Dimorphotheca



Larkspur



Gilia

GODETIA (Satin Flower)

DOUBLE-DWARF MIXED. Azalea flowered. Plants grow 1 foot high, and bloom from June to August. Flowers 3-4 inches across. Excellent for cutting and easily grown. **Pkt., 10c; ¼ oz., \$1.00.**

GYSOPHILA (Baby's Breath)

Graceful plants with light fairy-like growth. A quick growing annual with myriads of small open bell-shaped single flowers. Excellent for their delicate effect in bouquets. Height 2 ft.

Pkt., 10c; ¼ oz., 25c. Mixed, Pkt., 10c; ¼ oz., 25c.

HELIANTHUS

CHRYSANTHEMUM FLOWERED. Golden yellow double blooms 6 to 8 inches across. Used as backgrounds or screens on account of their stately growth. Thrives in almost any soil exposed to the sun, blooms until frost. Height 6-7 ft. **Pkt., 10c; ¼ oz., 25c.**

HELICHRYSUM—EVERLASTING FLOWER

MONSTROSUM. The center of the double pompon-like flower is nearly covered by the still overlapping petals. Height 2 ft. Blooms from June to November. **Mixed. Pkt., 10c; ¼ oz., 65c.**

KOCHIA—SUMMER CYPRESS

Quick growing hedge plant. Very symmetrical and attractive, the bushes taking on a distinctive red tinge late in the summer; for this reason often called Mexican Fire Bush. Height 2-3 ft. **Pkt., 10c; ½ oz., 25c.**

LARKSPUR

One of the best known of garden flowers and if planted in April will produce flowering plants by the first of July and continue to bloom until frost.

GIANT IMPERIAL DOUBLE MIXED. Height 3-4 ft. **Pkt., 10c; ½ oz., 70c.** Imperial White, Blue or Pink. **Pkt., 10c; ¼ oz., 50c.**

For Perennial Larkspur see Delphinium.

ROSAMOND. Tall double stock flowered, early, free flowering, pure deep pink. Height 3-4 ft. **Pkt., 10c; ¼ oz., 50c.**

LOBELIA

CRYSTAL PALACE COMPACTA. Desirable for edgings, bedding and pot culture. Dark blue flowers, dark foliage throughout the summer. Height 4 inches. **Pkt., 10c; ½ oz., 90c.**

LUPINUS

Free-flowering, easily grown annuals with long graceful spikes of richly colored pea-shaped flowers. During July and August. Prefers a little shade, acid soil and cool weather.

HARTWEGII GIANT KING MIXED. Height 2-3 ft. **Pkt., 10c; ¼ oz., 35c.**

MARIGOLD

French Marigolds are smaller than the African but are marked and spotted with varied shades of red and orange. The African is very large, double and in solid colors. Excellent for cutting. Blooms July to frost.

AFRICAN. Tall, double. Height 2½ ft. **Mixed. Pkt., 10c; ¼ oz., 70c.**

MAMMOTH MUM. Large double fluffy light sulphur-yellow flowers resembling Chrysanthemums. Plants bushy, erect and strong. Height 3 ft. **Pkt., 10c; ¼ oz., \$1.25.**

GUINEA GOLD. Orange flushed with gold, flowers semi-double. Height 2 to 2½ feet. **Pkt., 10c; ¼ oz., 35c.**

CROWN OF GOLD. Collarette type, rich golden yellow, chrysanthemum formed, fragrant, double. 2½-inch blooms. Height 2 ft. **Pkt., 10c; ¼ oz., 45c.**

SUNSET GIANTS. Largest known Marigolds, measuring 5 inches or more, ranging in color from deep orange to lemon-yellow, and a new delightful shade of primrose. Fragrant. Height 3-4 ft. **Pkt., 10c; ¼ oz., 65c.**

FRENCH. Dwarf double mixed. Height 1 ft. **Pkt., 10c; ¼ oz., 40c.**

MELODY. Dwarf French double, solid bright orange. Height 1 ft. **Pkt., 10c; ¼ oz., 50c.**

FLASH. Extra early, free flowering, single orange-red profuse blooms. Height 1½ ft. **Pkt., 10c; ¼ oz., 30c.**

MARVEL OF PERU—FOUR O'CLOCK

Large showy fragrant flowers, blooming the entire season. Succeed well in any ordinary garden soil in a sunny location. **Mixed. Height 2 ft. Pkt., 10c; oz., 80c.**

MIGNONETTE

Well known fragrant bedding or potting plant. Sowings made in April and again in July will result in a succession of bloom from early summer until frost.

MACHET GIANT MIXED. Large spikes, very fragrant. Height 12-15 inches. **Pkt., 10c; ¼ oz., 30c.**

Varieties marked * suitable for Rock Gardens.



Lobelia



Lupins



Nigella

NASTURTIUM

Popular plants of the easiest culture. Will bloom most prolifically if given a rather poor soil and an open sunny location. Fine for edgings, beds or borders. Blooms June to frost.

GOLDEN GLEAM. Golden yellow semi-double sweet scented dwarf variety. Height 15 in. Pkt., 10c; oz., 60c.
DWARF MIXED. Very brilliant in all shades of yellow, red and purple. Height 9 in. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

DOUBLE GLEAM HYBRIDS. Large well-formed, sweet-scented double flowers in an extremely wide range of colors. Height 15 in. Pkt., 10c; ½ oz., 30c.

TALL TRAILING—CHOICE MIXED. Height 10 ft. Pkt., 10c; oz., 60c; ¼ lb., \$1.25.

NICOTIANA

AFFINIS. Gives a continuous display of very fragrant flowers through the summer and autumn. Height 2-3 ft. Mixed. Pkt., 10c; ¼ oz., 30c.

NIGELLA OR LOVE-IN-A-MIST

Free-flowering plant, producing curious flowers surrounded by the finely cut foliage. Easily grown; useful for cutting. Height 1½ ft.

DOUBLE BLUE. Pkt., 10c; ¼ oz., 40c.

ORNAMENTAL GRASS

Vigorous plants, grown for their gray ornamental seeds which when dried are used for beads. Height 2-3 ft.

COIX LACRYMA. (Job's Tears.) Pkt., 10c; oz., 40c.



Nasturtium

PANSIES

These very popular and beautiful flowers may be sown in April or May for summer flowering or in August for early spring blooming. They thrive best in an open exposure, with protection during the winter. Height 8 in.

MAMMOTH EXHIBITION MIXTURE. True round and solid pansy form of giant size, each color an attraction. Pkt., 10c; 1/16 oz., \$1.75.

TRIUMPH OF THE GIANTS. (Fruited.) Finest for commercial use. Blooms enormous, most striking in brilliancy and beauty of color. Pkt., 10c; 1/16 oz., \$1.25.

SWISS GIANT ALPENGLOW. Rich garnet and ruby red shades with dark blotches. Pkt., 10c; 1/16 oz., \$1.75.

SWISS GIANT CORONATION GOLD. Large golden yellow, without blotches or marking. Pkt., 10c; 1/16 oz., \$1.75.

SWISS GIANT ULLSWATER. Marine blue with darker blue blotches showing through. Pkt., 10c; 1/16 oz., \$1.75.

PETUNIAS

Of easy culture. Do not plant in the shade nor in soil that is overly rich. For beds, borders, window boxes or hanging baskets.

HYBRIDA GRANDIFLORA (GIANTS OF CALIFORNIA). Light and dark colors, fringed and ruffled, with attractive deep throats, many beautifully veined. Height 12 in. Mixed. Pkt., 10c; 1/16 oz., \$6.00.

HOWARD'S STAR. Rose-crimson with a five-pointed white star. Height 18 in. Pkt., 10c; ¼ oz., \$1.60.

DWARF BEDDING VARIETIES

BLUE BEDDER. Mid-blue.

ROSY MORN. Pink white throat.

ROSE OF HEAVEN. Deep brilliant rose.

SNOW QUEEN. Large white.

Separate colors or Mixed. Height 12 in. Pkt., 10c; ¼ oz., \$1.60.

CHEERFUL. An All-American salmon-pink of dwarf spreading habit producing a mass of blooms. Height 10 in. Pkt., 25c; 1/16 oz., \$1.00.

FLAMING VELVET. Rich, brilliant, velvety crimson, hybrida type. Height 18 in. Pkt., 10c; ¼ oz., \$2.00.

BALCONY PETUNIAS

HYBRIDA PENDULA. For porch and window boxes, also excellent for bedding in solid masses of one or more colors. Large blooms produced in abundance. Height 18 in. Mixed. Pkt., 10c; ¼ oz., \$1.70.



Stocks



Schizanthus



Salpiglossis

PHLOX

Phlox makes a magnificent show in beds and masses where their brilliant and varied colors produce a gorgeous effect. Very easily raised and afford a bright display of flowers all through the summer.

***DRUMMONDII.** Choice mixture, first quality. Height 15 in. Pkt., 10c; ¼ oz., \$1.85.

***STAR PHLOX. (Cuspidata.)** With star-shaped flowers, dwarf growth. Height 12 in. Pkt., 10c; ¼ oz., \$2.50.

POPPIES

TULIP POPPY. One of the most brilliant annuals, the flowers are 3 inches in diameter and of a scarlet color, greatly resembling tulips. Height 20 in.

Pkt., 10c; ¼ oz., 60c.

THE SHIRLEY. Special strain mixed; fine for bedding or cutting; single annual. Height 20 in.

Pkt., 10c; ¼ oz., 25c.

ESCHSCHOLTZIA. (California Poppy.) Spreading plants 1 foot high, suitable for beds and borders, blooming from June until frost. Mixed. Pkt., 10c; ¼ oz., 25c.

PORTULACA—Mexican Rose

Very showy annual, easily grown, and very effective when massed in beds or edgings. A profusion of brilliantly colored flowers are produced throughout the summer. They thrive best in rather rich soil in a sunny situation. Height 6 in.

***LARGE-FLOWERING EXTRA DOUBLE MIXED.**

Pkt., 10c; ¼ oz., \$1.10.

***LARGE-FLOWERING SINGLE MIXED.** All colors. Pkt., 10c; ¼ oz., 55c.

RICINUS—CASTOR OIL BEAN

Ornamental plants of strong, stately growth, the foliage having the appearance of a tropical plant, very effective when planted in masses or as centers of Canna or Dahlia beds. Height 6-8 ft.

ZANZIBAR. Extra mixed. Pkt., 10c; oz., 40c.

SALPIGLOSSIS

Petunia-like flower borne on bushy stem, about 24 inches tall, various shades, which flower profusely during the summer. Mixed. Pkt., 10c; ½ oz., 90c.

SCABIOSA OR MOURNING BRIDE

Fine free-flowering plants for mixed borders and highly esteemed for cut flowers. The blooms are borne on long, erect stems in globular heads in colors ranging from white to dark maroon. From midsummer until frost. Height 3 feet.

DOUBLE MIXED. Pkt., 10c; ½ oz., 75c.

IMPERIAL GIANT. Deep lavender blue.

Pkt., 10c; ¼ oz., 45c.

SALVIA SPLENDENS OR SCARLET SAGE

Very popular bedding plant, extensively used for lawn and conservatory decoration, bearing long spikes of brilliant flowers from July to frost.

BONFIRE. Very dense flowering 2½ foot plants, excellent for beds or massing for color effect.

Pkt., 10c; ¼ oz., \$1.25.

BLAZE OF FIRE. Begins blooming 10 days earlier than any other early flowering Salvia. Dwarf type. Height 12 in. Pkt., 10c; ½ oz., \$2.75.

HABBINGER. Dwarf compact plants with bluish green foliage and a profusion of scarlet flowers. Height 16 in. Pkt., 10c; ½ oz., \$1.50.

SCHIZANTHUS

***MONARCH HYBRID MIXED.** A plant noted for its wonderful variety of coloring and butterfly-like blossoms, fine for cutting, graceful fern-like foliage, height about 18 inches. Blooms May and June. Pkt., 10c; ½ oz., \$1.00.

SNAPDRAGON

See Antirrhinum, page 43.

STATICE (Annual)

Suitable for growing in rock gardens and when dried used for winter bouquets. Splendid clusters of colorful, strawy blooms on stiff stems. Blooms all summer. Height 2 ft.

***SINUATA CHOICE MIXED.** Pkt., 10c; ¼ oz., 25c.

STEVIA

SERRATA. Grown outdoors or as a home plant for its dainty, fragrant, tiny white, star-shaped flowers produced profusely. Excellent cut flower for combining with other varieties. Height 2½ ft. Pkt., 10c; ½ oz., 65c.

STOCKS-10-WEEKS

Deliciously-scented flowers like small rosettes are produced in a wide range of soft and distinct shades. Fine for bedding, borders and cutting. Blooms May to July.

DOUBLE EARLY GIANT IMPERIAL. (Improved Bismarck.) Height 26 in. Mixed. Pkt., 10c; ½ oz., 75c.

DRESDEN PERPETUAL. These fine stocks will live outdoors for several years if protected with a fairly thick layer of straw, which must be lifted early in the spring. Height 20 in. Pkt., 10c; ¼ oz., 85c.

DWARF DOUBLE LARGE FLOWERED MIXED. Height 12 in. Pkt., 10c; ¼ oz., 75c.

***VIRGINIA.** Very early bedding variety. Bearing a profusion of small flowers continuously during cool weather. Height 6 in. Mixed. Pkt., 10c; ½ oz., 75c.

Varieties marked * suitable for Rock Gardens.

SWEET PEAS

CALIFORNIA GROWN SUCCESSFUL EVERYWHERE

One Ounce for 30 to 40 feet of row

THE SPENCERS are of exceptionally large size, the petals waved and frilled and the general effect remarkably graceful and effective. The plants are of vigorous growth and remain in bloom for a longer time than the Grandiflora sorts.

CULTURE.—Grow named varieties of the colors you like best; know them by name in your garden and you will derive much more pleasure from them. Early in the spring make a trench three to four inches deep in rich, mellow soil, so arranged that no water can stand in it and plant the seed in the bottom, covering at first only one inch deep. When the plants are two inches high, cultivate; and as they grow, gradually fill in the trench. When the plants are about five inches high they should be supported by poultry netting, strings or brush. Water should be applied thoroughly once or twice a week early in the morning or in the evening. The blooms should be picked before they form pods or the plants will soon stop flowering. The following have been selected from hundreds of varieties, as being those of the highest quality in their respective classes:

Early Flowering Spencer

Florists' varieties for early forcing—can also be grown successfully outdoors, coming into bloom a month earlier than original Spencer.

HARMONY. Clear lavender.

MARINER. Best clear blue.

SNOW QUEEN. Pure white, opens and retains pure white color.

VALENCIA. Bright orange, sunproof, long stems.

VULCAN. Vivid scarlet, sunproof.

ZVOLANEK'S ROSE. Bright rose pink.

Pkt., 10c; oz., 50c; ¼ lb., \$1.50; lb., \$5.00.

Spencer Garden Varieties

AMBITION. Rosy lavender.

BLACK DIAMOND. Black velvety maroon.

CHARMING. Rosy cerise.

FLAGSHIP. Deep navy blue.

GIGANTIC. Best white.

GLENEAGLES. Very large, silver blue.

JUBILEE. Scarlet cerise.

MAGNET. Bright cream pink.

PINKIE. Large rose pink.

PRINCE OF ORANGE. Best deep orange.

WHAT JOY. Deep, rich cream.

Pkt., 10c; oz., 30c; ¼ lb., 75c; lb., \$2.50.

Sweet Pea Mixtures

Our Sweet Pea Mixtures are combined of carefully considered proportions of varieties which have proven themselves to be the very choicest of their respective types and colors. These mixtures cannot be equaled in their beauty and flowering qualities.

MANN'S SUPERB SPENCER MIXTURE. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.00.

Varieties marked * suitable for Rock Gardens.



Spencer Sweet Peas

SUMMER POINSETTIA

See *Amaranthus Molten Fire*.

TITHONIA

SPECIOSA GRANDIFLORA FIREBALL. Brilliant orange-scarlet single dahlia-like flowers 3 to 4 inches across, dark green foliage, blooms in fall, depending on soil and climate. Height 6 ft. Pkt., 10c; ¼ oz., 65c.

VENIDIUM

FASTUOSUM. Very showy plant 2 to 3 feet tall, producing 3 inch diameter brilliant orange sunflower-like flowers with dark centers. The soft, gray, woolly foliage is very attractive. Pkt., 10c; ½ oz., 75c.

VERBENA

One of the finest bedding plants and also suitable for borders, with its heads of brilliantly colored flowers, producing a mass of bloom throughout the summer. Seeds may be planted as soon as the ground can be worked or earlier indoors and transplanted to the beds in April or May. They succeed in almost any good garden soil.

HYBRID MAMMOTH MIXED. Extra large flowered, brilliant colors and vigorous. Height 1½ ft. Pkt., 10c; ¼ oz., \$1.25.

VINCA (Periwinkle)

Very attractive bushy plants with luxuriant glossy green foliage, producing in abundance handsome flowers that bloom freely all summer. Excellent for borders, summer bedding and window boxes. Height 1 ft.

Choice mixed. Pkt., 10c; ¼ oz., \$1.00.

XERANTHEMUM

CHOICE DOUBLE MIXED. Silvery foliage and silky flowers which are highly prized for dried bouquets. Blooms from early summer until frost. Height 2 ft. Pkt., 10c; ¼ oz., 75c.

ZINNIAS—DOUBLE

GIANT FLOWERED MIXED. Height 3-4 ft. Pkt., 10c; ¼ oz., 40c.

DAHLIA FLOWERED IN SEPARATE COLORS

Height 2½-3 ft.

CRIMSON MONARCH. Deep crimson.

DREAM. Deep lavender purple.

GOLDEN DAWN. Golden yellow.

ILLUMINATION. Deep soft pink.

POLAR BEAR. Pure white.

WILL ROGERS. Scarlet.

Pkt., 10c; ¼ oz., 50c.

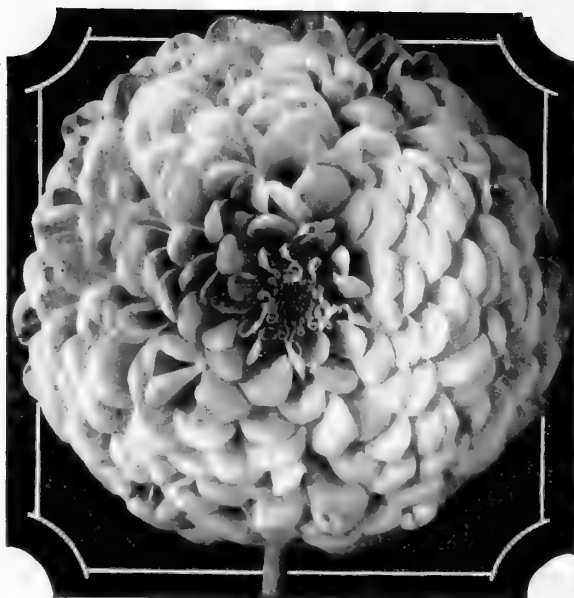
DAHLIA FLOWERED MIXED. Pkt., 10c; ¼ oz., 40c.

FANTASY. Large, well-rounded, informal graceful Chrysanthemum shaped blooms on long stems in the usual range of zinnia colors. Height 2½-3 ft.

Pkt., 10c; ¼ oz., 50c.

LINEARIS. Dwarf, compact, early flowering, single flowers, orange, light yellow stripe, dark center. Height 10 in. Pkt., 10c; ¼ oz., \$1.00.

DOUBLE LILLIPUT. Dainty profuse blooming type; flowers 1 inch in diameter, very popular. Orange, Salmon Rose, Lilac, Pink, Scarlet, Mixed. Height 1½-2 ft. Pkt., 10c; ¼ oz., 40c.



Dahlia Flowered Zinnia

Vines

BALLOON VINE. (Cardiospermum.) Very graceful, rapid grower. Climber with clusters of small white flowers followed by large, inflated balloon-shaped seed pods. Height 10 ft. Pkt., 10c; ¼ oz., 20c.

BALSAM APPLE. (Balsamina.) Fine for trellises or low fences. Rapid growing vines with lobed light green leaves and beautiful fruits of a rich golden yellow color, which when ripe, open up, disclosing the seeds in a carmine covering. (10-12 ft.) Pkt., 10c; ¼ oz., 80c.

CARDINAL CLIMBER. (Ipomoea Quamoclit Hybrida.) An easily grown climber developing to perfection in sandy loam soil. The brilliant scarlet flowers are borne profusely. The leaves resemble those of a fine Japanese Maple. (15-25 ft.) Pkt., 10c; ¼ oz., \$1.25.

COBAEA SCANDENS. Of rapid growth, with fine foliage and large bell-shaped flowers of a beautiful violet blue color. (10-20 ft.) Pkt., 10c; ¼ oz., 50c.

CYPRESS VINE. (Ipomoea quamoclit.) Beautiful and very popular, slender vine, with fern-like foliage and a mass of small star-shaped flowers. (10 ft.) Scarlet. Pkt. 10c; ¼ oz., 85c. Mixed Colors. Pkt. 10c; ¼ oz., 65c.

GOURDS. A large and interesting class producing a great variety of curious fruits, many of which are peculiarly marked. (12 ft.) Pkt., 10c; oz., 40c.



Gourds

HYACINTH BEAN (Dolichos.) Of extra rapid growth, introduced from Japan and very much superior to the old-fashioned flowering bean. (15 ft.)

Mixed. Pkt., 10c; oz., 40c.

MOON FLOWER. (Ipomoea mexicana.) Very pretty, rapid growing vine, with handsome trumpet-shaped flowers. (15 ft.) Pkt., 10c; ¼ oz., 20c.

MORNING GLORY

Giant Japanese Imperial Mixed. (10 ft.)

Pkt., 10c; ¼ oz., 30c.

Scarlet O'Hara. Rich dark wine red or deep rosy crimson, 3½ inch diameter. (10 ft.) Pkt., 10c; ¼ oz., 50c.

Heavenly Blue. Sky blue, shading golden yellow in throat, 4 inch diameter. (10 ft.) Pkt., 10c; ¼ oz., 30c.

Pearly Gates. Enormous flowers, 4½ inches across, clear shining white. (10 ft.) Pkt., 10c; ¼ oz., 55c. (10 ft.) Pkt., 10c; ¼ oz., 55c.

PASSION FLOWER. (Passiflora.) A most interesting and well known climber, bearing singularly beautiful flowers. Blue and white mixed. Pkt., 10c; ¼ oz., \$1.00.

THUNBERGIA. (Black-eyed Susan.) Free-flowering and of rapid growth. May be trained on a slender trellis or allowed to run freely over the ground to cover bare spaces. (5 ft.) Pkt., 10c; ¼ oz., 50c.

SCARLET RUNNER. Of very rapid growth, producing clusters of showy bright scarlet pea-shaped blossoms, followed by edible beans of very fine quality. (20 ft.) Pkt., 10c; oz., 15c.

CLEMATIS HYBRIDS. Large flowered 2-year. **Henryi**, white, **Jackmani**, purple, **Mme. Edouard Andre**, red, **Ramona**, light blue. Succeeds best when planted in rich soil and partial shade. (12 ft.) \$1.40 each.

CLEMATIS PANICULATA. (White.) One of the most beautifully hardy climbers; of strong rapid growth, producing a profusion of deliciously fragrant flowers. Succeeds best when planted in rich soil and partial shade. (12 ft.) Roots, \$1.00 each.

Varieties marked * suitable for Rock Gardens.

Perennial Flower Seeds

Perennials are used extensively in old fashioned gardens, hardy borders and rock gardens. They are easily grown and when once established become increasingly beautiful year after year. Care should be taken in selecting varieties according to their color, height and season of bloom.

