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Superior Seeds

FARM AND GARDEN SUPPLIES



ENSOR AND FORREST STS.

AT BELAIR MARKET



Specially Formulated For Maryland Soils and Climate

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.\$1.25 25 lbs. ..\$28.50 5 lbs. ... 5.90 100 lbs. ..110.00

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.\$.80 25 lbs. ..\$18.25 5 lbs. ... 3.80 100 lbs. .. 70.00

White Dutch Clover

1/4 lb.\$.30 1 lb.\$1.00

Kentucky Blue Grass

(Recleaned Heavy Seed)

1 lb.\$.85 5 lbs.\$4.00

Merion Blue Grass (B-27)

An improved Kentucky Blue, darker green, more heat and drought tolerant; spreads densely from its vigorous rhizomes.

1 lb.\$6.00 5 lbs. ..\$27.50

Manns' Shady Place Lawn Grass

Contains varieties especially adapted for growing under trees and in shaded areas.

1 lb.\$1.00 25 lbs. ..\$23.25 5 lbs. ... 4.80 100 lbs. .. 90.00

Manns' Shoreland Lawn Grass

A mixture of turf varieties particularly adaptable for growing in sandy soils.

1 lb.\$1.00 25 lbs. ..\$23.25 5 lbs. ... 4.80 100 lbs. .. 90.00

Manns' Quicklawn Grass

For immediate effect where permanence is not an important factor.

1 lb.\$.45 25 lbs. ..\$ 9.50 5 lbs. ... 2.00 100 lbs. .. 35.00

Astoria Colonial Bent

Fine textured grass, blends and grows nicely in lawn mixtures, responds to close mowing. Thrives best on non-acid soils.

1 lb.\$1.75 5 lbs.\$7.50

Chewings Fescue

Deep rooting and adapted to shaded or dry areas, slopes and terraces. Spreads slowly; blades are fine but tough.

1 lb.\$1.25

5 lbs.\$5.90

Lawn Making and Maintenance, See 3rd Cover Page

J. MANNS & CO.

Superior Seeds

BALTIMORE 2, MD.

PLEASE ADD

ENSOR AND FORREST STREETS-AT BELAIR MARKET

AND POS	STAGE		Date		
We pay pos Flower and	l Vege-		R, F, D		
Beans, Con	rn and	Post Office	Stat	e	• • • • • • • • • • • • • • • • • • • •
Peas No tax on V			(Express, Freight or Parcel Post)		
Seeds or Fe		Enclosed	(Check, Money Order or Stamps)		
			to the productiveness of any seeds we sell and n all instances is limited to the purchase pric		
QUANTITY		ART	ICLES	PRIC	CE
			7.22		
WANTEL	—Names	and addresses of your acqua	Amount Carried Forward,	Catalog, P	rice
	Lists	s, etc. We will appreciate yo	ur kindness and so will they.—Thank you.		
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QUANTITY	ARTICLES	PRIC	CE
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MANNS' SUPERIOR SEEDS Our 66th Year

1887

of Continuous Service to
Critical Market Gardeners and Florists

1953

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

You will enjoy Garden Shopping at Manns' Store Hours—8 to 5.30

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.

Shipments of baby fowl, live plants, nursery stock and agricultural products may weigh up to 70 lbs. and measure up to 100 inches combined length and girth. Other merchandise is limited to 40 lbs. in local, first and second zones; to 20 lbs. in zones 3 to 8 and may not exceed 72 inches combined length and girth.

		POSTA	GE RATES					POSTAC	GE RATES		
Weight in pounds	Local	Zone 1-2 Up to 150 mi.	Zone 3 150 to 300 mi.	Zone 4 300 to 600 mi.	Zone 5 600 to 1000 mi.	Weight in pounds	Local	Zone 1-2 Up to 150 mi.	Zone 3 150 to 300 mi.	Zone 4 300 to 600 mi.	Zone 5 600 to 1000 mi.
1 2 3 4 5	0.15 .17 .18 .19 .20	0.17 .20 .22 .25 .27	0.17 .21 .24 .28 .31	0.19 .24 .29 .34 .38	0.21 .28 .35 .42 .48	26 27 28 29 30	0.47 .48 .49 .50	0.77 .80 .82 .85 .87	1.05 1.08 1.12 1.15 1.19	1.38 1.43 1.48 1.52 1.57	1.90 1.97 2.04 2.10 2.17
6 7 8 9	.22 .23 .24 .25 .27	.29 .32 .34 .37	.35 .38 .42 .45 .49	.43 .48 .53 .57 .62	.55 .62 .69 .75	31 32 33 34 35	.53 .54 .55 .57 .58	.89 .92 .94 .97	1.22 1.26 1.29 1.33 1.36	1.62 1.67 1.71 1.76 1.81	2.24 2.31 2.37 2.44 2.51
11 12 13 14 15	.28 .29 .30 .32 .33	.41 .44 .46 .49	.52 .56 .59 .63 .66	.67 .72 .76 .81	.89 .96 1.02 1.09 1.16	36 37 38 39 40	.59 .60 .62 .63 .64	1.01 1.04 1.06 1.09 1.11	1.40 1.43 1.47 1.50 1.54	1.86 1.90 1.95 2.00 2.05	2.58 2.64 2.71 2.78 2.85
16 17 18 19 20	.34 .35 .37 .38 .39	.53 .56 .58 .61 .63	.70 .73 . 7 7 .80 .84	.91 .95 1.00 1.05 1.10	1.23 1.29 1.36 1.43 1.50	41 42 43 44 45	.65 .67 .68 .69	1.13 1.16 1.18 1.21 1.23	1.57 1.61 1.64 1.68 1.71	2.09 2.14 2.19 2.24 2.28	2.91 2.98 3.05 3.12 3.18
21 22 23 24 25	.40 .42 .43 .44	.65 .68 .70 .73 .75	.87 .91 .94 .98 1.01	1.14 1.19 1.24 1.29 1.33	1.56 1.63 1.70 1.77 1.83	46 47 48 49 50	.72 .73 .74 .75 .77	1.25 1.28 1.30 1.33 1.35	1.75 1.78 1.82 1.85 1.89	2.33 2.38 2.43 2.47 2.52	3.25 3.32 3.39 3.45 3.52

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.