The seeds may be sown indoors or in hot beds early in the spring and transplanted to their permanent locations when three or four inches tall. Very satisfactory results can also be obtained by sowing the seeds early in August and shading from excessive heat by using lath or burlap screens. It is well to give young plants winter protection the first year.

The following list includes those varieties which are most popular because of their beauty, usefulness and adaptability to local climatic conditions:

ALYSSUM

***SAXATILE—Compactum.** An excellent border and rock garden plant covered with bright sulphur-yellow flowers during early spring. Height 9 in. Pkt., 10c; ¼ oz., 40c; oz., \$1.25.

ANEMONE

***CORONARIA ST. BRIGID.** Semi-double and double flowers in a wonderful array of brilliant colors. Blooms in June. Height 18 in. Pkt., 10c; ¼ oz., \$2.00.

AQUILEGIA OR COLUMBINE

LONG SPURRED GIANT HYBRIDS. Very hardy, blooming profusely early in the season and during the summer a dainty cut flower and an attraction in the perennial border. Height 3 ft. Pkt., 10c; ½ oz., \$1.50.

MRS. SCOTT ELLIOTT HYBRIDS. The world's finest strain, consisting of the most wonderful colors, with very long spurred flowers. Height 3 ft. Pkt., 10c; ½ oz., \$1.25.

ARABIS—Rock Cress

***ALPINA.** An excellent early blooming dwarf perennial, covered with a mass of white flowers. It makes a fine border for taller perennials. Blooms during April. Height 6 in. Pkt., 10c; ¼ oz., 90c.

ARMERIA—Sea Pink

***FORMOSUM HYBRIDS.** Dwarf plants with grassy leaves and clover-like flower heads from May until July in various shades of pink. Height 1½ ft. Pkt., 10c; ¼ oz., 60c.

BOSTON IVY

AMPELOPSIS VEITCHII. Popular wall ivy with three lobed leaves which turn to bright red late in the fall. Attains a height of 20 to 30 feet in 2 or 3 years. Pkt., 10c; ¼ oz., 40c.

CACTUS

MIXED VARIETIES. All kinds and forms mixed including rare sorts. Easily and quickly grown; very interesting pot plants. Pkt., 10c; 1/16 oz., 75c.



Anemone

BELLIS (Double English Daisy)

Dwarf plant which bears very double aster-like flowers. Useful for border or for cut flowers. Blooms April to July. Height 6 inches.

MONSTROSA. Double Red. Pkt., 10c; ½ oz., \$4.00.

MONSTROSA. Double Mixed. Pkt., 10c; ¼ oz., \$2.50.



Aquilegia

Varieties marked * suitable for Rock Gardens.

CAMPANULA—CANTERBURY BELLS

CALYCANTHEMA. Hardy Biennial. Tall, erect growing plants, completely covered with large cup and saucer shaped flowers during May and June. Height 3 ft. Mixed. Pkt., 10c; ¼ oz., 90c.

CANDYTUFT

***IBERIS SEMPERVIRENS.** Large heads of white flowers. Height 1 ft. Pkt., 10c; ¼ oz., \$2.50.

GIBALTARICA. White flushed lilac. Blooms during June and July. Height 10 in. Pkt., 10c; ¼ oz., 60c.

CARNATIONS

With protection these well known half-hardy perennials can be wintered over outdoors. When planted early they will begin to bloom in about four months and continue until late in the fall. For winter blooming they should be cut back by removing the flower shoots early in the fall and transplanted to pots and kept in a cool room.

EARLY DWARF VIENNA. Carnations like lime. Compact plants about a foot tall, displaying an excellent range of bright colors. Height 1 ft. Mixed Dwarf. Pkt., 10c; ¼ oz., \$3.50.

MARGUERITE. Half Dwarf. Height 15 to 18 in. Choice double mixed. Pkt., 10c; ¼ oz., \$1.30.

PERPETUAL (Famous Chaubaud Type). Crimson. White. Height 2 ft. Pkt., 10c; ¼ oz., \$2.25. Choicest mixture. Pkt., 10c; ¼ oz., \$1.75.

CENTAUREA

MONTANA. Showy, thistle like, large, clear violet-blue flowers resembling the annual cornflower but larger. Blooms June to Sept. Height 2 ft. Pkt., 10c; ¼ oz., 75c.

CHRYSANTHEMUM PLANTS

Hardy Garden Varieties

LARGE FLOWERED

CHARLES NYE , yellow. 50c	PINK RADIANCE 30c
LAVENDER LADY ... 30c	POLAR ICE , white..... 40c
MRS. FINDLAY , yellow. 50c	RED VELVET 40c
OLIVE LONGLAND , peach. 40c	RUTH CUMMING , bronze. 30c

NEW LARGE ENGLISH

(Tall Early Flowering)

BORDER WHITE 40c	GOLD STANDARD 40c
CONQUEROE , red 50c	MRS. PERCY BEER , pink. 50c
DAILY SKETCH , bronze 40c	SALMON FRIEDA 50c

POMPOMS AND BUTTONS

CALIPH , red 30c	IRENE , white 40c
CAROLYN YOSICK , lav. 50c	JUDITH ANDERSON , yellow. 30c
EARLY WONDER , pink. 40c	RED FLARE 40c
GOBLIN , bronze 30c	ZANTHA , yellow 40c

SINGLES

GALAHAD , yellow 40c	SILVER MOON , white. 40c
KRISTINA , rose 40c	TUSSORE , pink 30c
RED HUSSAR 40c	VIKING , bronze 30c

DWARF AND CUSHION VARIETIES

AUTUMN LIGHTS , bronze. 30c	GOLDEN GLORY , yellow. 30c
BREECE'S RED	JOAN HELEN , purple. 40c
CUSHION . 40c	MAJOR CUSHION , pink. 40c
	MANDALAY , bronze .. 40c

Varieties marked * suitable for Rock Gardens.



Carnation

COLEUS (Tender)

HYBRID MIXTURE. Attractive and richly colored foliage plants for house or garden culture. Easily grown bedding plant for any shady or partially shady location. Height 2 ft. Pkt., 10c; 1/16 oz., \$2.00.

COREOPSIS—Golden Wave

GRANDIFLORA. (Mayfield Giants.) Double and semi-double broadly expanded golden yellow flowers. The plants bloom freely during late spring and summer affording a constant supply of cut flowers. Height 3 ft. Pkt., 10c; ¼ oz., 25c.

DOUBLE SUNBURST. Large, golden yellow, fully double, early blooming fine cut flowers. Height 3½ ft. Pkt., 10c; ¼ oz., 35c.

DAHLIA (Half Hardy)

Seed should be planted very early indoors and the plants transplanted in May or June. Most of the plants will bloom the same year. The roots should be dug before freezing weather and stored in vermiculite in a cool place.

CACTUS HYBRIDS. Extra double mixed. Many rich colors. Height 4 ft. Pkt., 10c; ½ oz., \$2.50.

SINGLE MIXED. Height 3½ ft. Pkt., 10c; ¼ oz., \$1.00.

UNWINS DWARF HYBRID IDEAL BEDDING MIXED. Double and semi-double flowers in a wide range of color. Flowering within four months from sowing. Height 1½-2 ft. Pkt., 10c; ½ oz., 75c.

DELPHINIUM

One of the finest summer flowering hardy perennials. To prolong the season of bloom cut the old flower stems off after they have faded and new shoots will produce flower heads successively. Sow Delphinium seed as soon as it is received to insure strong germination.

GOLD MEDAL HYBRIDS. A selected English variety, producing long spikes, completely covered with large blooms. Choice mixed dark blue and purple shades. Height 4-5 ft. Pkt., 10c; ½ oz., 50c.

PACIFIC GIANTS GALAHAD SERIES. Clear hugh white. Mildew resistant. Height 5 ft. Pkt., 10c; 1/16 oz., \$1.75.

PACIFIC GIANTS MIXED. Florets 2½ to 3½ in. across. Mildew resistant. Height 5 ft. Pkt., 10c; 1/16 oz., \$1.25.

DIANTHUS—Hardy Pinks

FLORISTS' PERPETUAL. Large clusters, fragrant, very useful for cut flowers. Height 1½ ft. Double and Single Mixed. Pkt., 10c; ¼ oz., 85c.

***PLUMARIUS—Single Mixed.** Large showy single flowers in wide range of colors during May and June. Height 1 ft. Pkt., 10c; ¼ oz., 50c.

***PLUMARIUS—Double Mixed.** Of very compact growth, double flowers in many colors, during May and June. Height 1 ft. Pkt., 10c; ¼ oz., \$1.00.

FEVERFEW (Matricaria)

BRIDAL ROSE. Beautiful, small, white button-like double flower heads, from June to October. Plants of bushy growth with finely cut dark green foliage; desirable for bedding. Height 2 ft. Pkt., 10c; ¼ oz., 50c.

FORGET-ME-NOT—Myosotis

***BIENNIAL ALPESTRIS.** Popular plants for massing in beds or borders. Succeeds best in moist, shady locations. Vivid blue flowers from May to July. Height 1 ft. Pkt., 10c; ¼ oz., \$2.00.

FOXGLOVE OR DIGITALIS

In stately appearance the Foxgloves occupy a prominent place among our hardy plants. They succeed well in an average garden soil. Blooms June and July.

MONSTROSA FINE MIXED. This mixture of the Giant Foxgloves is sure to please every gardener. Produces long spikes of beautiful, tubular-shaped flowers in a wide range of rich colors. Height 4-5 ft. Pkt., 10c; ¼ oz., 50c.

GAILLARDIA

BURGUNDY. Easily grown, will flower the first year if sown early. Thrives in full sun, will stand drought and hot weather. Long stemmed daisy-like flowers bloom in profusion from June to October. Height 2½ ft. The reddest Gaillardia—shining wine-red petals sometimes tipped yellow. Pkt., 10c; ¼ oz., 90c.

GRANDIFLORA, FINEST MIXED. Pkt., 10c; ¼ oz., 65c.
THE DAZZLER. Bright golden yellow with crimson-maroon center, rather large. Pkt., 10c; ¼ oz., 60c.

GERBERA (Jamesoni Hybrids)

NEW AFRICAN TRANSVAAL DAISY, producing wonderfully beautiful daisy-like blooms of large size, in a wide range of colors. Grown either as a greenhouse plant or propagated in hot-beds and set out early in May. Very profitable cut flower for florists. Height 12 to 18 inches. Pkt., 10 seeds, 10c; 100 seeds, 75c.



Delphinium

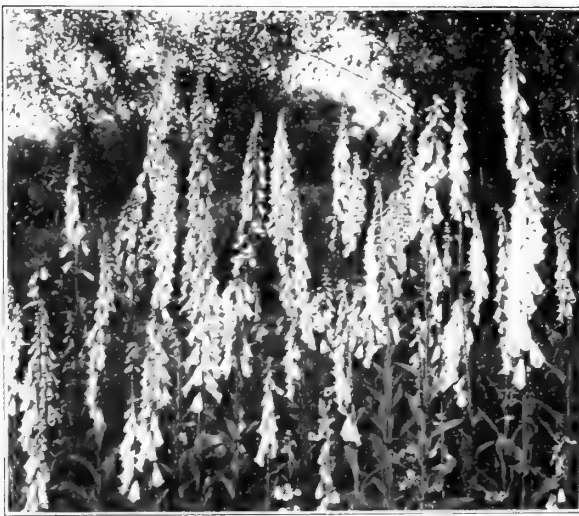


Gerbera



Feverfew

Varieties marked * suitable for Rock Gardens.



Foxglove



Gaillardia



Sweet Rocket

GEUM—Coccineum

***MRS. BRADSHAW.** Graceful, double orange-scarlet flowers produced on long stems from June to September. Valuable for cutting; excellent for border. Height 2 ft. Pkt., 10c; $\frac{1}{8}$ oz., 50c.

GYPSOPHILA—Baby's Breath

SINGLE (PANICULATA). Tiny white flowers borne on slender stems. The plants are covered with blooms during June and July. Height 2½ ft. Pkt., 10c; oz., 80c.

DOUBLE BABY'S BREATH. Small, double, white flowers, carried on slender wiry stems. Makes a fine show during June and July. Height 3 ft. Pkt., 10c; $\frac{1}{4}$ oz., \$2.50.

***REPENS.** An excellent variety for rock gardens. The plants are covered with small white flowers during June and July. Height 6 in. Pkt., 10c; $\frac{1}{4}$ oz., \$1.65.

HELIOTROPE (Half Hardy)

Excellent bedding plants in summer, desirable pot-plants during winter. Succeeds in any good soil and sunny location. Fragrant. Height 2 ft.

GIANT FLOWERED. Blue and white. Mixed. Pkt., 10c; $\frac{1}{8}$ oz., \$1.50.

HESPERIS MATRONALIS

(SWEET ROCKET)

Old fashioned garden plants. Bears during the summer, snowy white, lilac and purple fragrant flowers. Height 2-3 ft. Excellent for planting in a border or among shrubbery. Mixed. Pkt., 10c; $\frac{1}{4}$ oz., \$5.00.

HOLLYHOCKS

Excellent for a background to dwarfier plants. Succeeds best in deep rich, well drained soil. Sunny location. Blossoms from late spring until midsummer. Height 5-6 ft.

CHATERS DOUBLE CHOICE MIXTURE. Pkt., 10c; $\frac{1}{4}$ oz., 90c.

CHATERS SINGLE MIXED. Large, very artistic blooms. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

IBERIS—See Candytuft (Perennial)

LATHYRUS—Perennial Sweet Peas

A showy, free-flowering hardy climber. Blooms from midsummer until frost. Excellent for cutting. Height 5-6 ft.

FINEST MIXED. Pkt., 10c; $\frac{1}{4}$ oz., 65c.

LINARIA—Kenilworth Ivy

***CYMBALARIA.** Small lilac blue flowers, are borne on a charming neat trailing plant. Height 4 to 6 in. Pkt., 10c; $\frac{1}{8}$ oz., \$2.00.

LINUM—Perennial Flax

***PERENNE.** Beautiful light blue flowers from July until August. The blooms last only one day but they are produced continuously. Height 2 ft. Pkt., 10c; oz., 90c.

LUNARIA—Honesty

Biennial plant having round, silvery white, paper-like seed-pods which are dried for winter bouquets. Height 1½ to 2½ ft. Mixed. Pkt., 10c; $\frac{1}{4}$ oz., \$1.00.

LUPINS

Elegant spikes of pea-flower-like blooms during May and June. Height 3 ft.

RUSSEL. New hybrid. Pkt., 10c; $\frac{1}{4}$ oz., \$1.30.

NIEREMBERGIA (Tender Perennial)

PURPLE ROBE. Rich deep violet purple dwarf compact, does not fade, free flowering. Height 6 in. Pkt., 10c; $\frac{1}{32}$ oz., \$2.25.

PENTSTEMON

HYBRID GLOXINIOIDES (Beard Tongue). Beautiful bell-shaped flowers. Height 2½ ft. Choice mixed. Pkt., 10c; $\frac{1}{4}$ oz., \$1.65.

PHLOX

DECUSSATA—New Hybrids. Flowers in all bright colors; sow seeds late in fall and they will germinate in the spring. Height 2-3 ft. Pkt., 10c; $\frac{1}{4}$ oz., \$1.50.

Varieties marked * suitable for Rock Gardens.



Platycodon



Saponaria



Wallflower

PLATYCODON—Chinese Bellflower

GRANDIFLORA. Large showy, deep blue flowers, are produced all summer. A splendid plant for the hardy border. Height 1½ ft. **Pkt., 10c; ¼ oz., \$1.00.**

POPPIES

ORIENTAL SCARLET. The blooms are an intense shade of scarlet red having a conspicuous black blotch on each petal, during June and July. Height 2½ ft. **Pkt., 10c; ¼ oz., \$1.30.**

POPPY NUDICAULE—Iceland Poppies

Great numbers of flowers on slender stems 1 foot long throughout the season.

***SUNBEAM MIXED.** Embracing all the graceful, gaily, colored flowers in white, yellow and orange found in Iceland Poppies. **Pkt., 10c; ¼ oz., \$1.25.**

PRIMULA—Primrose

***AURICULA.** Many bright colors, including orange, copper, brown, and other pastel shades. An excellent hardy Primrose for the border. Blooms during spring. Height 6-9 in. **Pkt., 10c; 1/16 oz., \$2.25.**

PYRETHRUM—Painted Daisy

SINGLE MIXED. A showy perennial with daisy-like flowers, blooming during May and June. Height 2 ft. **Pkt., 10c; ½ oz., \$2.00.**

DOUBLE MIXED. This mixture contains many bright showy colors, shading from white to deepest red. The blooms are elegantly doubled. Height 2 ft. **Pkt., 10c; ½ oz., \$1.50.**

RUDBECKIA—Cone Flower

SPECIOSA NEWMANI. Brilliant orange-yellow daisy-like flowers with brown centers. Blooms from July until October. Height 3 feet. **Pkt., 10c; ¼ oz., 80c.**

SAPONARIA—Rock Soapwort

***OCYMOIDES.** Splendid hardy rock plant, with rose pink flowers during spring and summer. Height 6 to 9 in. **Pkt., 10c; ¼ oz., \$1.40.**

SCABIOSA

CAUCASICA. Charming perennials for border and cut flower culture. The large lavender blue flowers are borne profusely on fine long stems. Height 2 ft. **Pkt., 10c; ¼ oz., \$1.65.**

SHASTA DAISY

ALASKA. Splendid hardy perennial plants, having large white flowers with yellow center, 4 to 5 in. across, borne singly on long, stiff, wiry stems; excellent for cutting and borders. Height 2 to 2½ ft. **Pkt., 10c; ¼ oz., 50c.**

STATICE—Sea Lavender

Splendid hardy perennials, either for the border or rockery, producing all summer panicles of small flowers, which can be dried and used for winter bouquets. Height 2 feet.

LATIFOLIA. Large deep-blue flowers. **Pkt., 10c; ¼ oz., 90c.**

SWEET WILLIAM—Biennial

DIANTHUS BARBATUS

Sow the seed very early and have vigorous young plants coming into bloom the same season. They may be sown, however, in August to bloom the following May and June. Height 1-1½ ft.

SINGLE MIXED. All shades of white, pink and red. **Pkt., 10c; ¼ oz., 45c.**

SINGLE NEWPORT PINK. **Pkt., 10c; ¼ oz., 50c.**

SINGLE SCARLET BEAUTY. Scarlet. **Pkt., 10c; ¼ oz., 50c.**

DOUBLE MIXED. Very fine; all colors. **Pkt., 10c; ¼ oz., 65c.**

DOUBLE EXTRA DWARF MIXED. **Pkt., 10c; ¼ oz., \$2.00.**

TRITOMA—Poker Plant

EARLY HYBRID. Massive orange-scarlet flowers, for border and cutting. Blooms August to October. Needs winter protection. Height 3-4 ft. **Pkt., 10c; ¼ oz., 90c.**

VALERIANA (Coccinea)

Very showy red flowered border plant. Does well in poor soil. Height 2 to 3 ft. **Pkt., 10c; ¼ oz., \$1.00.**

VIOLAS OR TUFTED PANSIES

Well-known, free-flowering hardy perennials, easily grown from seed. While flowers are not so large as the regular type of Pansy, the blooms are produced in such an abundance and the flowering season so much longer that they are superior to pansies for some purposes. Seed sown in April produces flowering plants by June and from then on until frost they are a sheet of bloom. Height 6 in.

LUTEA SPLENDENS (Yellow). **Pkt., 10c; 1/16 oz., 70c.**

HYBRIDA. Choice mixed. **Pkt., 10c; ½ oz., \$2.00.**

WALLFLOWER

Showy plants, sweet-scented flowers in bright oriental red and yellow colors in May. Good cut flower. Height 1½ to 2 ft.

DOUBLE MIXED. **Pkt., 10c; ¼ oz., \$1.50.**

Varieties marked * suitable for Rock Gardens.

CANNA ROOTS

CITY OF PORTLAND. 3½ ft. pink. Flowers of largest size. A glowing shade of pink. Foliage green.

\$1.00 per dozen.

EUREKA. 4 ft. green foliage. The best white canna for all purposes. The large substantial flowers are very freely produced on strong vigorous plants. \$1.00 per doz.

HUNGARIA. 3½ ft. Peach blossom pink. Very compact. Foliage green. \$1.00 per dozen.

KING HUMBERT. 4 ft. Leaves are purple-brown over bronze. Crowned with immense heads of velvety orange-scarlet. \$1.00 per dozen.

PRESIDENT. 4 ft. The most wonderful green leaved, red flowered canna in cultivation. \$1.00 per dozen.

YELLOW KING HUMBERT. 4 ft. Green leaves, golden-yellow flowers blotched red. \$1.00 per dozen.

IRIS

ALCAZAR. Reddish bronze and purple.

AMBASSADOR. Reddish violet.

BLUE VELVET. Velvety, best dark blue.

GEORGE YELD. Combination of colors, standards bright apricot shaded rose, falls brilliant rose crimson.

GOLD IMPERIAL. Chrome yellow throughout.

MOTHER OF PEARL. Pale bluish lavender.

PEACHES. Peach, apricot blend.

PINK SATIN. True pink.

WHITE QUEEN. White.

YELLOW MOON. Soft uniform yellow.

20c each; \$2.00 doz.

HYACINTHUS CANDICANS

An ornamental midsummer flowering plant, producing from 20 to 100 large bell shaped flowers of a creamy white color on spikes 3 to 5 feet high. 15c each; \$1.50 doz.

PERUVIAN DAFFODIL

(Ismene Calathina)

Summer-flowering bulb with large, amaryllis-like, pure white, fragrant blossoms. 2½-in. size. 30c each.



Hardy Iris



Hardy Lilies

LILIES

	Each	Doz.
Regale. White, shading to yellow in the center with pink tinge on outer edge. Height 3 to 5 ft. Bulbs 8-9 inch size.....	.45	\$4.50

PEONIES

	Each
(Plant shallow just barely covering the eyes.)	
Baroness Schroeder. Immense white, fragrant.....	.85
Couronne d'Or. White with yellow stamens.....	.65
Duchesse de Nemours. Sulphur white, early.....	.65
Edulis Superba. Clear mauve pink, very early.....	.65
Felix Crousse. Ruby red, blooms profusely.....	.75
Festiva Maxima. White, carmine spot on center petal.....	.65
Mons. Jules Elie. Glossy lilac pink, shading to a deeper rose at the base.....	.85
Sarah Bernhardt. Midseason. Appleblossom pink with each petal silver tipped.....	.85

AMARYLLIS

(Giant American Hybrids)

The most desirable type of Amaryllis, especially beautiful and easily managed in the amateur's window or conservatory, produces from four to six gigantic blooms of perfect form. Red, 3 inches up, 90c. Mixed colors, 3 inches up, 75c each.

TUBEROUS ROOTED BEGONIAS

Especially adapted to window or conservatory culture. Sizes 1 to 1½ inch in diameter. Scarlet, pink, yellow. Single or double. 35c each; \$3.50 per dozen.

BLEEDING HEARTS

A beautiful hardy garden plant of graceful habit, 2 to 3 feet high. The foliage is of a highly ornamental fern-like appearance, over which hang the drooping spikes of pink, heart-shaped flowers. Blooms in May and June. Can be lifted and potted for winter and spring bloom indoors. 90c each.

EXCELSIOR PEARL TUBEROSE

One of the most fragrant and most popular of the summer flowering bulbs. May be started early in hotbeds or pots, or planted in open ground after the first of May. 10c each; \$1.00 per dozen.

CALADIUM ESCULENTUM OR ELEPHANT'S EAR

Large bulbs, 9-11 inch. 25c each; \$2.50 per dozen; medium sized bulbs, 5-7 inch, 15c each; \$1.50 per dozen.

FANCY LEAVED CALADIUMS

1½ to 2 inches. 25c each; \$2.50 per dozen.



Gladioli in Mass Planting

PINK

DEBONAIR. (Large—90 Days.) La France shrimp pink, shading shrimp pink toward center with a creamy throat. 6 to 8 blooms on an extremely long head.

MARGARET FULTON. (Medium—70 Days.) Clear soft rich dark salmon. 6 to 8 perfectly placed florets open.

PEGGY LOU. (Medium—95 Days.) A very outstanding pure pink with light rosy cast.

PHYLLIS McQUISTON. (Large—100 Days.) Large deep glowing shrimp pink shading lighter at the throat. 6 or more large blooms on a long spike.

PICARDY. (Giant—85 Days.) Soft shrimp pink. A blotch of light flesh pink shading to shrimp pink at edges. 7 to 10 florets open at a time.

ROSA VAN LIMA. (Large—75 Days.) Fine light rose pink with a few white lines in throat. 8 or more large well placed blooms open on a tall strong spike.

RED

BEACON. (Large—80 Days.) Clear bright scarlet with large cream blotch.

DREAM OF BEAUTY. (Medium—80 Days.) Large rose red. Tall, strong grower.

FLAMING SWORD. (Medium—70 Days.) Scarlet red, medium sized blooms 6 to 7 open on a tall straight stem.

JULES AMOTT. (Large—90 Days.) Glistening deep red, 6 to 8 florets open at a time.

NEW EUROPE. (Large—85 Days.) Vivid scarlet red with a small purple stripe in the throat. The strong and long spikes bear magnificently shaped enormous florets, from which at least 10 are open at a time.

WHITE

MARGARET BEATON (Large—80 Days.) Pure snow white with small orange scarlet blotch in the throat. 6-8 well placed blooms on long flowerhead.

VREDENBURG. (Large—75 Days.) Early large pure white. Perfect form and placement.

YELLOW AND CREAMS

GATE OF HEAVEN. (Medium—75 Days.) Beautiful ruffled deep yellow. 5 to 6 flowers open on a head of greenish yellow buds.

GOLD EAGLE. (Medium—70 Days.) Extra early light yellow of medium size.

SHIRLEY TEMPLE. (Large—75 Days.) Immense heavily ruffled cream with cream yellow throat.

WANDA. (Large—90 Days.) A large cream, deeper on the lower petal with a bit of rose deep in the throat.

GLADIOLI

Plant Manns' Gladioli Bulbs. They are strictly 1½ inches or more in diameter, sound, true to name, and can be absolutely depended upon to produce large, beautiful well-formed blooms.

Cultural Suggestions: Set bulbs 4 inches deep and 6 inches apart, either in rows or massed in beds, borders or among shrubbery. Successive plantings from April to July will bloom from July until frost. They will thrive in any good garden soil, but a sunny location is best. Cultivate frequently and water freely while blooms are forming.

BLUE

AVE MARIA. (Medium—85 Days.) Medium blue with darker blotch. Opens 8 well placed blooms.

BLUE BEAUTY. (Large—85 Days.) Medium light blue with edges overlaid violet blue. Wide open florets, 8 open, 20 buds, on a long strong spike.

LAVENDER

ELIZABETH THE QUEEN. (Giant—90 Days.) Beautiful clear mauve with darker lines in the throat. 7 to 8 blooms open on strong spike.

MINUET. (Large—80 Days.) Beautiful pinkish lavender. This lavender has been for many years the standard by which all other lavenders are judged.

ORANGE

BIT O'HEAVEN. (Medium—90 Days.) Beautiful orange color with yellow throat. 9 to 12 medium sized blooms on a tall straight spike.

PURPLE

CHARLES DICKENS. (Medium—75 Days.) Purple violet. Tall strong grower with long spike of blooms.

SMOKIES AND OTHER COLORS

BAGDAD (Large—90 Days.) Smoky old rose, 6 to 8 immense blooms at a time.

VAGABOND PRINCE. (Large—75 Days.) Mahogany brown with a glowing flame scarlet blotch on lip petal. 8 to 10 large size blooms open at a time.

PRICES

Variety	Each	Doz.	Per 100
Ave Maria	\$.011	\$1.10	\$7.50
Bagdad	.07	.70	5.00
Beacon	.07	.70	5.00
Bit O'Heaven	.07	.70	5.00
Blue Beauty	.12	1.20	8.00
Charles Dickens	.10	1.00	7.00
Debonair	.07	.70	5.00
Dream of Beauty	.10	1.00	7.00
Elizabeth the Queen	.16	1.60	12.00
Flaming Sword	.07	.70	5.00
Gate of Heaven	.10	1.00	7.00
Gold Eagle	.07	.70	5.00
Jules Amott	.12	1.20	8.00
Margaret Beaton	.07	.70	5.00
Margaret Fulton	.06	.60	4.00
Minuet	.14	1.40	9.00
New Europe	.15	1.50	10.00
Peggy Lou	.12	1.20	8.00
Phyllis McQuiston	.07	.70	5.00
Picardy	.07	.70	5.00
Rosa Van Lima	.09	.90	6.00
Shirley Temple	.10	1.00	7.00
Vagabond Prince	.12	1.20	8.00
Vredenburg	.12	1.20	8.00
Wanda	.09	.90	6.00

GLADIOLUS MIXTURES

MANNS' SPECIAL VARIETY MIXTURE:

25 Bulbs (mixed) 1 of each listed \$1.75.

100 Bulbs (mixed) 4 of each listed \$6.35.

100 Bulbs, in multiples of 10, your selection at 100 rates

MANNS' SUPERIOR RAINBOW MIXTURE: Made up of varieties which because of their commercial value and reliable flowering qualities are being produced in such large quantities that low prices are made possible.

50c per doz.; \$3.65 per 100

Manns' Vegetable Plants, Roots, Trees and Berries

PLEASE NOTE: All plants are quoted f. o. b. Baltimore. On parcel post orders, 15c per 100 must be added for postage and packing. No shipment can be sent into sections having Japanese beetle restrictions.

CABBAGE PLANTS, FROST-PROOF.

(Ready in February to May.)
60c per 100.

CAULIFLOWER PLANTS. (Ready in May.)

50c per doz.; \$2.25 per 100.

BORECOLE PLANTS. (Ready in July.)

\$1.25 per 100.

CELERY PLANTS. (Ready in July.)

Easy Bleacher Golden Plume Winter Queen
\$1.25 per 100.

EGG PLANTS. (Ready in May.)

25c per dozen; \$1.25 per 100.

LETTUCE PLANTS. (Ready in March, April, September and October.)

\$1.00 per 100.

PEPPER PLANTS. (Ready in May and June.)

25c per doz.; \$1.25 per 100.

SWEET POTATO PLANTS. (Ready in May and June.)

\$1.25 per 100.

TOMATO PLANTS. Hotbed Grown. (Ready in April.)

\$1.00 per 100.

Southern field-grown. \$1.00 per 100.

ASPARAGUS ROOTS

Mary Washington. From one to two years may be saved by planting Roots instead of seed. Choice, 2-year-old roots. 25 for 85c; \$2.75 per 100.

HORSERADISH ROOTS

Maliner Kren. (Bohemian.) Doz., 45c.

RHUBARB ROOTS

Victoria. \$1.75 per doz.



PLANT SETTER

No. 15—Automatic, positive and accurate operation, rigid construction, cadmium plated, no rust, removable water spout. \$5.75.



FRUIT TREES

APPLES. 5-6 ft. \$1.75 each; \$15.00 per 10. Delicious, Yellow Delicious, Double Red Delicious, Winesap, York, Red Rome, Grimes Golden, Jonathan, Yellow Transparent, Hyslop Crab, etc.

PEARS. 5-6 ft. \$3.00 each. Bartlett, Kieffer, Seckel.

PEACHES. 5-6 ft. \$1.75 each. Belle of Georgia, Carman, Crawford's Early, Crawford's Late, Elberta, Heath Cling, J. H. Hale, Shippers Late.

CHERRIES. 9/16 to 11/16 cal. \$2.50 each.

SOUR—Early Richmond, English Morello, Montmorency. **SWEET**—Bing, Black Tartarian, Napoleon, Yellow Spanish.

PLUMS. 5 to 7 ft. \$2.50 each. Abundance, Burbank, Red June.

GRAPE VINES (2 yr. No. 1)

CONCORD. Blue. 55c each.

DELAWARE. Red. 75c each.

NIAGARA. White. 55c each.

SMALL FRUITS AND BERRIES

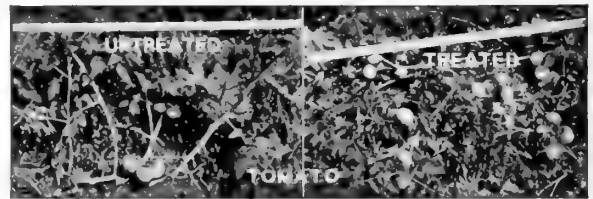
BLACKBERRIES. Blowers, Eldorado. 10, \$2.00; 100, \$12.50.

DEWBERRIES. Lucretia. 10, \$1.30; 100, \$7.50.

RASPBERRIES. Chief-red; Cumberland-black; Latham-red; St. Regis-red, everbearing; Indian Summer-red, everbearing. 10, \$2.25; 100, \$12.50.

BLUEBERRIES. 2 yr. 12-18 in. Burlington, Concord, Jersey, Rancocas, Rubel, \$1.75 ea.; 10, \$12.50.

BOYSENBERRIES. Thornless. 10, \$2.00; 100 \$12.50.



TRANSPLANTONE

For all plants and trees. No set-back from transplanting, insurance against replanting and an aid to earlier production. See page 77.

FRUITONE

The hormone spray for stopping premature drop of fruit, flowers and leaves. See page 77.

STRAWBERRY PLANTS

MARCH 1st to MAY 10th

We can supply fresh, strong, healthy plants of all the leading varieties in any quantity. Following is a partial list of the most popular sorts for planting in the vicinity of Baltimore.

Dorsett-Fairfax-Premier. Early varieties. \$2.25 per 100; 500 for \$7.50.

Big Joe-Catskill Midseason. \$2.25 per 100; 500 for \$7.50.

Chesapeake. Late. \$2.25 per 100; 500 for \$7.50.

BERRY BOXES

Pints	100	\$1.50	Let us
Quarts	100	1.50	quote
2 qt. Tills	100	3.75	quantity
3 qt. Tills	100	4.00	price.

(Not Mailable)



Weigela Rosea



Foundation Planting makes Lawn part of Home

AZALEAS

HINODEGIRI. Beautiful brilliant red, (Evergreen type).
8 to 10 inch, \$2.50; 10 to 12 inch, \$3.00.

FLOWERING SHRUBS

(Bare Roots)

Name	Size	Each
Almond, Double Flowering, Pink.....	2 ft.	\$1.25
Althea or Rose of Sharon, Red.....	4 ft.	1.25
Butterfly Bush, Purple.....	3 ft.	1.25
Calycanthus Sweet Shrub, Dark Maroon..	3 ft.	1.65
Deutzia, Crenata, Pink.....	4 ft.	1.65
Deutzia, Gracilis, White.....	2 ft.	2.50
Deutzia, Pride of Rochester, Cream.....	4 ft.	1.65
Forsythia, (Golden Bell), Yellow.....	4 ft.	1.25
Honeysuckle Tartarian, Yellow.....	3 ft.	1.25
Hydrangea, Arborescens, White.....	3 ft.	1.65
Hydrangea, Paniculata Grandiflora, White	4 ft.	2.25
Japanese Quince, Red.....	2½ ft.	1.65
Kerria Japonica, White.....	3 ft.	1.65
Lilac, Ludwig Spaeth, Purple.....	3 ft.	3.25
Lilac, President Grevy, Purple.....	3 ft.	3.25
Lilac, Marie LeGraye, Pink.....	3 ft.	3.25
Sambucus Aurea (Golden Elder) Yellow..	2-3 ft.	1.25
Snowball, (Common Old Fashion) White..	2-3 ft.	1.65
Spiraea, Anthony Waterer, Red.....	2½ ft.	2.00
Spiraea, Thunbergi, White.....	3 ft.	1.65
Symphoricarpos Racemosus (Snowberry)..	3 ft.	1.25
Spiraea, Van Houtte, White.....	3 ft.	1.65
Syringa, Coronarius (Mock Orange) Cream	3 ft.	2.25
Weigela, Eva Rathke, Red.....	2½ ft.	2.25
Weigela, Rosea, Rose pink.....	3 ft.	1.65

FLOWERING TREES

(Bare Roots)

Name	Size	Each
Flowering Cherry (Deep Pink).....	6 ft.	\$6.75
Flowering Crab.....	4 ft.	3.75
Flowering Peach (Red).....	4 ft.	4.25
Holly, American.....	3 ft.	6.75
Magnolia, Niagara (Dark Red).....	3 ft.	7.50
Viburnum Vosa (Yellow).....	6 ft.	6.75

SHADE TREES

(Bare Roots)

Name	Size	Each
Ash, European.....	5-6 ft.	\$6.75
Ash, Green and White.....	6-8 ft.	3.50
Birch, Niagara.....	6-8 ft.	3.50
Catalpa, Western.....	6-7 ft.	3.50
Linden, American.....	6-7 ft.	5.00
Maple, Norway.....	6-8 ft.	5.95
Maple, Red.....	7-8 ft.	10.00
Maple, Silver.....	6-8 ft.	3.00
Poplar, Lombardy.....	6-8 ft.	1.50
Willow, Golden.....	6-8 ft.	3.50

EVERGREENS

(Burlaped and Balled)

Name	Size	Each
Arborvitae, Berckmans Golden.....	15-18 in.	\$3.75
Arborvitae, Globe.....	18-24 in.	3.75
Arborvitae, Pyramidal.....	3 ft.	5.00
Juniper, Pfitzer.....	18-24 in.	4.25
Spruce, Colorado Blue.....	2-2½ ft.	11.75
Spruce, Norway.....	3 ft.	5.95
Spruce, White.....	3-4 ft.	5.95
Yews, Hatfield.....	3 ft.	10.00
Yews, Spreading.....	18-24 in.	6.75

HEDGE PLANTS

BARBERRY

THUNBERGI. Popular for mixing in the shrubbery border, as single specimens, or for planting in clumps on the lawn, as well as for foundation plantings and for hedges. 12 in., \$2.00 per 10; \$17.50 per 100; 18 in., \$4.00 per 10; \$35.00 per 100.

CALIFORNIA PRIVET

12 to 15 in., 10 for \$1.40; \$12.50 per 100; 18 to 24 in., 10 for \$2.00; \$18.50 per 100.

ROSE BUSHES

DAHLIAS

U. S. PLANT PATENTED NOVELTIES

FERTIL-POTTED

Subject to stock being available and price prevailing at that time.

BETTER TIMES (23) Cerise-red	\$1.85
COUNTESS VANDAL (38) Pink with salmon glow.	1.85
DICKSON'S RED (376) Scarlet red.....	1.85
ECLIPSE (172) Rich gold	1.85
HECTOR DEANE (361) Crimson, orange.....	1.85
McGREDY'S SUNSET (317) Orange, yellow.....	1.85
MISS AMERICA (264) Flesh with salmon and gold..	1.85
SIGNORA (201) Orange red.....	1.85
BLAZE (10) Climber, scarlet.....	2.00
DOUBLOONS (152) Climber, saffron yellow.....	2.00

SELECT EVERBLOOMING HYBRID—TEA

These standard varieties have stood the test of time, having become popular by their performance in Baltimore gardens.

Subject to stock being available and price prevailing at that time.

BRIARCLIFF. Extra large, perfect form, exquisite deep rose-pink, lighter on outer petals.

CALEDONIA. Large, white, very double, long-lasting, slightly fragrant, long stems, hardy.

DAME EDITH HELEN. Glowing pink, large and full, intensely fragrant. Continuous bloomer all season, very hardy.

E. G. HILL. Massive deep maroon, velvety on inside, very fragrant. Blooms throughout season.

ETOILE de HOLLAND. Bright red, large, loose, semi-double, very fragrant.

GOLDEN DAWN. Sunflower-yellow turning to lemon, well-formed. Fragrant, profuse, continuous.

K. A. VICTORIA. Exotic pure white blooms for contrast in bouquet or garden.

McGREDY'S IVORY. Delicate creamy white, yellowish at base. Long, pointed bud.

MRS. E. P. THOM. Fine buds, perfect rich yellow flowers; delicate fragrance.

MRS. P. S. DUPONT. Deep golden yellow, slightly lighter with age; semi-double. Fragrant, steady bloomer.

MRS. SAM McGREDY. Scarlet-copper-orange, flushed red outside; fragrant. Profuse, continuous bloomer, very hardy.

PRES. HERBERT HOOVER. Maroon and orange, two-tone. Vigorous, upright, free blooming.

RADIANCE. Cameo-pink; large, intensely fragrant. Blooms all season, in all climates. Tall.

RED RADIANCE. Very large, long-lasting; intensely fragrant, clear, even red, tall.

TALISMAN. Golden yellow and copper; long-lasting. Free blooming.

Dahlias do well in almost any kind of soil, but thrive best in a medium loam. The tubers should be planted in a horizontal position, with the sprout up and about four inches below the surface; they should be set three or four feet apart each way, in deeply spaded soil. Mulch with peat moss and allow only one shoot to stand. A good plant food applied just as the buds start to form will increase the size and improve the color of the blooms. If large exhibition blossoms are desired, it is absolutely necessary to disbud. After the frost has killed the flowers, the roots should be removed from the ground, allowed to dry for two or three days, and then stored away in peat moss in a cool, dry, dark place, where frost will not reach them.

C—Cactus

ID—Informal Decorative

FD—Formal Decorative

JANE COWL (ID). Orange. 35c each.

JERSEY BEAUTY (FD). Pink. 50c each.

KATHLEEN NORRIS (ID). Large pink. \$1.00 each.

KENTUCKY DAWN (ID). Salmon. 50c each.

LAVENDER GLORY (ID). Lavender. 50c each.

LOUIS WALCHER (FD). Purple, white tipped. 75c each.

OGDEN REID (ID). Large, dark pink, \$1.50 each.

PRINCE OF PERSIA (ID). Red. 50c each.

PRODUCER (ID). Yellow and red. 75c each.

PURPLE VICTORY (ID). Large, purple. \$1.50 each.

SON OF SATAN (C). Bright scarlet. 50c each.

SUNSHINE 3RD (ID). Large yellow. 50c each.

WHITE CHRISTMAS (ID). Medium white. 75c each.

WHITE FAWN (FD). White, miniature. 60c each.

DWARF DAHLIAS

Bedding Mixed 25c each.; \$2.50 doz.



Spray Guide

INSECT OR DISEASE	DESCRIPTION	MATERIAL TO USE (See List)	WHEN TO APPLY
Anthracnose	A common disease recognizable from dusky white spots on stems with brown spot on leaves.	B—Q	Make first application when growth starts in spring. Repeat weekly until plants start blooming.
Ants	Sweet or grease eating.	Antrol	When ants appear.
Aphis	Small green, red or black lice feeding on the tender terminal growth of many plants.	C—E—X	When pests first appear. Wet insects thoroughly. Repeat as necessary.
Asparagus Beetles	Olive colored, both adults and grub like larvae.	A—E—N—S—X	When grubs first appear, preferably when plants are wet with dew.
Bag Worm	Builds ½-inch to 2-inch tapering bag-web.	A—M—P—X	When insects first appear or when evidence of feeding is observed. Repeat as needed.
Black Rot	(Grapes) Fungus disease. Shows first as small white spots, later surrounded by brown ring.	B—F—G—L—Q	When leaf buds first open. When shoots are 10 to 15 inches long. Just after blossoms fall.
Blights	Bacterial disease that attacks young shoots and leaves, causing brown or black spots and sudden wilting.	B—F—Q	Make first application when growth starts in spring. Repeat weekly until plants start blooming.
Brown Canker	Disease which develops small purple spots on stems and leaves of roses, later turning to light center with purple margin.	B—F—Q	As above.
Cabbage Looper Cabbage Worm Caterpillars	Pale green-white, striped caterpillar. Doubles or loops as it crawls. Woolly or naked. Feed on leaves.	A—E—N—S—X A—E—M—P—S—X	When larvae first appear. When insects first appear or when evidence is observed. Repeat as needed.
Celery Leaf Tier	Pale green or green striped caterpillars.	A—E—P—X	When first appears.
Corn Earworm	Green worm which eats into ears of corn.	A—M—P—S Corn Earworm Drops	Apply to silk when it first shows through the tips of each ear. Repeat two or three times within week.
Cucumber Beetles	Yellow and black striped.	A—E—N—S—X	When vines begin to run. Repeat at frequent intervals.
Currant Worm	Green leaf-devouring worm.	A—E—P—S—X	When pests appear.
Cut-Worms	Destroy plants by cutting stems.	Snarol	When first appear.
Damping Off	Causes plants to suddenly wilt as though rotted at the ground level.	Semesan Formaldehyde	Treat seed or soil.
Downy Mildew	White, down mold on pods of lima bean, or under side of melon leaves.	B—F—S	At weekly intervals.
Grape Berry Moth	Lays eggs from which small worm develops in fruit.	E—S	Just after blossoms fall. Repeat at monthly intervals until July.
Grapevine Flea Beetle Grape Root Worm	Dark brown larvae. Grayish brown beetles.		
Horn (Tomato) Worms	Large green worms.	A—E—N	When bugs or worms first appear.
Japanese Beetles	Bronzy-green about ¾ inch long.	J	When first appear.
Leaf Beetles	Yellow beetles with twelve spots on wings.	A—E—N—S—X	When pests first appear. Repeat at weekly intervals.
Leaf Hoppers	Small greenish insects that suck plant juices.	C—E—N—X	When pests first appear. Repeat as necessary.
Leaf Spot	Fungus disease causing brown spots on leaves.	B—F—Q	Repeat at intervals.
Mealy Bug	White, cottony appearance.	E—V	Every few days until under control.
Mexican Bean Beetles	Copper-colored beetles with eight black spots. Cream-colored larvae, which also devour leaves.	D—E—K—M—N—S	When pests first appear.
Potato Bug or Blister Beetles	Gray, black or striped beetles up to ¾ inch long.	A—P—X	Spray or dust plants as soon as they break through and every ten days thereafter.
Powdery Mildew	White growth on leaves.	B—F—Q	When white growth makes its appearance.
Red Spiders	Small mites that feed on foliage, causing it to assume a rusty appearance.	E—T—V	When pests first appear; on strawberry use Strawberry Dust (85-15).
Rose Beetle	Long-legged clay-colored beetles on roses and peonies.	A—E—S—X	When pests first appear. Repeat at weekly intervals.
Rust	Orange-colored pustules (fungus) in streaks or patches on leaves or stems.	B—Q—V	When first appears, or early and weekly as a preventative.
Scab Spot	Fungus disease causing black spots on leaves.	B—F—Q	Begin when leaves are size of mouse ears and repeat every ten days or two weeks.
Scale	Attacks bark of tree.	L—R	As late dormant spray.
Scurfy Scale	Gray, pear-shaped scale.	O	When first appears.
Thrips	Tiny winged or wingless insects that rasp leaves and suck juices from plants.	C—E—X	When pests first appear. Repeat as necessary.
Tussock Moth	Caterpillar 1½ inches long. Red head. Has tufts of yellow, red, black and white hairs.	A—E—P	When insects first appear or when evidence is observed. Repeat as needed.
White Flies	Small whitish flies. In larval stage, tiny, scale-like, greenish objects.	E—O—V	When pests first appear. Repeat as necessary.

LIST OF MATERIALS INDICATED IN ABOVE CHART

A—Arsenate of Lead.	G—Grape Dust.	P—Paris Green, Red River Potato Mix
B—Bordeaux, Kopper King, Kopper Queen.	J—D-X and G & O Plant Spray.	Q—Sulfocide.
C—Aphis Spray, Black Leaf 40, G & O Plant Spray.	K—Kryacide.	R—Scalecide.
D—20-60-20 Dust.	L—Lime and Sulphur Solution.	S—*Slug Shot.
E—*D-X, Red Arrow, G & O Plant Spray.	M—Garden Guard.	T—Emo, Emo-Nik and Selocide.
F—Dusting Sulphur, Fungtrogen.	N—*Rotenone Dust.	V—Volck.
	O—*Fish Oil Soap.	X—Nicotine-Pyrox, G & O Plant Spray.

Materials marked (*) are non-poisonous when used as directed. Pyrethrum and Rotenone base materials such as DX and Red Arrow are contact sprays and must strike the insects to be effective.

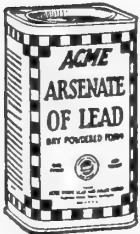
D.D.T. Controls: Flies, Mosquitoes, Gnats, Horn Flies, Lice, Fleas, Sheep Ticks, Ants, Wasps, Hornets, Codling Moth, Mealy Bug, Japanese Beetle, Leaf Hoppers, Oriental Fruit Moth, Peach Borer, Rose Shafar, Cabbage Worm, Flea Beetles, Onion Thrips, Tomato Fruit Worm, Caterpillars, Boxwood Leaf Miners and many others. Ask for special DDT folder and use with caution.

SPRAYS INSECTICIDES DUSTS



ANTROL ANT TRAPS
 15c Each
ANT-X
 25c Each
ANT-X JELLY
 1 oz., 35c
MAGIKILL JELLY
 1 oz., 40c;
 3 oz., \$1.00

ANTROL SET
 Set 40c
 Individual feeders
 Each 10c
ANTROL SYRUP
 4-oz. bottle 20c



ARSENATE OF LEAD
 (1 lb. makes 25 to 35 gallons)

For fruit trees, vegetables, bushes and tobacco. Can be used as dust or spray. To control Japanese Beetle grub on lawns apply 1 lb. to 100 sq. ft. 1-lb., 47c; 4-lb., \$1.30.

ARSENITE OF ZINC
 (1 lb. makes 50 gals.)

Ranks next to Paris Green in strength. It has gained considerable popularity in certain sections for use on potatoes and other hardy ground crops to destroy chewing insects. Mixes well with Lime Sulphur solution which is used to combat psyllid on potatoes. 1 lb., 40c; 4 lbs., \$1.15.



AZOFUME No. 10 DUST

A dust for dusting plants indoors or out; not a fumigant. Dusted on plants it slowly gives off its fumes. Recommended for red spider on roses, phlox and most other flowers. 4 lbs., \$2.40.



No. 4

BEETLE TRAPS
 (Jar not included)

No. 4 Trap (without cage) \$1.10
Liquid Bait70
Dry Bait15
G & O Beetle Traps with Dry Bait, 75c each.
G & O Perforated Metal Containers, 20c ea.
G & O Green Painted Rods, 35c ea.

BENZO-FUME POWDER PRESSURE FUMIGATORS

Especially recommended for control of greenhouse red spider. ½ lb. size for 5,000 cubic feet of air space.

½ lb., 40c ea.; 6 for \$1.80; 12 for \$3.20
 1 lb., 60c ea.; 6 for \$3.15; 12 for \$5.50

"BLACK LEAF 40"
 (1 oz. makes 6 gallons)



Kills Aphis, Thrips, Leaf Hoppers and other insects on garden, farm and orchard crops by contact and fumes—an advantage not possessed by non-volatile, non-poisonous spray materials.

Also kills Poultry Lice. Merely paint tops of perches with "Black Leaf 40." Body heat from roosting birds creates fumes which penetrate feathers and kill lice and feather mites. (Cap brush packed with bottle.)

Oz., 36c; 5 ozs., \$1.05; 1 lb., \$2.42;
 2 lbs., \$3.92; 5 lbs., \$7.40; 10 lbs., \$12.85.

BORDEAUX MIXTURE

(1 to 2 lbs. makes 12½ gallons)

Prevents large losses caused by blight, rot, mildew, scab, anthracnose and certain other fungous diseases. It stimulates plant growth and greatly increases the harvests. 1 lb. 40c; 4 lbs., 95c.



CALCIUM ARSENATE

(1 to 2 lbs. makes 50 gals.)

Calcium Arsenate is the cheapest arsenical insecticide on the market but of great economy and efficiency for certain purposes. Recommended to combat chewing insects on potatoes, vegetables, cotton and certain fruit trees. 1 lb., 35c; 4 lb., 60c.



COPPER ARSENATE

(Basic) 4 lbs., \$2.00

CARBOLA—WITH D.D.T.

Carbola applied to the walls, ceilings, partitions, nests, etc., of your poultry houses will help to prevent contagious diseases among your flock. 5 lbs., 80c; 10 lbs., \$1.35; 50 lbs., \$5.50.

CARBOLINEUM—AMERICA

Kills chicken mites and blue bugs in poultry houses, makes wood Termite proof and Stops Rots. Gal., \$2.00

CARBON DI-SULPHIDE

Specified by U. S. Dept. of Agriculture for treatment of soils to destroy grubs of the Japanese Beetle.

Also used for control of insects in grain.

Lb., 50c; 5 lbs., \$1.65.



CATALIZER

A combined adhesive and spreader, making spray materials more economical and effective, inexpensive. Use 2 pounds to each 100 gallons of spray. 2-lb. pkg., 75c.

COPPER SULPHATE
 (Blue Stone)

Powdered; 20c lb.; 5 lbs., 75c; 10 lbs., \$1.25.

CORN EAR WORM DROPS

(2 ozs. treats 100 ears)
 2 oz. 35c

CROW REPELLENT

NO-CROW—Treat corn and other seeds to repel crows, birds, moles, etc. Economical and easy to use. Liquid, ½ pt., 50c; pt., \$1.00.

CUCURBIT DUST

(10 to 15 lbs. to acre)

For control of striped and spotted cucumber beetles on melons, cucumbers and squash. 5 lbs., 75c; 50 lbs., \$5.85.



CYANOGAS ANT KILLER—A gas-producing powder. 4-oz. spout can is enough to treat ant nests in average lawn. 30c.

CYANOGAS A-DUST — Kills rats, moles, woodchucks (groundhogs) and other rodents instantly. "It's the gas that kills 'em." 1 lb., 75c; 5 lbs., \$3.00.

CYANOGAS G-FUMIGANT — Most widely used greenhouse insecticide. Regular use insures insect-free house all season. 5 lbs., \$3.00; 25 lbs., \$10.00.

D.D.T. (Liquid)

Pratts 25% (Garden). 1½ oz., 35c; 8 oz., \$1.00.

McCormicks Red Arrow "D-25RC" Emulsion Concentrate (Garden). 4 oz., 90c; pt., \$2.50; qt., \$4.80.

Conkeys 25%, I. K. Residual Spray (Household). Qt., \$1.40; gal., \$4.95.

McCormicks 5% Red Arrow Wall & Screen Spray (Household). Qt., 55c; gal., \$1.95.

McCormicks Red Arrow Water Dispersible Powder with 50% D.D.T. (Garden). One tablespoon makes 1 gallon. 20 oz., \$2.00; 5 lbs., \$6.00.

D.D.T. (Dust)

CCC—10%, (Household). Lb., 50c.
 CCC—25%, (Garden). Lb., 75c.

DE-K-PRUF

A compound that makes wood and fabrics immune to attack against mildew, rot, termites and other wood destroying insects. One gallon covers 400 sq. ft. wood, 20 lbs. fabric. Color, green. Gal., \$2.85; 5 gallons, \$13.50.

Dusting and Spraying Materials (Continued)

DISINFECTANTS (Seed)



These effective seed disinfectants are sold by the Bayer-Semesan Company, a consolidation of E. I. du Pont de Nemours & Company, Inc., and The Bayer Company, Inc. They comprise the following products:

SEMESAN — For vegetable and flower seeds. One ounce to 15 to 30 lbs. seed. $\frac{1}{2}$ oz., 12c; 2 oz., 45c; 12 oz., \$2.10; 4 lbs., \$10.10.

SEMESAN, JR. — For corn, 2 ounces to 1 bushel corn. $1\frac{1}{2}$ oz., 17c; 12 oz., 62c; $6\frac{1}{4}$ lbs., \$4.16.

SEMESAN BEL — For potatoes. 1 lb. to 60-80 bu. potatoes. 2 oz., 35c; 1 lb., \$1.83; 4 lbs., \$6.33.

CERESAN (New Improved) — For wheat. $\frac{1}{2}$ oz. for 1 bu. seed. 4 oz., 35c; 1 lb., 90c; 4 lbs., \$3.00.

DOG REPELLENTS



Protect that evergreen—keep dogs away. Remove cap and hang tube of Dawg-Gone (opening down) in the lower branches of trees at the points of approach. Not necessary to place tube in every tree unless standing alone. The odor slowly emanating from the open tube will keep dogs at a distance. Tubes 30c each.



KEEP AWAY
I'm Chaperoned



CHAPERONE. 4 oz., 60c; 12 oz., \$1.25; qt., \$3.00.

ANTI-DOG. $\frac{1}{2}$ pt., 30c; 1 pt., 50c.

DOG CHECK. 3 oz., 60c; 8 oz., \$1.00.

DOGZOFF. 3 oz., 60c.

FUMOGEN. 8 oz., 50c.

DOWFUME (Soil Fumigant)
(1 gal. treats 400 sq. ft.)

A soil fumigant containing Ethylene Dibromide. Very effective in controlling nematodes, wire worms and other soil insects in home gardens. Gal., \$3.50.

DUST

20—60—20 Dust—Copper—Lime—Arsenate. \$9.00 per 100 lbs.

DOW'S MAGNESIUM ARSENATE
Magnesium Arsenate Dust Mixture,
4-lb. pkg., 60c; 100-lb. drum, \$12.00.

DX SPRAY

(1 oz. makes 6 gallons)



A rotenone-pyrethrum-D.D.T. spray in an active vegetable oil base for control of sucking and chewing insects on fruit trees, shade trees, vegetables and flowers. $1\frac{1}{2}$ oz., 40c; $\frac{1}{2}$ pt., \$1.50; qt., \$4.75; gal., \$12.75.

DX NICOTINE SPRAY. $1\frac{1}{2}$ oz., 40c; $\frac{1}{2}$ pt., \$1.50.

DX PYRETHRUM SPRAY. $1\frac{1}{2}$ oz., 35c; qt., \$3.50.

DX ROTENONE SPRAY. $1\frac{1}{2}$ oz., 35c; $\frac{1}{2}$ pt., \$1.40; qt., \$4.30.

EMO

(1 pt. makes 4 gallons)

A summer oil spray of fine quality, safe to use, pleasant to handle and of the much desired flowable consistency. Recommended as a contact spray in the control of White Flies, Rust Mites, Blister Mites, Mealy Bugs, Red Spiders, certain scale and other insects. 8 oz., 30c; pt., 50c; qt., 70c; gal., \$1.95.



EMO-NIK

(1 pt. makes 12 $\frac{1}{2}$ gallons)

Complete contact spray combining nicotine in its most active form with EMO a summer oil emulsion. $4\frac{1}{2}$ oz., 35c; pt., 70c; qt., \$1.00.



EVER GREEN GARDEN SPRAY

KILL PLANT INSECTS

35¢

EVER GREEN GARDEN SPRAY

THE EASY WAY . . . Simply dilute with water in accordance with directions and spray, hitting the insects to be controlled. Non-injurious when used as directed. Deadly to many common varieties of both chewing and sucking insects (1 oz. makes 6 gallons). 1 oz., 35c; 6 oz., \$1.15; pt., \$2.45; qt., \$4.10; gal., \$12.60.

FISH OIL SOAP

Keeps trees, plants and vines clean and healthy, effectively controlling sucking insects and many forms of scale. 1 lb., 35c; 5 lbs., \$1.25.

ACME SPRAY SOAP—1 lb., 45c.

FORMALDEHYDE

Extensively used in the preparation of potatoes for seed, as a preventative against potato scab and to destroy other germs on the seed. Will also control some forms of grain smut. For potatoes a solution of 1 pint to 15 or 20 gallons of water is made and cut pieces are soaked for 2 hours. One to two gallons of this will be sufficient for 1 bushel of seed. Pt., 65c.

FORMACIDE FORMALDEHYDE DUST

Is a seed and soil treating compound which controls seed borne diseases and when applied to the soil controls "damping off" and other root rots of vegetable and flower seedlings. Usually applied 1 lb. per 10 sq. ft. 1 lb., 85c; 5-lb. can, \$2.50.

FUMIGANT—(Mill & Warehouse)

A non-flammable and non-toxic insecticide for fumigating grains, warehouses, etc. Use at the rate of 1 qt. to 200 cubic feet of space. Qt., \$1.00; gal., \$3.25.



An effective and scientific preventive and remedy for mildew, black spot and many fungus diseases of Roses and other plants. Dilute one part to 60 parts water. $\frac{1}{2}$ pt., 75c; pt., \$1.25; qt., \$2.00.



GO-WEST

An effective insect bait for weevils, snails, slugs, sowbugs, cut-worms, earwigs grasshoppers and similar leaf eating garden insects. 10 lbs., \$4.00.

GRAPE DUST

A readily diffusible, lightweight powder fungicide, very efficient in destroying mildews and preventing blights. 1 lb., 40c; 5 lbs., \$1.50.



JAPIDEMIC

Milky disease spore control for Japanese Beetle. 1 lb. treats 4,000 sq. ft. Lb., \$4.50.



KOPPER KING

(1 to 2 lbs. makes 50 gals.)

(Basic Copper Sulphate)

1 lb., 50c; 4 lbs., \$1.35.

KOPPER QUEEN (Mildew Spray)

(1 pt. makes 12 $\frac{1}{2}$ gal.)

For control of mildew, leaf spot, and black spot on rose bushes, flowers, and many other kinds of foliage. Stainless, leaves no unsightly residue. $\frac{1}{2}$ pt., 35c; pt., 60c; qt., 95c; gal., \$2.25.



Dusting and Spraying Materials

(Continued)

KRYOCIDE

Non-arsenical, very effective for control of striped cucumber beetle, Mexican bean beetle, cabbage worms, etc. Use as spray, 3 tablespoons to one gallon of water. 1 lb., 35c.

KRYOCIDE D-50. Dust mixture containing sulphur. 1 lb., 50c; 3 lbs., 85c.

KRYOCIDE C. With copper. Can be used as a dust or spray. If as a spray 3 tablespoons to 1 gallon water. 1 lb., 90c.

DRY LIME AND SULPHUR

Dormant Season: 12 lbs. to 50 gallons. Growing Season: 3 lbs. to 50 gallons.

For use in dormant spraying against scale, peach blight, leaf curl and twig borer. Summer spraying against scab, soot, blotch, red spider and mite. 1 lb., 37c; 10 lbs., \$1.40.



LIME AND SULPHUR SOLUTION
1 gal., 95c; 5 gal., \$3.25.



MOLE-NOTS

Protects lawns, gardens, flower beds, golf courses, etc. No traps, ready to use. Pkg. of 8, 35c; pkg. of 50, \$1.00.

MOLOGEN

Patents Pending

Destroys moles quickly, easy to use. No odor or gases. Harmless to soil or grass. ½ lb., 50c; 1½ lbs., \$1.25.

NAPHTHALENE FLAKES

Used for sprinkling lightly over bulbs for protection against moles and field-mice. 20c lb.; 5 lbs., 75c; 100 lbs., \$14.00.

"NICO-FUME" POWDER PRESSURE-FUMIGATOR

Improved quality; burns under pressure in special container; more effective and more economical than old methods. Use at approximate rate of 1 lb. per 20,000 to 30,000 cu. ft. of air space.

½ lb., 50c ea., 6—\$2.70, 12—\$4.60.
1 lb., 80c ea., 6—\$4.35, 12—\$7.95.

OPTOX

A well balanced Rotenone-Pyrethrum spray. Safe to use on open blooms, non-poisonous. 1 oz., 35c; 6 oz., \$1.00; gal., \$12.00.

ORTAZOL POWDER (Dinitro)

Use in the dormant period to control aphid eggs, bud moth and other pests. Mixes easily in cold water. Use 1 to 2 lbs. in 100 gallons of spray. Lb., 75c.



PARIS GREEN (1 lb. makes 30 gal.)

A rich, emerald color and of fine fluffy physical character. Containing 55% arsenious oxide, it will give quickest control where extreme measures are necessary.

¼ lb., 25c; 1 lb., 65c; 5 lbs., \$3.00.

PEACH BORER CONTROLS

PARA-SCALECID

(1 gallon to 7 gallons water)

(Use 1 pint solution to each three-year-old tree.)

Is effective and safe on young or old trees. Qt., \$1.00; gal., \$2.50.

PARA-DICHLOROBENZENE

Apply September 1st to October 10th, according to latitude. Some growers prefer to make two applications, the first being in the month of June. One pound is sufficient for 10 to 30 trees, according to size. It is not advisable to treat trees under 4 years of age, and apple trees should never be treated.

1 lb., 40c; 5 lbs., per lb., 30c; 25 lbs., per lb., 22c; 100 lbs., per lb., 20c.

PESTEX (Pest Repellent)

Does not kill but repels dogs, rabbits, squirrels, moles, rats, mice, starlings, pigeons, crows, etc. 2 lbs., 70c.

PLANT SPRAY G & O

An all purpose spray, non-poisonous, kills Japanese beetles, rose bugs, thrips, aphid, corn borer, mealy bug, white fly. Economical dilutes 1-25/30. ½ pt., 35c; pt., 55c; qt., \$1.00.

POMO-GREEN

With Nicotine—1 lb., 80c.

PRUNING PAINT



Forms a protective shield while the tree is recovering from wounds left by pruning, storms or accidents, and helps to prevent diseases. ½ pt., 45c; pt., 85c; qt., \$1.50; gal., \$4.50.

PYROX

It not only kills leaf-chewing insects, prevents blight and other diseases, as Standard Pyrox does, but it also kills sucking insects, such as aphid, thrips, and leaf-hoppers. Standard Pyrox, of course, is designed for most commercial crops, but in the garden, where sucking insects do so much damage, you will want Nicotine Pyrox.

	Without Nicotine	With Nicotine
20 oz. ....	...	\$ .60
5 lb. ....	...	2.25
25 lb.	\$6.00	7.00
50 lb.	9.00	11.50
300 lb.	40.00	...

RED ARROW



1 oz. makes 8 gal.

Economical and efficient contact spray, non-poisonous, will not injure blossoms, foliage or fruit; positive death to almost all types of insects. 1 oz., 35c; 4 oz., \$1.00; 1 pt., \$2.85; qt., \$5.50; gal., \$19.00.

RED ARROW SPECIAL

Highly concentrated pyrethrum spray prepared especially for greenhouses. Qt., \$7.50; gal., \$28.50.

RED RIVER POTATO MIX WITH D.D.T.

(Special Formula for Potatoes Only)

(1 to 1½ lbs. makes 12½ gals., or as dust) A copper fungicide with quick-killing arsenic. Kills potato bugs quicker, drives off flea beetle and leaf-hopper, prevents blight from gaining a foothold, stimulates foliage, making more and better potatoes. 1-lb. bag, 55c; 4-lb. bag, \$1.75.



ROTENONE DUST

Strictly non-poisonous and proven to be the most practical, effective and economical insecticide for the control of insects attacking vegetable crops. Contains ¼% Rotenone, plus all the toxic (killing) ingredients of the rotenone bearing roots. Should be used at rate of 15 to 25 lbs. per acre or as a spray 1 lb. to 10 gallons. Hammonds—1 lb., 50c.

McCormicks—2-lb. bag, 75c; 5-lb. bag, \$1.50.



Let us quote larger quantities.

ROTENONE GARDEN GUARD

(1 lb. makes 10 gallons as spray, 15 to 25 lbs. per acre as dust.)

1-lb. sifter carton 50c;
4-lb. bag \$1.10.



ROTENONE GARDEN SPRAY

(NNOR) Containing Rotenone kills most common garden bugs of both sucking and leaf eating types. 1 oz., 35c; 6 oz., \$1.00; 16 oz., \$2.15.



Dusting and Spraying Materials (Continued)



ROSE SPRAY

Good-by guesswork! Grow beautiful roses and other flowers with the Acme System of Spray Treatment combining 3 necessary elements (packed separately) to solve the entire spraying problem—NO other sprays needed. Ask for ACME SCIENTIFIC ROSE SPRAY

The number indicates number of gallons of spray each will make.

No. 3.....\$.95
No. 24..... 4.00
No. 48..... 6.00
No. 96..... 9.75



SCALECIDE

(1 gallon to 15 gallons water.)

Qt., 85c; gal., \$2.00; 5 gals., \$7.35; 15 gals., \$17.25; 30 gals., \$27.50; 55 gals., \$42.50.

SELOCIDE

1 gallon makes 100 to 400 gallons. Kills Red Spider. Gal. \$3.00.

SLUG SHOT

Guaranteed to destroy potato bugs, cabbage worms, lice, fleas, beetles, striped bugs, etc., on currants, egg plants, melons, turnips, beets, etc.; canker worms and caterpillars on fruit and ornamental trees.

1-lb. sifter, 40c; 5-lb. pkg., \$1.70.

Liquid—1 oz., 35c; 4 oz., \$1.00.



SNAROL

A ready prepared bait meal that means sure death for cutworms, snails, slugs, sowbugs, and other garden pests. Harmless to vegetation, safest to use, not affected by rain or sprinkling. 1 lb. pkg., 35c; 2½ lb. pkg., 75c; 6 lb. pkg., \$1.50.



STRAWBERRY DUST

85-15 Mixture successfully used for many years to stop clippers cutting off the blossoms. Apply when plants first begin to blossom. 1 lb., 15c; 10 lbs., \$1.25; 25 lbs., \$2.50; 100 lbs., \$8.00.

SULFOCID

(1 quart to 50 gallons water.)

Sulfocide is a highly concentrated non-poisonous liquid sulphur fungicide—entirely distinct from lime sulphur.

Pt., 75c; qt., \$1.25; gal., \$2.75; 5 gals., \$9.25; 15 gals., \$22.75; 30 gals., \$40.30; 50 gals., \$60.00.



SUMMER SPRA-CREAM

A stabilized 83% summer oil emulsion for foliage spraying of fruit trees, shade trees, and evergreens. Used as a sticker for arsenate of lead and bordeaux sprays. (Do not use with sulphur.) Gal. \$1.75.



SULPHUR (DUSTING)
(An Excellent Chigger Chaser)
(2 lbs. makes 35 gallons; or as dust)

Recommended to control mildew, leaf spot, black spot and rust on rose bushes, chrysanthemums, snapdragons, carnations, also red spiders on evergreen. 2-lb. carton, 42c.

VOLCK

Oil spray for use against certain mealy bugs, scale insects, red spiders, white flies. 4 oz., 35c; 16 oz., 70c; gal., \$2.85; 5 gal., \$5.95.

TARTAR EMETIC

(Control for Thrips)

Use 2 oz. (4½ teaspoonfuls) and 8 oz. brown sugar (1½ cups) added to 3 gallons of water. Spray gladiolus after leaves are 6 inches tall every week until buds are formed. Lb., \$1.00.



Especially recommended for the fall treatment of roses. 10 lbs., \$4.75; 25 lbs., \$11.00; 100 lbs., \$40.00.

TOBACCO DUST

Excellent insecticide and fertilizer combined, extensively used against black and green aphids, fleas, beetles, etc. 1 lb., 10c; 10 lbs., 50c; 100 lbs., \$3.75.

TOMATO DUST



1 lb. sifter top, 50c; 4-lb. bag, \$1.05; 1-lb. pump gun, 65c.

TREE BANDING COMPOUND



ACME STOP—Used to band trees, shrubs and vines; prevents insects from crawling up to the foliage. 6 oz., 50c; 1 lb., 85c.

TRI-GEN

The all-purpose spray

A highly concentrated insect spray and fungicide for garden and greenhouse plants.

Economy kit, 90c.
Small kit (makes 16 quarts), \$1.50.
Medium kit (makes 64 quarts), \$4.00.
Large kit (makes 32 gallons), \$6.00.

TRI-GEN DUST

General purpose three-way insecticide-fungicide dust. 5 lbs., \$3.50.

SULPHUR

Commercial Flour of Sulphur. 1 lb., 7c; 10 lbs., 60c; 25 lbs., \$1.20; 100 lbs., \$3.50.

Superfine Dusting Sulphur. 10 lbs., 90c; 25 lbs., \$1.80; 50 lbs., \$3.25.

SULPHUR (DRITOMIC)
5-lb. bags, 75c.

WEED KILLERS

DUPONT AMMATE

Poison ivy weed killer. 1 lb. to 1 gal. water treats 100 sq. ft. 2 lb., 75c; 6 lbs., \$2.00.



HAMMOND'S

Easy and economical to use. One gallon added to 40 gallons of water makes sufficient treating liquid to effectively cover about 1,000 sq. ft. Not mailable. Qt., 70c; gal., \$2.00.

ACME

Quart, 65c;
1 gallon \$1.75.



WEEDONE

Kills Poison Ivy, Poison Oak, Bindweed, Honeysuckle, Dandelion, other noxious weeds. Sprayed on leaves, it travels down and kills right out to the root tips. Sprayed on lawns, it kills many weeds without hurting the grass. Non-corrosive, safe for humans and animals. Just mix with water and spray.

6 oz. bottle (covers 500 sq. ft.), 75c.
1 qt. can (covers 2,500 sq. ft.), \$2.50.
1 gal. can (covers 10,000 sq. ft.), \$7.50.

WEEDUST

The new 2.4-D Weed Killer in dry powder form. No mixing with water, no spraying, just one shake for each dandelion, plantain or other ugly weed. 12 oz., 75c.

WEEDAR 64

Recommended for pre-emergence and post-emergence control in cereal crops, and for use on easy-to-kill weeds in turf and pasture. \$9.25 gal.

WEEDONE Concentrate 43

An economical formula for the hard-to-kill weeds. It is soluble in water for ground spraying and miscible with oil for airplane spraying. \$10.90 gal.

ZOTOX

Zotox is absorbed through the leaves into the circulatory system of the Crab Grass plants, where its toxic effect causes the plants to die. All Crab Grass seeds contacted by the Zotox solution are rendered non-viable and will not germinate. 8 oz., \$1.00; 16 oz., \$1.50; 32 oz., \$2.50; 5 lbs., \$4.50.



CRABEX

Kills crab grass without destroying permanent lawn grasses. Also valuable in controlling other lawn weeds, such as Dandelion, Plantain, Buckhorn, Chickweed, Spurge, Ground Ivy. Easy to use.

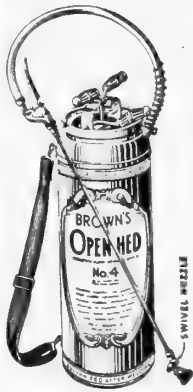


8 oz., covers 1,000 sq. ft., 75c.
16 oz., covers 2,000 sq. ft., \$1.25.

Sprayers



210G



4D



SMITH NEW STREAMLINE BLIZZARD CONTINUOUS SPRAYER



INSECT-O-GUN



701W

HUDSON	
192G—LEADER, 3 1/2 gal., galv.	\$7.70
235G—CLIMAX, 3 1/2 gal., galv.	8.50
241G—CLIMAX, JR., 2 1/2 gal., galv.	8.50
210G—PERFECTION, 4 gal., galv.	10.50
247GA—DU-MORE, 4 gal., galv.	24.00

FLAME SPRAYERS

701W—3 3/4 gal., galv.	\$19.20
SMITHS—4 gal., galv.	22.45

BROWN OPEN-HED

3D—3 gal., galv.	\$8.95
4D—4 gal., galv.	9.75

SMITH

22GO—BANNER, 4 gal., galv.	\$10.00
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SINGLE ACTION

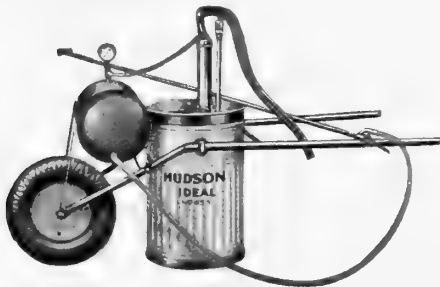
403—Master Fog, quart, tin.	\$.60
3G—Smith, quart, galv.	.75



Master Fog

CONTINUOUS SPRAYERS

431—Comet, quart, tin.	\$.90
432—Mercury, quart, tin.	1.05
435—Cardinal, 3 qt., galv.	1.85
26BG—Brown, 1 qt., tin, glass jar.	1.75
335—Brown, 1 qt., copper.	2.95
14Q—Blizzard, 1 qt., copper.	3.00



HUDSON
IDEAL
SPRAYER

35PR—Hudson With Pressure Tank, 18 gallon galv. tank and operated with a large removable barrel pump. Discharge equipment consists of 10 ft. spray hose, 3 ft. extension rod and angle spray nozzle. (Illustrated)	\$59.20.
35—Hudson, as above. Steel wheel.	\$43.20.
57—Brown With Pressure Tank.	\$45.95.
36—Sunshine, 12 1/2 gal. cap.	\$22.00

BUCKET PUMPS

122—Modoc	\$6.00	CCC	\$8.95
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ARNOLD GARDEN HOSE SPRAY CARTRIDGES

Arsenate of Lead, Bordeaux Mixture, Cryolite, D.D.T. Pyrethrum-Rotenone, Rotenone, Sulphur, Vitamin B-1. 35c each; 3 for \$1.00.

Arnold's Victory Cartridge Sprayer, \$1.00.
Brown's Vitamin B-1 Cartridge, with transparent holder, \$1.00.

INSECT-O-GUN

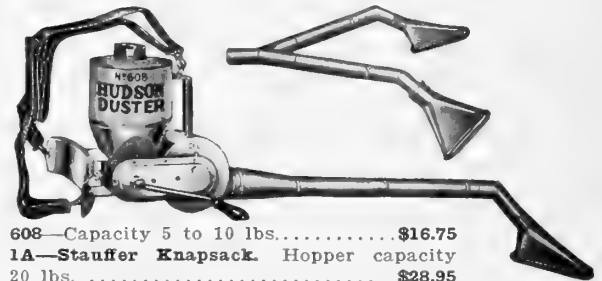
No pumping, attaches to water hose. One filling sprays 3 gallons. \$4.85.

Deluxe 6—One filling sprays 6 gal. \$6.95.



HAYS, JR. SPRAY GUN, \$6.95
HAYES-ETTE SPRAYER, \$2.95
HAYES-HAN-D SPRAYER, \$2.95

DUSTERS



608—Capacity 5 to 10 lbs.	\$16.75
1A—Stauffer Knapsack. Hopper capacity 20 lbs.	\$28.95

ROOT WHEELBARROW TRACTION DUSTER

T44—Designed especially for small acreage truck crop operations. Hopper capacity 15 to 25 lbs. Rubber tire. \$30.00

663—Cadet	\$.55
666—Major	1.20
612—Patrol	1.30
766—Admiral	1.40
Browns Crystal	1.85

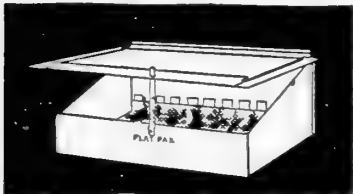
C-3A—(Illustrated). With attachments. Hopper capacity 7 1/2 lbs. Feed adjustment per acre 1 to 20 lbs. \$24.30.



C-3A

612

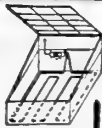
FLAT-PAK PLANT FORCER



Sturdy, all stainless steel insures protection from all weather-threats. Grooves for electric sunlamp cords in freezing temperature. Plastic, adjustable window admits all beneficial sun-rays, filtering out harmful beams. Resists all chemicals and stains, regardless of plant-food used. Size 26 in. x 36 in. **Price \$15.95.**

'GRO-QUICK' ELECTRIC SEED BED HEATER

- "ROOT CUTTINGS IN 6 DAYS"
- "SEED UP IN 30 HOURS"
- "CUT GERMINATION TIME BY 2/3"
- "TRANSPLANT 2 WEEKS SOONER"



These enthusiastic reports from users tell what **GRO-QUICK SOIL HEATING CABLE** will do for you. Send today for testimonials and free, new instr. sheet with plans. For hotbeds—cold frames—unheated greenhouses—plant benches—for early plant starting in open ground. Operates from household current.

JUNIOR 40' Cable, 200 watt with thermostat for 3x6 bed or 20 sq. ft. \$5.35
SENIOR 80' Cable, 400 watt with thermostat for 6x6 bed or 40 sq. ft. \$6.95

AIR THERMOSTAT \$3.75

PEERLESS GLAZING POINTS
 Pound box, 85c.

TWEMLOW'S OLD ENGLISH GLAZING PUTTY
 Semi-Liquid

For bedding glass in sash and filling cracks or seams in roof joints or frames of greenhouses or hotbeds. 16-pound can (1 gal. capacity), **\$4.35**

CAULKING GUN

Model D1—Barrel size 9 1/2 x 2 1/2 in. Capacity, one pint. 1/2 in. nozzle, ratchet rod, breech cap., **\$4.50.**

PUTTY BULBS

For applying liquid Putty to sash or greenhouses. 12-oz. size, **\$1.25.**

SPRAY BULBS

C—12 oz. **\$1.15**

RAFFIA

Natural color in braided hanks of about 2 pounds. **70c lb.**

HYACINTH STAKES—Green

12 in., 60c 100; **\$3.15** per 1,000.
 18 in., 70c 100; **\$3.95** per 1,000.

GALVANIZED HARD STEEL WIRE PLANT STAKES—No. 3 gauge

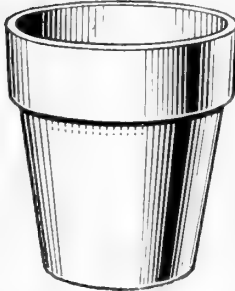
Height	Doz.	100	1,000
4 1/2 ft.	\$.58	\$3.15	\$28.50
5 ft. ....	.60	3.45	31.25



TRAIN-ETTS
 Weatherized trelis netting.
No. 2—60 x 96 in., 85c.
No. 3—60 x 180 in., \$1.25.

CEMETERY VASE
 Ground level, Aluminum finish, **\$1.50.**

FLOWER POTS



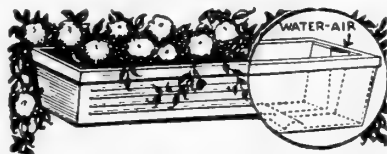
A complete line of regular pots, azalea pots, bulb pans and saucers.

Size	Ea.	Doz.	100	1000	Sauc. Each
2 in...	\$.03	\$.24	\$1.50	\$13.50	..
2 1/2 in...	.03	.30	1.80	16.50	..
3 in...	.04	.40	2.30	21.00	..
4 in...	.06	.60	3.65	33.00	\$.04
5 in...	.10	.95	6.60	..	.06
6 in...	.15	1.45	..	..	.08
7 in...	.22	2.15	..	..	.11
8 in...	.31	3.10	..	..	.16
9 in...	.48	4.80	..	..	.20
10 in...	.65	6.45	..	..	.32
12 in...	1.30	13.20	..	..	.48

NEPONSET FLOWER POTS

Dia.	Red Shipping		Green Growing	
	per 100	per 1000	per 100	per 1000
2 in.	\$.70	\$6.00		
2 1/4 in.	.70	6.00	\$1.15	\$9.80
2 1/2 in.	.75	6.10	1.20	10.50
3 in.	.80	6.85	1.40	12.10
3 1/2 in.	1.00	9.15	1.90	16.35
4 in.	1.20	10.40	2.20	19.25
5 in.	1.60	13.30	3.00	26.40
6 in.	2.00	16.90	3.90	34.15

FLOWER BOXES



Galvanized, green. 8 1/2 inches wide and 6 inches deep. **20 in., \$2.00; 26 in., \$2.50; 32 in., \$3.00.**

GALVANIZED WATERING POTS

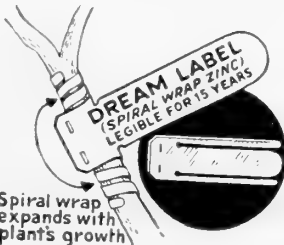
8 Qt., **\$1.75; 10 Qt., \$1.85**

WOODEN LABELS

Painted

4 inch pot, per 1,000.....	\$2.65
5 inch pot, per 1,000.....	2.90
6 inch pot, per 1,000.....	3.30
3 1/2 inch Tree, copper wired....	3.20
8 inch Garden, per 1,000.....	5.00
10 inch Garden, per 1,000.....	8.80
12 inch Garden, per 1,000.....	12.00

Prices, per 100—3 1/2 to 6 in., 45c; 8 in., 85c; 10 in., \$1.10; 12 in., \$1.50.



DREAM LABEL
 (SPIRAL WRAP ZINC)
 LEGIBLE FOR 15 YEARS

Spiral wrap expands with plant's growth

No. 1 Kit. Consists of 24 labels, 1 oz. etchant, one applicator. **85c.**



WATERPROOF PLANT BANDS
 Ready-to-use Plant Bands.

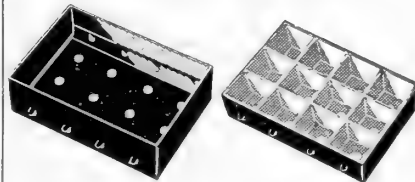
VITA BAND 10 (Fertilized)

2x2x2 1/2 in.—Per 1,000 **\$3.25**
 2 1/2 x 2 1/2 x 3 in.—Per 1,000 **4.15**
 3x3x3 in.—Per 1,000 **4.55**

VITA BAND 40 (Fertilized)

2x2x2 1/2 in.—Per 1,000 **\$4.70**
 2 1/2 x 2 1/2 x 3 in.—Per 1,000 **5.50**
 3x3x3 in.—Per 1,000 **6.30**

TOM THUMB FLAT AND PLANT BAND COMBINATION



Without Bands

With Bands

With Vita Band 10 fertilized Plant Bands. 500 Sets (500 flats, 6,000 bands, 2x2x2 1/2 in.), **\$33.93.**

WINDOW SILL GREENHOUSE

RB22—Waterproofed plant boxes for starting seedlings and plants indoors, consisting of a two compartment seed starter and two transplant boxes. **Set, 29c.**



CEDAR PLANT TUBS
 (Richmond Style)

Made of Selected Virginia White Cedar, bound with electric welded hoops, painted green.

No.	Inside Top Dia.	Inside Bot. Dia.	Inside Depth	
5	10	7 1/2	9	\$1.35
7	12	9	11	1.95
9	14	11	13	2.85
11	16	12 1/2	15	3.50
13	18	14 1/2	17	4.85

TWIST-EMS

B—8 in. box of 125, **35c.**
D—16 in. box of 125, **65c.**



SOIL-SOAKER
Made of Canvas

No. 1, 18 ft. \$2.20
No. 2, 30 ft. 3.40
No. 3, 50 ft. 5.50

SOIL-SOAKER

WATER HOSE



CORNET. 5/8 in. 1 braid, 25 ft. lengths, \$2.15; 50 ft. lengths, \$4.00. (Couplings included.)
SURPRISE. 5/8 in. 2 braid; red. 25 ft. lengths, \$3.90; 50 ft. lengths, \$7.45. (Couplings included.)
SURPRISE. 3/4 in. 2 braid, black, smooth, 50 ft. lengths, \$12.25. (Couplings included.)
GREEN THUMB—Plastic 5/8 in. 25 ft., \$5.25; 50 ft., \$9.75.

SPRAY HOSE

3/8 inch, 20c per ft.



SPRINKLERS

5044 (Illustrated) \$.80
Belfont98
156—Tulip 1.25
5040—Ring 1.65
5011—Greenlawn 1.75
100—Lifetime 2.00
5018—Propeller, Jr. 2.05

HOSE NOZZLES

161....\$.70 155....\$1.10

SKINNER SPRAY WAVE SPRINKLER



Waters up to 40x50 ft. (illustrated). \$22.50.



ROTO-SPRAY. Waters up to 75 ft. diameter on 30 lb. pressure. \$18.75.

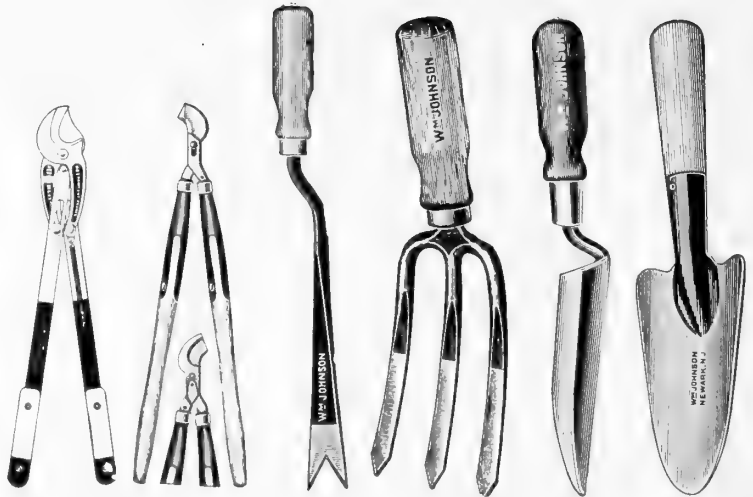
GRAFTING WAX

Trowbridge Brand. 1/4 lb., 30c; 1/2 lb., 45c; lb., 70c.

FRUIT PICKER—Without pole, 70c.

MOLE TRAPS

200 Reddick (Illus.)...\$1.45
E-Z-Trip 1.80



PORTER 5403 2500 300 211 222

LOPPING SHEARS

PORTER POINT CUT No. 1—20-inch steel handles, adjustable drawcut \$7.50
5406—20-in. hdl. 2.35
5403—22-in. hdl. (drawcut) illustrated 4.45

ASPARAGUS KNIFE

2500J—Short handle \$.45
ASPARAGUS BUNCHER \$4.50

THERMOMETERS

5140—7 1/2 in. indoor, maroon lac. \$.75
5126—6 in. indoor, walnut ... 1.25
5316—8 in. outdoor, white enamel 1.25

WEEDER



A—3 Tines, 9 1/4 in. handle....\$.20
B—3 Tines, 22-in. handle..... .25
BB—3 Tines, 33-in. handle.... .40
C—4 Tines, 10-in. handle..... .25
D—4 Tines, 10 1/4-in. handle with blade40
E—4 Tines, 10 1/4-in. handle with blade40
G—4 Tines, 57-in. handle..... 1.35
H—4 Tines, 48-in. handle with blade 1.50
K—4 Tines, 48-in. handle with blade 1.50
Rifle Weeder, long handle..... 3.90

GRASS SHEARS



5600



801

801 (Wiss), Illustrated.....\$1.40
Doo-Klip Snip-It, Similar to 801 1.65
Doo-Klip, Standard 1.95
5600 (Wiss), Illustrated..... 2.25
Doo-Klip, long handle..... 3.50

CORN KNIVES

Little Giant \$.40
C. C. Brooks50
Cumberland Valley50
Nawatoco60
Black Diamond50

HAND GARDEN FORKS

300—3 Tine \$.45

GARDEN TROWELS

222J—5 1/2 in. Strawberry \$.20
217J—6 in. Transplanting20
215J—6 in. Steel Blade..... .30
211J—6 in. Forged Steel..... .80



DIBBLES

218J—Wood bent handle, steel point, 95c
Steel Points only..... ea. 50c



HOLE-IN-ONE TOOL

75c

TREE PRUNER

8 ft. \$2.70
10 ft. 3.00
12 ft. 3.50

PRUNING HOOKS

Without Pole
11—Telephone \$3.00
166—Pruning shear and hook 2.75
167—Pruning, curved saw, shear and hook 3.75

HEDGE SHEARS



8 1/2 B (Wiss), 8 1/2 in. \$3.75
Doo-Klip—9 in. 4.50
8 1/2 E (Wiss), 8 1/2 in. 4.75



PRUNING SAW

118—18 inch \$1.50
162—20 inch 2.75

PRUNING SHEARS



119

615—(Flower) 6 1/2 in., cuts and holds stem in one operation.....\$1.85
908—(Wiss) 8 in. Anvil..... 2.00
119—Snap Cut, 8 in. Anvil..... 2.00



SC14



B14

LEVEL HEAD
CURVED TOOTH RAKES
 RHLSC ... 14 Teeth \$.80
 SC14 14 Teeth 1.20
 SC16 16 Teeth 1.35

ROUND BOW
CURVED TOOTH RAKES
 B14 14 Teeth \$1.45
 B16 16 Teeth 1.60



SL14

BROOM RAKES
 Teeth
 BRF22 22-14 in. \$1.25
 SL14 22-14 in. 1.35
 Gardex ... 22-12 in. 1.35
 Disston ... 18-14 in. 1.95
 Disston ... 24-14 in. 2.45
 24 Teeth—Wire 1.25

DANDELION RAKES
 Teeth
 YDLR 26-3½ in. \$1.10



YDLR

WOOD LAWN RAKE
 24 Teeth, 95c

MANURE FORKS
 Tines
 RHA4½ ... 4-12 in. \$1.50
 A4½ ... 4-12½ in. 1.90
 A54½ ... 5-12½ in. 2.00
 RHA54½ ... 6-12½ in. 1.70
 RHA64½ ... 6-12½ in. 1.90
 A64½ ... 6-12½ in. 2.30



A36



A54½



E10



EHD5

HAY FORKS
 Tines
 A36 3-12 in. \$1.90
 RHA36 ... 3-12 in. 1.65

ENSILAGE FORKS
 Oval Tines
 EN 8-16 in. \$3.25
 E10 10-16 in. 3.65

HEAVY FORKS
 Diamond Tines
 EHD5 5-16 in. \$4.35



SAHD



VC3



VC5

SPADING FORKS
 Flat Tines
 SAHD 4-11 in. \$1.85
 SALD 4-11 in. 1.65

VICTORY CULTIVATOR
 Tines
 VC3 3 \$1.25
 VC5 5 1.60



4SC



SG

SPEEDY CULTIVATORS
 Tines
 4SC 4 \$1.45
 SL5 4 1.45

GARDEN HOES
 L5 (Ladies)
 5 in. blade \$1.00
 RHSG—6½ in. blade 1.00
 SG—6½ in. blade... 1.20



2PWF



W7



N2½

TWO PRONG HOES
 2PWF—3-9/16 in.
 blade \$1.25
 SL7—3-9/16 in. blade 1.25

WARREN HOES
 SL6 —4¾ in. blade. \$1.20
 W7—4¾ in. blade.. 1.30



MR9



MM9

NURSERY HOES
 N2½—2½ in. blade. \$1.10
 SL4—2½ in. blade.. 1.15

MORTAR HOE
 MR9 \$2.20

MORTAR MIXER
 MM9 \$2.20



R248



HAWCS



TE



4BOL

SHOVELS
 Ed. Pt. Long Hdl.
 No. 0-717L, Ladies... \$1.75
 No. 903RS 1.60
 No. 2XL-703 1.85
 R248 Razor Back... 1.60
 Sq. Pt. Long Hdl.
 No. 2-701 Ingersoll.. 1.75
 Sq. Pt. "D" Hdl.
 No. 2-700 Ingersoll.. 1.75
 Ed. Pt. "D" Hdl.
 No. 2-702 Ingersoll... 1.75
 R2UD Razor Back... 1.60

SPADES
 GSUD Razor Back "D"
 Handle \$1.60
 No. 2-724 1.75
 GS48 Razor Back,
 long handle 1.60

CHAMPION POTATO SCOOP
 No. 70—Heavy wire,
 "D" handle \$3.45

WEED CUTTERS
 HAWCS \$1.10

LAWN EDGER
 Te-Blade—9x4¼ in. \$1.35
 Planet Jr. No. 2... \$2.10

POTATO HOOKS
 Tines
 4BOL... 4-6½ in. ... \$1.45

SIDEWALK SCRAPERS
 RHSC—7x4½ in.
 blade \$.85
 SSC—7x6 in. blade... 1.35

ONION HOE
 STO7—7x1¾ in.
 blade \$1.25

SHRUBBERY HOE
 SL19—1¼x6 in.
 blade \$.85

GRASS TRIMMERS
 USGT Union \$.90
 V165 Graswhip 1.50

ALL PURPOSE HOE
 \$1.35



HSC



STO7



SL19



USGT



SCYTHES
 Best American Grass \$2.15
 Bush or Brier Scythes 2.25
 Weed Scythes, 24 in. 2.45

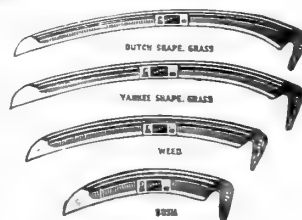
SNATH or SCYTHE HANDLES
 Grass Snath, light.. \$2.50
 Bush Snath, heavy.. 2.65

SCYTHE STONES
 Darby Creek (Flat).. \$.25
 English Talacre
 (Round)30

WEED SLUGGER
 No. 7G \$2.75

BRUSH HOOKS
 No. 1130 \$2.60
 Earl Special 2.60

GRASS HOOKS
 Lightning \$.60
 Little Giant85
 No. V395
 Little Giant
 Long Handle ... 1.15



AXES
 Collins, 3 to 4 lbs... \$2.75

MATTOCKS
 5 lb., 3½ in. cutter. \$1.65
 (Handles Extra)

BROOMS
 Palmyrah \$.85
 12B-BASS95
 Stable Push 1.05

HOTKAPS—An Individual Hothouse for Every Plant!



HOTKAPS can make many extra dollars for you this season by assuring you of earlier, bigger crops, and higher early-to-market prices. A patented wax paper cone which completely covers the plant and protects them from frost, rain, wind, ground-crusting and insects.

25 Hotkaps with Fibreboard Setter.....	\$.70
100 Hotkaps with Fibreboard Setter.....	2.75
250 Hotkaps with Fibreboard Setter.....	4.65
1000 Hotkaps.....	\$13.50 per 1000; 10,000, \$13.20 per 1000
Fibreboard Setter .....	.20
Steel Setter	1.95



A popular type of glove—for **MEN** and **WOMEN**—specially designed for garden wear.

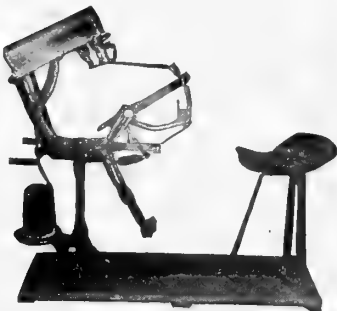
All-Leather	DIRT-PROOF
SOFT AS KID	Easy to Wear
	Pair
Size 6, 7, 8.....	\$1.15
Size 9	1.25



COW TIES
 4½ ft.....\$.45 each
HALTER CHAINS
 4½ ft.....\$.45 each
TIE OUT CHAINS
 20 ft.....\$.90 each
 30 ft..... 1.20 each

POTATO DIGGER
 Success Jr., Two Wheel
 \$21.50
BACK BANDS
 Plain G-56 \$.45
 Padded E-5655
 351-L65

Asparagus Tape
 Jute Cord
 Cotton Cord
 Hay Rope
 Plow Lines
 Binder Twine
PRICES ON REQUEST
State Quantity Wanted.



FELINS
VEGETABLE
TYING MACHINE

Save Hours of Labor
 with this Machine.
Bigger and Better
Than Ever.
 \$86.65

WHEELBARROWS



No. 3

No. 3. 26 inches long, 19 to 22 inches wide. Sideboards 12 inches high, tread 2¼ in. \$17.45.

No. 1-RTW. Size of body 30 in. long, 24 to 25 in. wide, sideboards 12 in. high, with 4:00x8 pneumatic rubber tired wheel, plain bearing. \$29.50.



No. 174-RTW

No. 174-RTW. Size of tray 37 by 28 in., capacity 4 cubic feet, with 4:00x8 pneumatic rubber tired wheel, plain bearing. \$24.00.



No. 174

No. 174
 Size of tray 37
 by 28 ins.; capa-
 city 4 cubic ft.
 \$14.50

OLIVER PLOW REPAIRS



	Mould-boards	Land-sides	Solid Shares	Slip Shares
AC-2	\$2.75	\$1.10	\$.70	....
BC	3.55	1.45	1.00	....
10	3.70	1.70	1.05	\$1.15
13	4.40	1.85	1.10	1.40
19	5.60	2.00	1.30	1.50
20	6.80	2.50	1.45	1.60
E	8.25	2.25	1.45	1.70
40	8.25	2.70	1.75	1.70
83	7.45	....	1.45	....
84-88 12 in.	8.25	....	1.45	....
SLIP POINTS			23c	

SYRACUSE PLOW REPAIRS

	Mould-boards	Land-sides	Solid Shares	Slip Shares
603	\$4.96	\$1.93	\$1.45	\$1.33
602	6.29	2.05	1.33	2.54
601	6.78	2.54	1.45	....
1462	5.75	2.12	1.33	2.54
1463	4.96	1.64	1.45	1.33
SLIP POINTS, A and B.....				25c

CHATTANOOGA REPAIRS

	Mould-board	Land-side	Solid Share	Slip Share
65	\$6.05	\$2.35	\$1.37	\$1.58

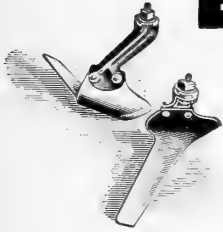
INTERNATIONAL SOLID SHARES

No. 6002DS	\$1.58
No. 6007DS	1.68

BOSS REPAIRS

	Mouldboard	Landside	Share
1½-2	\$.80	\$.65	\$.45
2½-3 .....	.90	.65	.50
20	1.50	....	.60

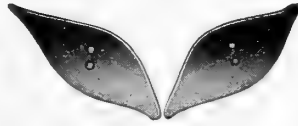
Planet Jr. Garden Tools



HOES



SHOVEL STEEL



HILLER



3825 3824
TURNING SHOVEL



FURROWER

CATALOG ON REQUEST

CULTIVATOR STEELS

No.	Size		No.	Size	
4064	1 x 8	\$.23	1888	1 1/4 x 10	\$.30
1156	1 1/4 x 8	.24	1249	1 1/4 x 10	.31
2367	1 3/4 x 8	.25	1199	2 1/4 x 10	.36
2368	2 1/4 x 8	.30	1200	3 x 10	.43
2369	3 x 8	.36	1201	4 x 10	.48
2370	4 x 8	.45			

SHOVEL STEELS

No.	Size		No.	Size	Pair
2539	7"	\$.50	4059/60	4 1/2"	\$1.45
2540	8"	.55	4061/62	6"	1.60

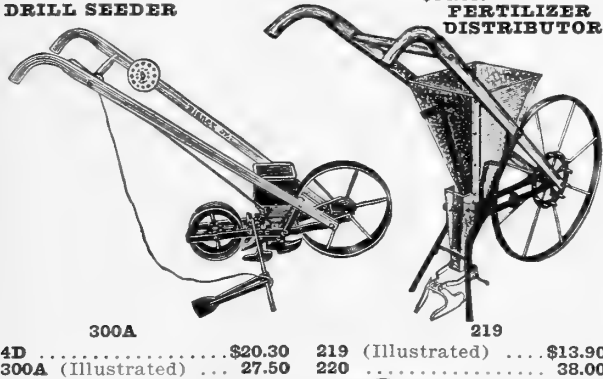
HOES

SINGLE WHEEL HOE
No. 16 (Illustrated)
\$12.40



19—Garden Flow with cultivator tooth, sweep and plow. \$7.00.
12—Double Wheel Hoe. \$15.70.

DRILL SEEDER



300A \$20.30 219 (Illustrated) \$13.90
300A (Illustrated) 27.50 220 38.00

HILLERS AND PLOWS

No.	Size	
1167/8	6" Hiller	\$1.60
495/6	7" Plows	1.95

TURNING SHOVELS

No.	Size		No.	Size	
3822/3	5" \$.95 pr.		2621	12"	1.80
3580/1	6" 1.05 pr.		1162	15"	2.30
3824/5	7" 1.35 pr.				

FURROWERS

No.	Size		No.	Size	
1494	5" \$.50		1498	15"	\$1.20
1495	8" .60		1499	18"	1.65
1496	10" .70		2731	3"	.40
1497	12" 1.00				

IMPROVED SWEEPS

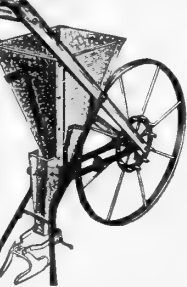
No.	Size		No.	Size	
1494	5" \$.50		1498	15"	\$1.20
1495	8" .60		1499	18"	1.65
1496	10" .70		2731	3"	.40
1497	12" 1.00				

12 TOOTH HARROW



92D—(Illustrated.) Weight 45 lbs. \$13.25.
90D—Expands to 32 inches, contracts to 12 inches. Weight 54 lbs. \$14.85.

FERTILIZER DISTRIBUTOR



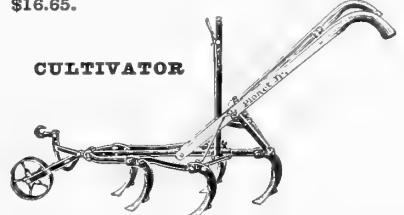
219 (Illustrated) \$13.90
220 38.00

HORSE HOE



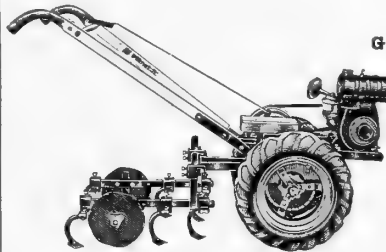
8—(Illustrated.) \$21.15.
9D—Same as illustrated, less the depth regulator and steel lever wheel. \$16.65.

CULTIVATOR



101D—As illustrated, less wheel, weight 44 lbs. \$11.50.
100D—As illustrated, less lever expander and wheel, weight 38 lbs. \$10.00.
4D—As illustrated, less wheel and lever expander, weight 49 lbs. \$11.50.
9D—As illustrated, less wheel, weight 56 lbs. \$14.25.

GARDEN TRACTORS



Planet Jr.
Simplicity
Booking orders
for future delivery.

RODERICK LEAN WALKING WEEDER

7 1/2 ft., 39 teeth
Less Runners
\$26.30

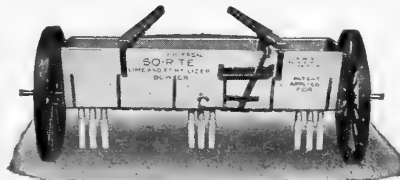


DRAG SCOOPS

1—100 lbs., \$16.50
2— 90 lbs., 15.50
3— 80 lbs., 13.50



"SO-RITE" UNIVERSAL FERTILIZER AND LIME SOWERS



As a Fertilizer Drill—Rubber spouts are adjustable to any width rows. The quantity to be sowed is regulated by lever on back of machine.

As a Broadcaster—Remove all stoppers and spouts.

No.	Width	No. Sprouts	Weight	Price
5-UW-6-1	3 ft. 1-Horse	6	225 lbs.	\$74.90
600-U1-9-1	6 ft. 1-Horse	9	325 lbs.	86.70
700-U1-9-1	7 ft. 1-Horse	9	350 lbs.	92.90
800-U1-9-1	8 ft. 1-Horse	9	375 lbs.	99.75
900-U1-9-2	9 ft. 2-Horse	9	400 lbs.	109.70
1000-U1-9-2	10 ft. 2-Horse	9	425 lbs.	117.95

Extra Spouts Complete \$1.32 Each

MANN'S CHICKS

FROM UNITED STATES APPROVED—MARYLAND
STATE SUPERVISED AND INSPECTED FLOCKS
PROVEN TO BE PULLORUM FREE



WE GUARANTEE DELIVERY

100% LIVE VIGOROUS CHICKS

With Profit Producing Characteristics Bred Into Them



Mann's chicks are produced from hand selected, Blood-Tested, hens mated to large, true-to-type, Blood-Tested, well bred cockerels. These breeders are continually culled for egg production and vigor to insure you of chicks that will not only live, but will grow uniformly, rapidly and profitably for meat or egg production. Upon maturity you will have strong and healthy pullets capable of making money.

ORDER EARLY—SPECIFY DATE WANTED

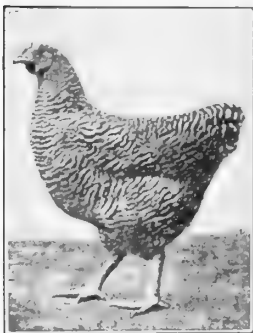
Order Early. Prices are subject to change but you will be given full benefit of any reduction in prices until shipping date.

	As		Sexed	
	Hatched	Pullets	Pullets	Cockerels
Barred Rocks	\$16.00	\$22.00	\$13.00	
White Leghorns	16.00	31.00	4.00	
White Rocks	16.00	22.00	13.00	
Barred Crosses	16.00	23.00	13.00	
New Hampshire Reds	16.00	25.00	11.00	

300 or more 50c per 100 less.

Less than 100 lots add 1c each.

TURKEY POULTS. Broad Breasted Mammoth Bronze.
95c ea.; \$85.00 per 100



Barred Plymouth Rock



New Hampshire Red

DOG FOODS

CONKEYS Y-O DOG RATION—Contains yeast and cod liver oil; meal or cubes.

10 lbs., \$1.25; 25 lbs., \$2.60; 100 lbs., \$9.50.

FOR ECONOMY
Give Your Chicks The Best
FEED THEM

Conkeys

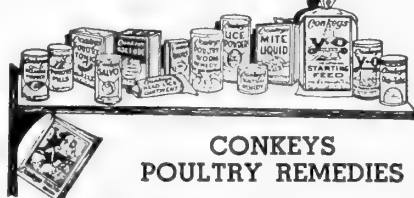
(The Original)
Let Us Quote

YO STARTING FEED	SUPERIOR SCRATCH
YO GROWING MASH	PIGEON FEED
YO EGG MASH	RABBIT FEED



CONKEYS Y-O

1 lb., 60c; 2 lbs., \$1.10; 5 lbs., \$1.75; 25 lbs., \$6.20; 50 lbs., \$10.75; 100 lb. drum, \$19.00.



CONKEYS POULTRY REMEDIES

Be Prepared
Keep A
"Conkey
Corner"
In Your
Poultry
House

COLD PILLS 75-35c; 175-75c.
DIA-TAB TABLETS. 25-25c; 55-50c; 125-\$1.00.
INHALENT SPRAY (Concentrated) ¼ pt., 65c; ½ pt., \$1.00.
INHALENT SPRAY (Ready to use) qt., \$1.00.
LICE POWDER, 12 oz., 25c; 6 lbs., \$1.50.
NOXICIDE, pt., 40c; qt., 70c; gal., \$1.75.
OLD RELIABLE POWDER, oz., 25c; 2½ oz., 50c; 7 oz., \$1.00.
100 TO 1 POWDER, 4 oz., 30c; 1 lb., \$1.00.
PICK-END BITTERS, 2¾ oz., 25c; 7¾ oz., 65c.
POULTRY TONIC, 1½ lbs., 30c; 3½ lbs., 55c; 6½ lbs., \$1.00; 20 lbs., \$2.90.
SALVO, 2 ozs., 25c.

LEE'S POULTRY REMEDIES

ACIDOX, 4 oz., 50c; 12 oz., \$1.00; 32 oz., \$2.00; ½ gal., \$3.50; 1 gal., \$6.50.
GERMOZONE, 4 oz., 40c; 12 oz., 75c; 32 oz., \$1.50; ½ gal., \$2.50; gal., \$4.50.
GIZZARD CAPSULES—Adult 50-75c; 100-\$1.25.
GIZZARD CAPSULES—Pullet 50-50c; 100-\$1.00.
GIZZARD CAPSULES—Chick 50-40c; 100-75c.
LEEMULSION, 4 oz., 50c; 12 oz., \$1.00; 32 oz., \$2.00.
MITE KILLER, qt., 60c; gal., \$1.50.
PICKPASTE, 2 oz., 25c; 6 oz., 60c.
TONAX, 2 lbs., 75c.
VAPO-SPRAY, pt., 50c; qt., 75c; gal., \$2.00.

AVICOL

For white diarrhea, stops chicks dying. 60 tablets, 50c; 180 tablets, \$1.00.

DON SUNG

Makes hens lay. 45 tablets, 50c; 135 tablets, \$1.00.

GROUP-OVER

The sure way to treat Colds, Roup and Canker. 3 oz., 50c; 8 ozs., \$1.00.

"T. S. F."

Kills chicken lice. ½ lb., 35c; 1 lb., 60c.

TOXITE

Disease Control Spray—Controls poultry Coccidiosis, Round Worms and Red Mites which are transmitted by contaminated litter. Qt., 75c; gal., \$2.00.

"BLACK LEAF" WORM POWDER

4 oz., 100 birds... 75c 1½ lbs., 600 birds... \$3.00
CHARCOAL—Fine. 3 lbs., 25c; 5 lbs., 35c; 50 lbs., \$2.25.
Coarse. 3 lbs., 25c; 5 lbs., 35c; 50 lbs., \$2.25.
GRIT, coarse and fine, 100 lbs., \$1.25.
OYSTER SHELL, coarse and fine, 100 lbs., \$1.25.

CAPONIZING SETS

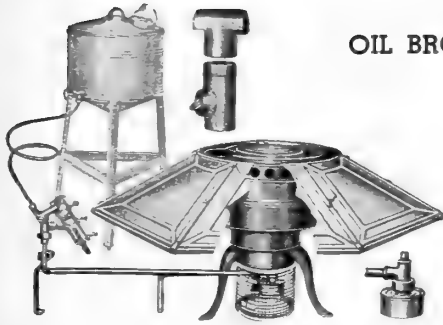
Dr. Salsbury—Set \$3.50

WRITE FOR FREE POULTRY BOOKS

Lederle VETERINARY PRODUCTS

Sulfaguanidine, Duatok, Phenothiazine, etc.

Free Literature on Request, state whether for poultry or live stock.



OIL BROODER

256B—54 inch; 8-gallon tank; 700 chicks. Without Fuel Stand. \$27.15.

COAL BURNING BROODERS

A16—56-inch hoover, capacity 500 chicks. \$31.90.

ELECTRIC BROODERS

UB42—Galv. Metal, 500 watt enclosed type heater, with thermostat, size 36 in. by 42 in., capacity 200 chicks. \$15.85.

302. Galv. metal chick battery unit with 150 watt acra heater, micro switch and wafer thermostat. Size 23 x 36 inches. Capacity 100 chicks. \$13.85.

LG2 Liv-An-Gro. Body and cover corrugated board, metal feed pan and water trough. Fitted with socket for light bulb, 6 ft. cord, 40 watt bulb recommended for room temperature 65 or 70 degrees, capacity 50 day old chicks. \$3.00.



REEL TOP FEEDER

H224—24 in. galv..... \$.40 H6360—36 in. galv..... \$.95
C236R—36 in. galv..... .85 H5480—48 in. galv... 1.60

GRILL TOP FEEDER



H7480—48 in. galv.... \$2.15

FOUNTAIN AND FEEDER

CG6—(Crystal). Fits any Mason Jar. 15c.
HG25—Galv. 11c.

SINGLE WALL FOUNTAINS



HA8—2 gal. Galv..... \$1.25
HC3—3 gal. Galv..... 1.80
HC5—5 gal. Galv..... 2.45

SPIRAL BANDS

Dark blue, light blue, red, green, white.



Size Per 100
1/4 in. \$.20
5/16 in. .30
9/16 in. .40
11/16 in. .50
3/4 in. .50

FLOCK FEEDERS

H25S—60 in. galv.... \$5.75
H28S—96 in. galv.... 8.80



TOP FILL FOUNTAINS

302S—2 gal. Galv..... \$1.95
303S—3 gal. Galv..... 2.95
305S—5 gal. Galv..... 3.85
HK3—3 gal. Galv..... 2.40
HK5—5 gal. Galv..... 3.55
HK5H—5 gal. with heater 6.30
904—Automatic Valve and Float only 1.00

FOUNTAIN HEATERS

H5H—Oil, fits any 15 or 15 1/2 in. pan. \$2.80.
H82—Lamp with burner and wick. \$1.85.
H569—Elec., fits any 5 to 10 gal. fountain. \$5.40.

FEEDER AND WATERER



G16L—16 in. dia. 4 1/2 in. high, 16 qt. capacity. \$1.95

K. R. O.

Kills Rats Only
2 oz. (Mix with 2 lbs. bait) \$.75
Ready Mixed, 6 oz., 35c; 1 lb., \$1.00.
GALVANIZED PIPE
2 ft. lengths. 4 in., 35c; 5 in., 40c.

GALVANIZED ELBOWS

4 in., 40c; 5 in., 45c.

GALVANIZED CAPS

HPC5—5 in., 30c.

ROOF SADDLE

440. Adjustable. 4 in., \$1.70

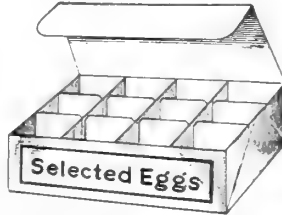
HRS5—5 in., \$1.65.

N12—Non-adjustable. 4 in., 60c.

WAFER THERMOSTATS

T-347—DeLuxe. 3-in. \$.35
T-434—4-in.45
128 Brooder Thermometers50
Incubator Thermometers85

EGG CARTONS



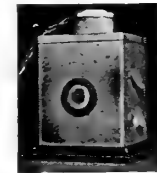
\$1.50 per 100; \$3.15 per carton of 250 (weight 26 lbs.). Postage extra.

EGG PRESERVATIVE



Qt., 60c; gal., \$1.70

EGG CANDLER

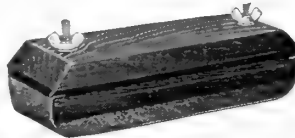


8910

WIRE EGG BASKETS

44—Capacity 12 to 15 doz... \$1.25

EGG CLEANERS



13 \$.35
14—10 ft. Cleaning Cloth .80

CEL-O-GLASS

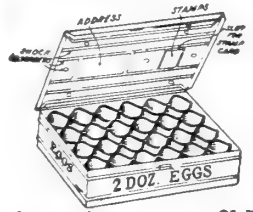
Now guaranteed for 5 years, glass substitute, wire base. Standard roll 36 in. wide, 100 ft. long. 36c per running ft.

R-V-LITE VITAPANE

36 inches wide (cord base)..... 21c lineal foot
50 ft. roll (150 ft.)..... \$10.25 roll



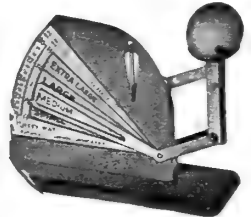
METAL EGG CRATES



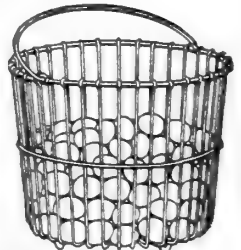
1-dozen size \$1.75
2-dozen size 2.00
3-dozen size 2.50
4-dozen size 3.00
6-dozen size 3.50

Postage Extra

SCALES



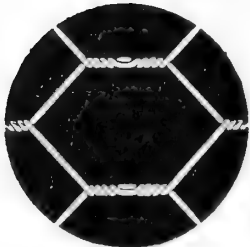
517 Egg Grading.... \$1.75
8910—Spring balance. Capacity 100 lbs. by 1 lb. \$4.50.



HUMANE POULTRY KILLER

\$1.85

POULTRY NETTING
Galvanized After Weaving



Hex-Cel

150-FOOT ROLLS	
2-inch Mesh	1-inch Mesh
20 gauge	20 gauge
24 inch.. \$2.85	12 inch.. \$3.25
36 inch.. 3.95	18 inch.. 4.45
48 inch.. 4.65	24 inch.. 5.75
60 inch.. 5.70	36 inch.. 8.45
	48 inch.. 10.85

25 to 150 foot lengths
2-inch mesh 1½c per sq. ft.
1-inch mesh 2½c per sq. ft.

AMERICAN FARM FENCE

Thoroughly galvanized, with hinge joint patent lock knot.

Put up regular in 20-rod Rolls.

726—7 strands, 26 inches high, 6-inch stays, per rod,

PIONEER POULTRY FENCE

DISTANCE BETWEEN BARS	NO. BARS	LENGTH
2 1/2	72	72 INCH
3	60	60 INCH
4	48	48 INCH
5	36	36 INCH

2158—58 inches high, top and bottom wires No. 11, intermediate and stay wires No. 14½, 6-inch stays, per roll of 165 feet.

BARBED WIRE GALVANIZED

4-point, 12½-gauge, 5 ins. between barbs, 80-rod.

POST HOLE DIGGERS

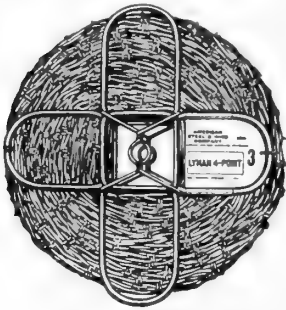
\$2.75

EARTH AUGERS

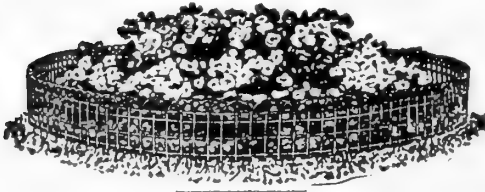
8—8-14 in. \$10.00

DISTANCE BETWEEN BARS	NO. BARS	LENGTH
9	11 BARS	55 INCH
	10 BARS	47 INCH
8	9 BARS	39 INCH
	8 BARS	32 INCH
7	7 BARS	26 INCH
	6 BARS	20 INCH
6		
5½		
5		
4½		
4		
3½		
3		

1948—48 inches high, top and bottom wires No. 11, intermediate and stay wires No. 14½, 6-inch stays, per roll of 165 feet.



FLOWER GUARD



Designed for protecting Flower Beds

22-inch, per foot.....

HARDWARE CLOTH

2x2.....	\$.08 sq. ft.	4x4.....	\$.09 sq. ft.
3x3.....	.08 sq. ft.	8x8.....	.10 sq. ft.

100 sq. ft. or more deduct 1c per sq. ft.

PRIME ELECTRIC FARM FENCE

Approved for Safety by Underwriters' Laboratories



110-120 Volt

48	.....	\$34.50
48V	.....	34.50
480A	.....	42.50
486 (Illustrated)	.....	44.50
2C1	.....	47.50

Battery Type

680A \$42.50

Accessories

Battery Cabinet 255, \$2.50.
Bulbs P-362, 30c; P-363, 50c; P-364, 75c.
Clips Spring Tie P-19, 45c per 100.
Electric Fence Tester, \$2.95.

Fuse Plug, P-407, 10c each; box of 5, 45c.

Fuses, P-523, 6c each.

Gate Handles, P-500, 7 inch, 35c.

Gate Springs, P-501, 10c.

Insulators End and Corner, P-23, 5c.

Insulators End and Corner, P-26, 10c.

Insulators Standard, P-1, \$2.40 per 100.

Insulators Weatherproof, P-2, \$2.90 per 100.

Lightning Arresters, P-244, 30c.

Let us send descriptive catalog, prices and free booklet on Electric Fencing.

ROOFING MATERIAL
SMOOTH SURFACED

	Weight Per Lbs.	Per Roll
Panamoid, medium	..... 45	\$2.15
Everlastic, heavy	..... 55	2.65
Everlastic, extra heavy	..... 65	2.85

(Underwriters' label)

TARRED SLATERS FELT

500 square feet..... 30 \$2.65

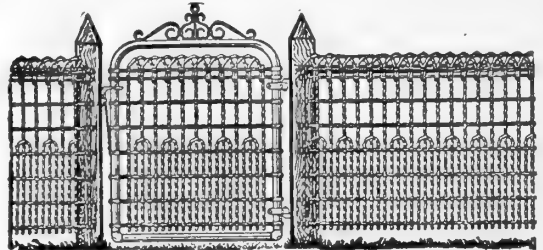


KUR-A-LEKE

A semi-liquid mastic or cement-like composition, not affected by extreme heat or cold; absolutely water tight and fireproof. It "kures" the leaks in wornout tin, galvanized iron or composition roofings. Gal., 95c; 5 gals., \$2.75.



ORNAMENTAL LAWN FENCE



Very attractive and we believe the most durable wire lawn fence made. Heavy galvanized. Spaces, 1½ inches; wire, No. 9½ Crimped Pickets in No. 12½ Tw. Cables.

	36-inch	42-inch	48-inch
Per ft. 100 ft.	Per ft. 100 ft.	Per ft. 100 ft.	Per ft. 100 ft.

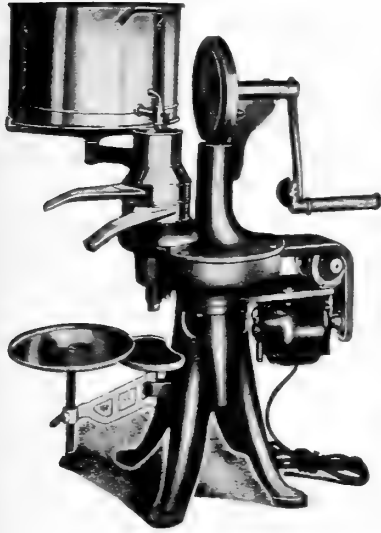
Single Loop
Double Loop

ORNAMENTAL GATES

Heavy steel frames, filled to match the fence; fittings for 1½ in. iron posts included.

Width	Height	Price
36-inch	36-inch	.....
36-inch	42-inch	.....
36-inch	48-inch	.....

NEW E-Z AMERICAN SEPARATOR



50 Hand—Capacity 500 pounds of milk per hour; skims about 62 quarts in 15 minutes. **\$100.87.**
80 Combination Elec. and Hand, with Motor (illustrated). **\$152.97.**
 Smaller models. Let us quote.



STRAINER PADS

Plain round rapid-flo filter disks. 100 in box—6 inch, 70c; 6½ inch, 75c.

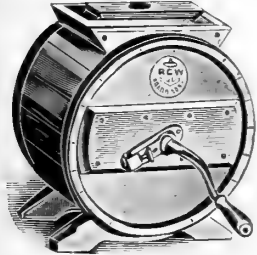
STANDARD GLASS CHURNS

Size Churns
 4 quart—2 quart.....\$2.85
 8 quart—4 quart..... 3.95

GLASS JARS ONLY

2 qt., 50c; 4 qt., 85c; 6 qt., \$1.00;
 8 qt., \$1.20.

CYLINDER CHURN



1—3 Gal. (churns 1½ gal.) \$5.95.

ICE CREAM FREEZER



Snowball (Triple Action). 4 qt., \$7.85; 6 qt., \$9.85.

HUDSON BARN EQUIPMENT

2A—Stall, \$11.40.
 193—Stanchion, \$5.15.
 181—Stanchion, \$3.55.
 89—Water Bowls, \$5.00

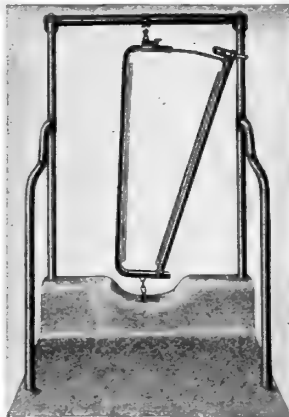


PARCHMENT BUTTER PAPER

Sizes 6x9, 9x12.... Lb., 35c
 Postage Extra

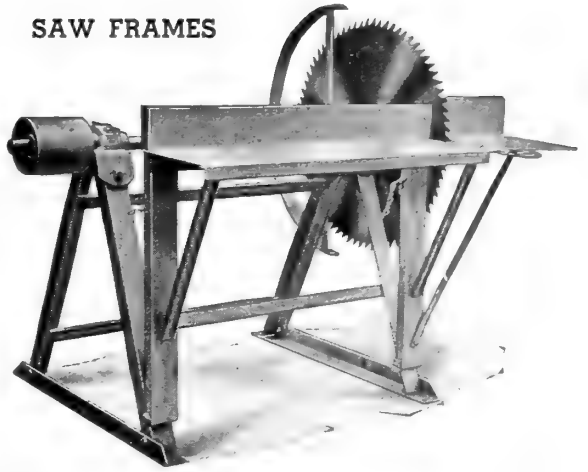
DANDELION BUTTER COLORING

Small, colors 500 lbs..\$ 40
 Medium, colors
 1250 lbs. 70



262—Hay Carriers, \$18.50.
 268—Harpoon Fork, \$5.00.
 249S—Rafter Brackets, 8c ea.
 290—Hanger Hooks, 25c ea.
 401—Track, 34c ft.

SAW FRAMES



(Blades Extra) No. 9 Steel
 Frame Only
 With Flywheel

BLADES (Cross Cut)—Bore 1¾-inch
 18-inch, \$6.10; 24-inch, \$9.65; 26-inch, \$10.90; 28-inch,
 \$13.00; 30-inch, \$14.50.

SAWS

AA3—24 in. 8 pt. Penna. Hand Saw.....\$4.00
 400—3 ft. Penna. One Man Saw..... 3.15
 400—3½ ft. Penna. One Man Saw..... 3.70
 800—5½ ft. Penna. Cross-Cut Saw..... 5.60
 K-854—6 ft. Keystone Cross-Cut Saw..... 6.10
 1½—Penna. Buck Saw..... 1.65

FARM BELT

Rubber coated canvas transmission belting; 4 in. wide; 4 ply; flat sides; black. 45c ft.

Bag Balm, 70c.

Kow-Kare, 1¼ lbs., 75c; 2¾ lbs., \$1.35.

Conkeys Fly Knocker, qt., 60c; gal., \$1.50.

Conkeys Stock Tonic, lb., 30c; 2¾ lbs., 55c; 6 lbs., \$1.10.

Conkeys Calf Meal, 25 lbs., \$2.20.

Hog Oil Wormer, 12 oz., \$1.00; qt., \$2.00.

CALF WEANERS, No. 103 Medium, 65c.

TEAT DILATORS for Cows, box of 18, 25c.

PERFECTION ANTI-COW KICKERS, \$1.00.

GRINDSTONES

VICTOR. Tubular steel frame, adjustable steel seat, treadle type, ballbearing journals and crank attachment. Stone 19 to 22 inches in diameter by 1¼ to 2¼-in. face.

WESTERN. Angular steel frame, adjustable steel seat and equipped with treadles, ball-bearing, strong and rigid. Stone 19 to 20 inches in diameter by 1¼ to 2-in. face. \$13.50.

KING. The frame is constructed of tubular steel, very rigid, ball bearing, adjustable seat, and equipped with treadles. Stone is 20-22 inches in diameter by 2-inch face.
LOOSE GRINDSTONES (centered) 20-22 in. dia. by 2 in. face. \$8.75.

Loose Grindstones, 6c per pound.



TOOL GRINDER

This very useful grinder is especially suited to farm work and can be easily clamped to a mower wheel or bench.

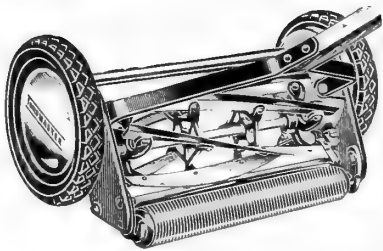
82—With Bevel Tool Wheel only\$9.50

83—With both Flat and Bevel Tool Wheels.. 10.80

171—4½x1½ Dime-Grit Tool Wheel 2.95

DG3¼—Beveled Wheel only 1.85





LAWN MOWERS

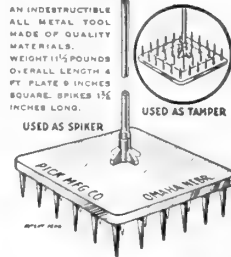
5 Blades, 16 in. Cut
TURFMASTER GRASS GROOMER DIAMOND DELUXE
 Let us quote.

GRASS CATCHERS

For hand lawn mowers 14 thru 18 inches. \$2.25.

WATER BALLAST LAWN ROLLERS

Equipped with ball bearings and scraper.



\$6.85

601—14x24, Empty 70 lbs.; Filled 175 lbs. \$14.00
 602—18x24, Empty 85 lbs.; Filled 265 lbs. 16.50
 603—24x24, Empty 110 lbs.; Filled 420 lbs. 20.50

GARDEN CART



Light, strong, welded all-steel body, steel axle and wheels with solid rubber tires. 18 in. wide, 27 in. long; capacity 2 3/4 cubic feet.

Standard \$6.25
 DeLuxe 7.50

PARA WATERPROOFED TARPULINS



GRIZZLY BRAND (12 oz. sq. yd. before waterproofing). Genuine canvas duck, color brown. Ruggedly constructed, heavy rustproof brass grommets set at each corner and along edges in double reinforced canvas patches.

Cut size before seaming and hemming	Approx. weight	Price
10x12	16 lbs.	\$11.40
12x16	23 lbs.	18.24
15x20	40 lbs.	28.50
16x24	50 lbs.	36.48

Sizes not listed available at proportionate prices. F.O.B. Factory.

KNOW which elements are needed in your soil



Practical tests with the Sudbury Soil Test Kit will show the acidity of soil and any possible deficiency in nitrogen, phosphorus, and potash. Each kit is accompanied by complete instructions and tables of plant needs.

MODEL D (as illustrated)—Contains enough soil testing solutions to make 20 individual tests. \$2.50.

JR. PROFESSIONAL—Makes 50 individual tests for nitrogen, phosphorus, potash and acidity. Cased in handsome sturdy imitation leather. \$4.75.

HORTICULTURAL—In permanent metal case. Contains sufficient chemical for 60 individual tests for nitrogen, phosphorus, potash and acidity. Case contains test tube rack, extra test tubes, special glass funnels, color charts and a supply of filter paper. \$12.50.

DELUXE MODEL—Widely used by large growers, nurseries and government departments. Makes 200 individual tests for nitrogen, phosphorus, potash and acidity. Cased in instrument type pine box. Complete instructions. \$22.50.

TESTING FLUID for refill. Specify whether for nitrogen, phosphorus, potash or acidity. 2 oz., \$1.00; 6 oz., \$2.00.

ACID OR ALKALINE PREFERENCES

(Letters refer to degree of acidity in chart below)

VEGETABLES, GRAINS, GRASSES, ETC.

Alfalfa A	Cucumber B	Potatoes D
Asparagus A	Currants C	Pumpkin D
Barley A	Eggplant B	Radish B
Beans C	Endive B	Raspberries B
Beets C	Gooseberry C	Red Clover B
Bent Grass D	Grapes D	Rhubarb C
Blue Berries E	Kale E	Rye C
Blue Grass A	Laurel E	Spinach B
Broccoli B	Leek B	Squash C
Cabbage A	Lettuce A	Strawberries C
Carrots A	Muskmelons B	Tobacco C
Cauliflower A	Oats C	Tomato C
Celery A	Onions A	Turnip C
Chicory B	Parsley A	Rutabaga B
Corn B	Parsnips D	Watermelon C
Clover A	Peas B	Wheat A
Cowpeas C	Peppers C	
Cranberries E	Plums D	

FLOWERS

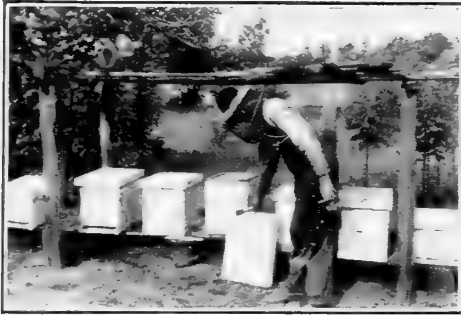
Azaleas E	Forget Me Not A	Nasturtium A
Anemone B	Fuschia B	Orchid D
Aster B	Gardenia E	Pansy B
Begonia B	Genista A	Peony B
Bleeding Heart C	Geranium A	Primula B
Bouvardia C	Gerbera A	Poinsettia B
Calendula A	Gladiolus B	Petunia A
Candy-tuft B	Godetia B	Phlox C
Canna B	Heather D	Poppay F
Carnation B	Heliotrope A	Rhododendron C
Centaurea B	Holly E	Rose B
Cineraria A	Hyacinth B	St. Paulia B
Chrysanthemum B	Hydrangea Blue E	Salpiglossis B
Clarkia B	Hydrangea Pink C	Scabiosa B
Clematis A	Iris B	Schizanthus B
Columbine B	Lady Slipper E	Snapdragon B
Cosmos B	Larkspur B	Stocks B
Cyclamen C	Lilac B	Swainsonia A
Dahlia B	Lily C	Sweet Peas A
Delphinium B	Lupine C	Tulips E
Didiscus C	Marigold B	Violet B
Easter Lily C	Mignonette B	Westeria B
Euphorbia C	Morning Glory A	Woodbine B
Feverfew B	Myosotis B	Yucca B
Ferns C	Narcissus B	Zinnia B

4pH	5pH	6pH	6 1/2	7pH	7 1/2	8pH
E	D	C	B	A		
Acid				Alkaline		
Neutral						

B, C, D and E indicate degrees of acidity from 7 pH, which is neutral, to 4 pH which is extremely acid. "A" indicates a slightly alkaline condition.—(1000 lbs. Hydrated Lime per acre will change a sandy loam from pH 5 to pH 6.)

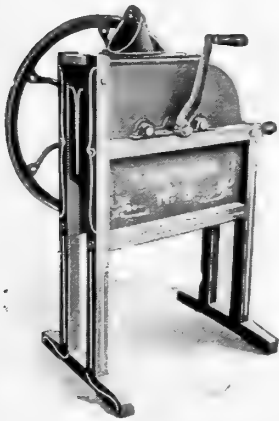
Root QUALITY BEE SUPPLIES

Let Us Send Complete Free Catalog
For Quick Service
Mail Your Order To Us
Prices F. O. B. Baltimore



HONEY JARS

6736—Plain Round	½ lb. size	\$1.25 case 2 doz.
6741—Plain Round	1 lb. size	\$1.45 case 2 doz.
6752—Plain Round	2 lb. size	\$.95 case 1 doz.
6558—Honey Jar	5 lb. size	\$1.50 doz.
White coated caps included		



CORN SHELLERS

3\$31.00

SALT BRICKS

Dr. Blackman's\$.25
Worcester25

MEAT CURING PRODUCTS

Mortons Sugar Cure,
(Smoke Salt) 7½ lbs.,
90c.
Mortons Tender Quick,
2½ lbs., 65c.
Mortons Sausage Season-
ing, 10 ozs., 40c.
Mortons Meat Pump,
\$2.00

RURAL MAIL BOX

1—18¾ in. long, 6¾ in. wide, 8¾ in. high.....	\$2.50
2—23¾ in. long, 11 in. wide, 13¾ in. high.....	5.25

HANDLES

Axe, 19 in. Bobolink, House.....	\$.20
Axe, 34 in. Bobolink, Bent.....	.70
Axe, 36 in., Bent.....	.50
Cultivator, Rough, pair.....	1.35
Hammer, 14 in. ....	.15
Hatchet, 14 in. Bobolink.....	.15
Hay Fork, 4½ ft., with ferrule.....	.90
Hay Fork, 6 ft. with ferrule.....	1.15
Hoe, 4 ft. socket.....	.45
Manure Fork, IDL top, heavy, with ferrule.....	1.25
Mattock, 36 in. Natural, Bobolink.....	.70
Plow, Rough, pair.....	1.75
Rake, 6 ft., with ferrule.....	.70
Shovel, 4½ ft., single bend.....	.85
Shovel, 4½ ft., double bend.....	.85
Sledge, 36 in. ....	.60
Spading Fork, "D" top, with ferrule.....	1.20
Window Brush, 12 ft.....	.75

FULTON'S PLANTABBS Odorless Plant Food Tablets Containing Vitamin B₁

10 Tablets, 10c; 30 Tablets, 25c; 75 Tablets, 50c; 200 Tablets, \$1.00; 1000 Tablets, \$3.50. (By mail add 10%.)

FLORALIFE "B"

Prolongs life of cut flowers, retards wilting, prevents fading, maintains fragrance.

10c size makes two quarts solution
\$1.00 size makes thirty quarts solution

TAT VITAMIN B-1 (Liquid)

½ fluid ounce makes 100 gallons, 25c.
2 fluid ounces make 800 gallons, \$1.00.

VITA-FLOR Vitamin B Solution

A solution containing all Vitamin B growth substances necessary for plant development. Two drops make one gallon solution, ¼ oz., 50c.

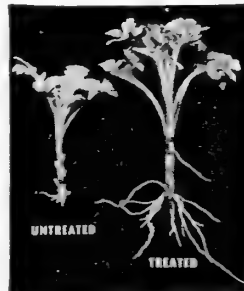
FRUITONE

REG. U. S. PAT. OFF.

FRUITONE, the hormone spray for stopping premature drop of fruit, flowers and leaves. When sprayed on flowers or tomatoes or beans it produces better set and larger crop. Prevents premature drop of apples and pears. Makes hollies and other Christmas greens hold their leaves longer. 2/5-ounce packet, 25c; 2-ounce package, \$1.00; 12-ounce can, \$5.00.

ROOTONE

Reg. U. S. Pat. Off.



The New Hormone Powder for dusting seeds, cuttings and bulbs. Requires no solutions nor soaking and is easy to use. Assures better germination of seeds, produces better plants with longer roots, greater top growth and vigor. Rootone kills fungi and prevents damping off.

¼ oz. will treat 2½ lbs. seed or 400 cuttings, 25c.
2-oz. size will treat 8 bu. seed or 3,000 cuttings, \$1.00.
1 lb. will treat 30 bu. seed or 30,000 cuttings, \$5.00.

TRANSPLANTONE

Reg. U. S. Pat. Off.

Contains Vitamin B-1 and other parts of the Vitamin B fraction, plus plant Hormones which are active in root formation.

This Vitamin-Hormone tonic stimulates the growth of seedlings, plants, trees, shrubs, rose bushes, lawns, etc., by not only forming new roots but by also continuing their growth and making plant food more available. Very beneficial to transplanted seedlings, shaded lawns and backward garden plants. 1 ounce makes 10 gal. transplanting solution or 900 gal. watering solution. ½ oz. pkt., 25c; 3 oz., \$1.00; lb., \$4.00.

VERMICULITE (Terra-Lite Brand)

Expanded Vermiculite is a new sensational sterile, inert, plant growing medium obtained from natural deposits in Montana. Work done by the U.S.D.A. at Beltsville and Glen Dale, Md., definitely proves this propagating material far superior to mixtures of sand and soil, sphagnum moss, etc., for producing the finest seedlings and best rooted cuttings. Processed at 2200° heat, there are no weed seeds, no disease organisms, no "damping off". It holds water, air and applied plant foods readily available, therefore seeds germinate quickly, grow faster with much stronger roots and therefore transplant better. Cuttings of even very difficult varieties are easily rooted. Vermiculite has many other horticultural uses such as soil corrective, mulch, for bulb storage, etc. Packed in bags of approximately 2½ cu. ft., weighing about 15 lbs. \$1.50 ea.; Bu., \$1.15; pk., 40c.

Plant Food Elements

Plants require nitrogen, phosphorus, potassium (the three most important), oxygen, hydrogen and carbon (obtained from air and water) and the minor elements usually found in the soil in sufficient quantity but also supplied in the better brands of mixed fertilizers.

These minor elements are calcium, sulphur, magnesium, manganese, iron and boron. Their functions are largely indirect, but very essential as they aid the chemical changes which render other ingredients more available. Calcium (lime), for example, aids in making the nitrogenous materials more quickly available and changes the physical nature of soils. Sulphur seems to exert a beneficial influence on plant growth and iron is necessary in the formation of chlorophyll.

NITROGEN is the "top growth" element needed for leafy vegetables such as spinach, kale, parsley, etc. Aside from mixed fertilizers, nitrogen can be had in various organic forms as in bone meal, blood meal, tankage, fish meal, cottonseed meal and inorganic forms such as nitrate of soda (tending toward an alkaline reaction), am-

monium sulphate (tending toward an acid reaction), urea and potassium nitrate. The organic materials are safest to use as they react slowly and do not burn.

PHOSPHORUS is generally the most needed element, as the continued use of manures possessing such a little of it, combined with the fact that most crops are heavy phosphorus feeders, soils worked for a number of years are practically depleted of this element. A real fertile soil is rich in readily available phosphorus. It is the element which promotes growth and vigor, flowers, fruit and seeds. Beans, corn, cucumber, tomatoes, turnips and rutabagas seem to respond to heavy feedings of phosphorus. It is available in mixed fertilizers, superphosphate, bone meal and tankage.

POTASH is the root growing element. Asparagus, beets, carrots, celery, cucumbers, lettuce, potatoes and radish all respond to extra potash feeding. Sulphate of potash is best for tobacco, lettuce and leaf crops, while muriate of potash is most beneficial to carrots, potatoes and root crops.

FERTILIZERS

Analysis	C. O. D. Per Ton	List Price Per Ton	100 Lbs.	CROPS AND SOILS
0-14-7	\$34.24	\$38.05	\$2.90	ALFALFA, CLOVERS (200-800), SOYBEANS, COWPEAS (200-300). In rotation, on manured land. CORN and GRASS land (200-400) that is heavily manured. WHEAT, RYE, WINTER BARLEY, (200-400) on Piedmont and Mountain Valley soils. For annual legumes on heavy unmanured soils (200-400). Fall applications on PASTURES, TURF GRASSES (200-400) and HOME LAWN (10-20 lbs. per 1000 square feet). Recommended for legume sods in orchards.
10-6-4	49.63	55.15	4.10	TOP DRESSER, Spinach, kale, cabbage, lettuce, mustard, turnip greens and other leafy vegetables.
3-12-6	38.56	42.85	3.25	SWEET CORN (200-500), and TOMATOES (500-1000) for canning on heavy soils and where manure is used. FIELD CORN (200-500), on light soils.
4-12-8	42.52	47.25	3.60	TOMATOES (500-1000) in rotation with field crops on light soils. LATE POTATOES (500-1000), ASPARAGUS (400-800), SWEET POTATOES (800-1200), CARROTS, PARSNIPS, TURNIPS and other root crops (400-800).
5-10-5	41.13	45.70	3.45	Cannery PEAS and BEANS on heavy soil or well-manured soil (400-800). SWEET CORN (200-600) for market, early and mid-season STRAWBERRIES (300-600). EARLY POTATOES (2000), ASPARAGUS, LEAFY VEGETABLES and other truck crops (400-800).

Ton prices include delivery to farm. If hauled from factory deduct \$2.00 per ton.

ORGANIC PLANT FOODS

	5 lbs.	10 lbs.	25 lbs.	100 lbs.
Blood Meal (3 lbs., 40c) \$.15				
Bone Meal (Raw).....	\$.35	\$.65	\$1.50	\$4.90
Bone Meal (Steamed).....				4.50
Cow Manure.....	.30	.50	.90	2.85
Sheep Manure.....	.25	.40	.80	2.75
Tobacco Stems (Meal)....		.50	.90	2.85

AGRICULTURAL CHEMICALS, ETC.

	lb.	10 lbs.	25 lbs.	100 lbs.
Aluminum Sulphate.....	\$.10	\$.50	\$1.00	\$3.25
Asparagus Salt.....		.40	.65	1.90
Calcium Chloride.....	.05		1.00	
Epsom Salts.....	.10	.65	1.25	4.50
Hydrated Lime (50 lbs., 75c).....		.20		1.25
Iron Sulphate (Crystal).....	.20			
Nitrate of Soda.....	.10	.80	1.50	4.35
Pulverized Ground Limestone, (80 lbs., 75c; 160 lbs., \$1.25)				
Sulphate of Potash.....	.10	.80		
Super Phosphate (20%).....	.10	.40	.75	2.35
Top Soil (500 lbs., \$5.00).....		.20	.50	1.25
Zinc Sulphate.....	.20			

ADCO

Is a powder, which, when mixed with almost any non-woody vegetable waste, and kept wet, gradually converts it into manure.

50 pounds of ADCO makes a ton of manure. Equal to stable manure—Odorless. 7½ lbs., \$1.00; 25 lbs., \$2.25; 150 lbs., \$12.00.

ROSE FOOD

An organic plant food especially for roses.

G. & O. Analysis 5-7-4. 5 lbs., 65c; 10 lbs., \$1.15; 25 lbs., \$2.50.

TRIOGEN. Analysis 5-10-5. 5 lbs., \$1.00; 10 lbs., \$1.60; 25 lbs., \$3.00.



HY-GRO SOLUBLE PLANT FOOD

Formulated by America's greatest authority on soils, an ideal starter solution and all season fertilizer. A proven product that helps growers increase their profits. Hy-gro analyses 13-26-13 plus minor elements, completely soluble in water, absorbed quickly by the roots. Use 2 to 4 lbs. per 50 gal. water.

3-ounce jar, 25c; 20-ounce jar, \$1.00. 10 lbs., \$4.00; 25 lbs., \$5.75; 100 lbs., \$20.00.

HYPONEX

Chemical Plant Food
Contains Vitamin B-1

For growing plants in soil, sand or water. Ideal for "tank farming," a complete and balanced plant food; odorless and keeps indefinitely.

3 oz. makes 18 gallons.....	\$.25
7 oz. makes 42 gallons.....	.50
1 lb. makes 100 gallons.....	1.00
10 lbs. makes 1000 gallons.....	8.00
25 lbs. makes 2500 gallons.....	15.00



HY-TROUS

A Concentrated Liquid Fertilizer

For all house plants, flowers, vegetables, fruits, flowering shrubs, lawns and trees.

3 oz. size makes 6 gallons.....	\$.25
8 oz. size makes 16 gallons.....	.59
16 oz. size makes 32 gallons.....	.99

3 AGRICO Fertilizers

FOR BETTER LAWNS and GARDENS

Each of these three special-purpose AGRICO Fertilizers is made to do its own job and do it better than any all-purpose fertilizer could possibly do. Yet Agrico costs no more . . . is more economical to use . . . gives you more value, per pound and per dollar.



AGRICO FOR LAWNS, TREES & SHRUBS

Keep a lawn good by feeding it with Agrico every Spring and Fall. Use Agrico in rebuilding lawns. Also, feed your trees and shrubs. Use 30 lbs. per 1000 sq. ft. 5 lbs. \$.45; 10 lbs. \$.80; 25 lbs. \$ 1.50; 50 lbs. \$ 2.50; 100 lbs. \$ 4.50.



AGRICO FOR GARDENS

Use this special-purpose Agrico for flowers of greater health and beauty — and for larger yields of vegetables, richer in minerals and vitamins. Use 40 lbs. per 1000 sq. ft. 5 lbs. \$.45; 10 lbs. \$.80; 25 lbs. \$ 1.50; 50 lbs. \$ 2.25; 100 lbs. \$ 4.00.

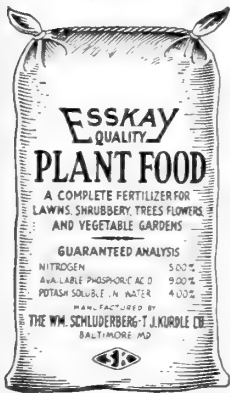


AGRICO FOR BROADLEAF EVERGREENS

This AGRICO provides all needed plant foods for acid-loving plants, — also acidifies the soil, essential for best results. Use approximately 1 1/2 lbs. per 100 running feet. 10 lbs. \$ 1.00; 25 lbs. \$ 2.00; 50 lbs. \$ 3.25; 100 lbs. \$ 5.25.

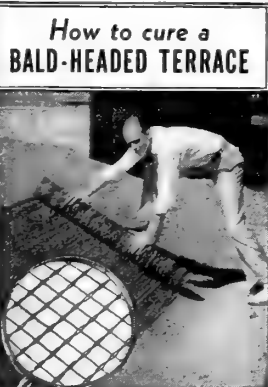
COMPLETE INSTRUCTIONS ON EVERY BAG ESSKAY QUALITY PLANT FOOD

(Analysis: 5-9-4)



A complete organic fertilizer consisting of blood, bone meal, tankage and potash scientifically blended for Flowers, Lawns, Vegetables, Trees and Shrubs. It builds up the soil and leaves no acid residue.

100-lb. bag	.....	\$4.00
50-lb. bag	.....	2.75
25-lb. bag	.....	1.65
10-lb. bag	.....	.83



USE BEMIS EROSIONET

EROSIONET

Now you can grow grass on that stubborn slope. Unroll this mesh blanket and laugh at the rain. Your seeds will not be washed out, and you will get a sturdy stand of grass. 45 in. wide..... 10 yds. or more.....

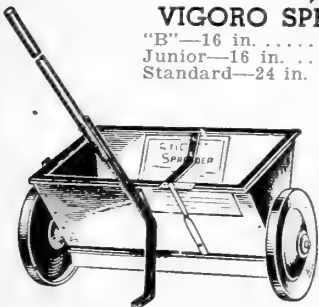
VIGORO SPREADERS

"B"—16 in.	15 lb. capacity	.....	\$4.90
Junior—16 in.	35 lbs. capacity	.....	9.15
Standard—24 in.	65 lb. capacity	.....	17.45

SALEM SPREADERS

Automatic shut off; six quantity adjustments.

16 in., 22 lb. cap.,	\$5.95
20 in., 40 lb. cap.,	9.95
30 in., 80 lb. cap.,	16.75



Hyper-Humus

Completely organic, maintains high soil fertility by bacterial conversion. Worked into the soil before planting it makes poor soil loamy and holds moisture and plant foods where they do the roots most good. For faster results add 5 to 10 lbs. organic plant food per 100 lbs. Humus.

AMOUNT TO APPLY PER SQUARE FOOT

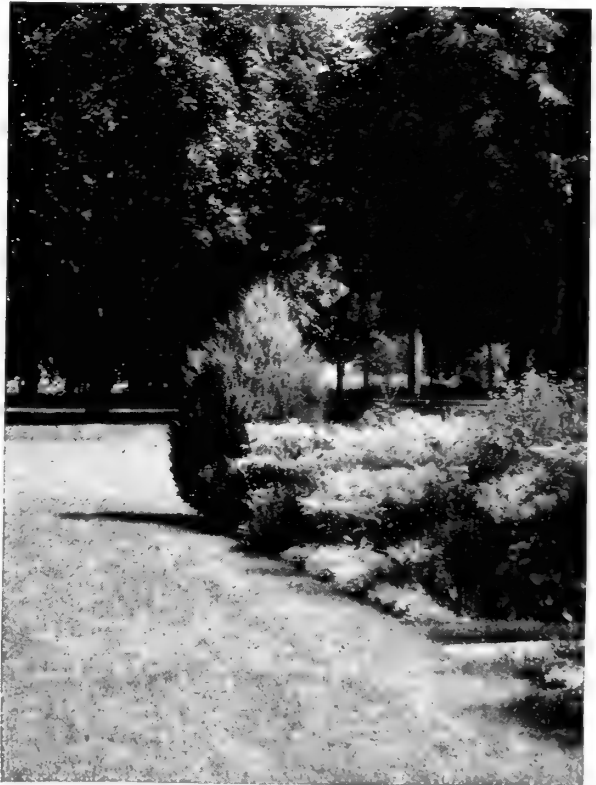
NEW LAWNS, 1 to 3 lbs.; OLD LAWNS, 1 to 2 lbs. GARDENS AND FLOWER BEDS, 2 to 4 lbs.

5 lbs., 25c; 10 lbs., 40c; 25 lbs., 75c; 50 lbs., \$1.10; 100 lbs., \$1.75; 500 lbs., \$7.50; 1000 lbs., \$12.50; ton, \$22.50. Let us quote 5 ton and carload lots.

PEAT MOSS

Promotes Growth by Improving Texture of Soils and as a mulch, keeps roots moist and cool; discourages weeds. Ideal for rose beds and perennial borders. Large Bale, \$4.90; 8 bu. box, \$4.35; 1 bu., 60c.

VIGORO



Vigoro is a complete fertilizer containing all necessary minor elements. It is clean, odorless, sanitary and easy to apply. Economical because you need only 4 pounds of Vigoro per 100 sq. ft. to get best results from everything you grow.

100 lbs.	\$4.00	10 lbs.	\$.85
50 lbs.	2.50	5 lbs. ....	.45
25 lbs.	1.50	1 lb. ....	.10

LAWN MAKING AND MAINTENANCE

The very best time of the year to make a new lawn is early in the fall because of ample rainfall, continued cool weather and the winter killing of many weeds. The second best season is very early spring (March and April) because there is sufficient rainfall and cool weather to start the young grass quickly. Spring seeding however must compete with weed seeds in the soil and is sometimes damaged by hot dry weather before it is thoroughly established.

Preparing the Soil

Preparation of the soil is the most important part of lawn making and should have the most careful attention because no amount of effort spent after a lawn is made can equal the results of thorough tillage before the seed is sown.

A successful lawn requires at least 2 to 4 inches of good quality top soil possessing the organic matter and plant foods necessary for sturdy growth of the grasses. However six inches or more of thoroughly prepared finely pulverized and fertilized top soil would be ideal.

If existing top soil is of fair quality and at least 2 to 4 inches deep it should not be necessary to spread additional top soil. It is essential though to apply a good lawn fertilizer which is high in phosphate (such as bone meal or the chemical lawn foods) at the rate of 2 to 4 lbs. per 100 sq. ft. In addition to this an application of a one inch layer of humus or a two inch layer of well rotted manure (it must be very well rotted to be weed free) is necessary to supply sufficient organic matter.

After spreading the plant food and humus materials evenly, they must then be spaded into and mixed with the top soil to a depth of about six inches depending on the quality of the sub-soil and the depth of the top soil. When this newly processed top soil is completely broken up and thoroughly mixed it should be raked and rolled in both directions until there are no uneven places. A good seed bed has now been prepared and is ready for seeding.

Sowing the Seed

Sow at the rate of 1 lb. to 200 sq. ft. broadcasting half of the seed in one direction and the other half at right angles. If the soil is dry the surface may be raked very lightly covering seed not over $\frac{1}{8}$ in. and being extremely careful to avoid "bunching" the seed. Rolling is desirable but only practical if the soil is sufficiently dry so that the seed does not stick to the roller. Many successful lawns are made without raking or rolling in the seed by depending upon the rain or watering to pack the soil firmly about the seeds. If watering is once begun however the soil must be kept damp continuously or the seed may sprout and die off before it has rooted. Clipping should begin when the grass is about 3 inches high but should not be cut closer than 2 inches.

Re-Seeding Old Lawns

Thin turf or lawns with bare spots can be rebuilt by raking lightly so that the existing grass is not damaged and then seeding as though making a new lawn. Another satisfactory method is to mix seed with top soil or sow the seed and then cover lightly with top soil. In either case the top

soil should be free from weed seeds. If the seed is sown early in March it can be broadcast without raking or rolling because the ground is "open" and the late wet snows will carry it in.

Fertilizing

Timely and ample applications of fertilizers have double advantages. Very early feeding whether Spring or Fall forces growth of the grass during its most natural growing seasons, thereby helping it to crowd out crab-grass and more easily survive hot dry summer weather. A strong healthy turf also stands the rigors of winter so much better. Fertilizer materials are most accurately and easily applied by using a fertilizer spreader. Most materials should be applied when the grass is dry at the rate of 2 to 4 lbs. per 100 sq. ft. then watered in. Lawns that are thoroughly established and are thriving should be fertilized once every two years but average lawns require at least one feeding a year.

Rolling

During the winter the alternate freezing and thawing have played "tug-o-war" with the little grass plants in your lawn, heaving them out of the ground so that they are only partly rooted. It is therefore extremely necessary to roll your lawn after the frost is out of the ground and while it is still wet but not soggy. This smooths out uneven places caused by the frost and puts the grass roots back where they can quickly begin producing a luxuriant lawn.

Weed Control

One of the best weed controls is a good heavy turf, well fertilized very early, cut not shorter than 2 inches and kept seeded to grass so there will be practically no space for weeds to grow. Crab-grass which is perhaps the most difficult weed to combat should be killed by chemicals during June or July. Other chemicals such as 2-4-D are available for clearing lawns of dandelions, plantain and most other lawn weeds.

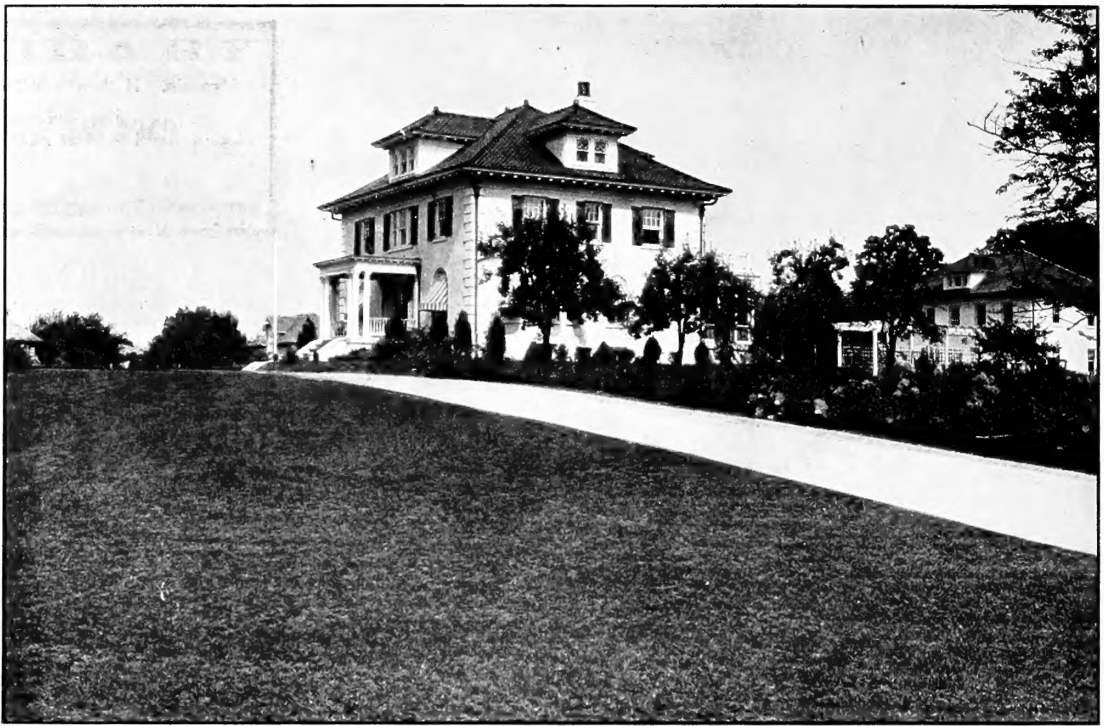
Soil pH

For most Maryland lawns the pH values (acidity or alkalinity) should be between 6.0 and 7.5, that is ranging between slightly acid to slightly alkaline, 7 being neutral. The grasses which thrive best in this climate succeed best in this pH range. If the soil is strongly acid (pH 4.5 to 5.0) an application of 10 lbs. of ground limestone per 100 sq. ft. will reduce the acidity to approximately pH 6. Lime should not be used on lawns unless an actual soil test indicates excessive acidity.

Moss

The presence of moss is often considered an indication of acid soil, but it is more often the result of low fertility. During March apply nitrate of soda (1 lb. per 100 sq. ft.) This will kill the moss but not injure the grass. In about two weeks the dead moss may be raked from the lawn and if there are bare spots they should be reseeded at once.

ALWAYS SOW MANNS' SUPERIOR SEEDS



Manns' Lawn Mixtures have been known for their Superior Quality for more than half a century

Manns' Superior Lawn Grass

A correctly proportioned mixture of the most desirable perennial varieties blended according to a formula resulting from years of study and experience. It produces beautiful and permanent lawns under average conditions of soil and sunlight.

1 lb.\$.70 25 lbs. ..\$15.75
 5 lbs. 3.30 100 lbs. .. 60.00

Manns' Evergreen Lawn Grass

(Without clover)

A good, clean mixture of high germinating seeds, of low weed content. An excellent value where clover is not desired.

1 lb.\$.60 25 lbs. ..\$13.25
 5 lbs. 2.85 100 lbs. .. 50.00

Manns' Shady Place Lawn Grass

Contains varieties especially adapted for growing under trees and in shaded areas.

1 lb.\$.75 25 lbs. ..\$17.00
 5 lbs. 3.55 100 lbs. .. 65.00

Manns' Shoreland Lawn Grass

A mixture of turf varieties particularly adaptable for growing in sandy soils.

1 lb.\$.75 25 lbs. ..\$17.00
 5 lbs. 3.55 100 lbs. .. 65.00

Manns' Quicklawn Grass

For immediate effect where permanence is not an important factor.

1 lb.\$.30 25 lbs. ..\$ 5.75
 5 lbs. 1.35 100 lbs. .. 20.00

Lawn Making and Maintenance, See Page 81

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SUPERIOR SEEDS
 BALTIMORE, MD.

AT
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