How and When to Plant Vegetables

	SERINGOR	DATE TO SOW	No.			Con Dr Ange		Mersenan on		
Vegetables	PLANTS TO PROVIDE FOR FAMILY OF FIVE	OR PLANT OUTDOORS FIRST LAST	OUTDOORS	LORPTH TO COVER INCHES	SPACE BETWEEN ROWS	OR THIN OUT TO INCHES	TIME REQUIRED TO PRODUCE CROP	RUNNING FEET OF ROW FOR FAMILY OF 5	SPECIAL NOTES	
Asparagus Beans (Bush)	1 oz. or 50 2 qts.	Mar. 20 April 20	Aug. 1	Seeds 1 in. Plants 4 in. 2 in.	3 to 4 ft. 2 ft.	12 in. 3 to 4 in.	Seeds 4 years Plants 2 years 60 to 90 days	50 ft. 200 ft.	A well-cared for bed improves with age and lasts for many years.	
Beans (Pole)	1/2 pt.	May 5	Aug. 1	2 in.	3 to 4 ft.	3 ft. (hills)	90 to 120 days	80 to 100	, K	
Beet	2 oz.	Mar. 20	Aug. 15	½ to 1 in.	18 in.	2 to 3 in.	50 to 80 days	hills 80 ft.	Select early, midseason and late kinds for	
Borecole or Kale Broccoli Brussels Sprouts Cabbage	1 pkt. 1 pkt. 1 pkt. or 15 36	April 20 April 5 May 5 April 20	Sept. 1 Aug. 10 Sept. 15	1/8 in. 1/2 to 1 in. Seed 1/2 in.	2½ ft. 2½ ft. 2½ ft. 2 to 3 ft.	12 in. 24 in. 24 in. 18 to 24 in.	80 to 100 days 120 days 120 days 100 to 150 days	20 ft. 20 ft. 20 ft. 60 ft.	winter storage. Sow during July for fall nse. Handle axactly like Cauliflower. The most delicate of all the cabbage tribe. Set out ? Alex assist 1 Are mislassen and	· · · · ·
Chinese Cabbage Carrot	1 pkt. 1/2 oz.	July 20 Mar. 20	Aug. 1	½ in.	2½ ft. 1½ to 2 ft.	12 in. 2 to 3 in.	80 to 100 days 45 to 60 days	20 ft. 40 ft.	Sow short rows often Sow on Angust 1st 1st	<i></i>
Cauliflower Celery Corn (Sweet)	24 ½ oz. or 50 1 pt.	April 5 Mar. 20 April 20	July 10 July 15	Seed 1/4 in. 2 in.	2 to 3 ft. 3 ft. 3 ft.	2 ft. 5 in. 12 in.	120 to 150 days 100 to 120 days 65 to 95 days	20 ft. 50 ft. 200 ft.	lbbage.	
Cucumber	1 pkt.	April 20	Aug. 5	% in.	4 to 5 ft.	(3 to hill)	60 to 80 days	10 bills	Sow in poeks of short rows, for perfect pol- lenization. When picking cut stems: do not null vines.	
Eggplant Endive Kohl-Rabi	12 1 pkt. 1 pkt.	May 20 April 5 April 5	July 25 Aug. 10	% in. % to %	2½ ft. 2 ft. 1½ to 2 ft.	36 in. 24 in. 12 in. 4 to 5 in.	100 to 120 days 50 to 80 days 50 to 80 days	20 ft. 40 ft. 60 ft.	Needs lots of heat and frequent hoeing. To bleach, tie plants into cone shape. Should be used when roots reach a diameter	rier ——
Leek Lettuce Lima Beans (Bush) Lima Beans (Pole)	1 pkt. 2 oz. (4 kinds) 1 pt. 1 pt.	Mar. 30 Mar. 20 June 1 June 1	July 15 July 10	½ in. ¼ in. 1 in. 1 in.	2 ft. 1½ to 2 ft. 2½ to 3 ft. 3 ft.	4 in. 10 to 12 in. 2 ft. (hills) 3 ft. (hills)	100 days 45 to 50 days 100 days 120 days	20 ft. 150 ft. 100 ft. 100 ft.	of 2½ in. Oof 2½ in. Should be thinned out to stand a foot spart. Select an early and a late variety in both	1 10
Melons Onions	1 pkt. 1 oz.	May 10 Mar. 20		½ to 1 in. ½ to ½ in.	4 ft. 18 in.	4 ft. (hills) 3 or 4 in.	100 to 120 days 80 to 110 days	10 hills 80 ft.	classes. See note on Cucumbers. Weeding and hoeing are their chief require-	
Onion Sets Parsley Parsnips Peas	1 qt. 1 pkt. 1 pkt. 3 pts.	Mar, 20 Mar, 20 April 5 Mar, 20	Aug. 10 June 1 Aug. 10	1/4 to 1/2 1/2 to 1 in. 2 in.	12 in. 15 to 18 in. 15 to 18 in. 2½ ft.	2 in. 4 in. 2 to 4 in. 1 in.	30 to 60 days 100 to 120 days 150 days 50 to 100 days	40 ft. 50 ft. 50 ft. 200 ft.	ments. Seed requires 3 to 6 weeks to germinate. Cultiviste well during the growing season. The early amouth seeded sorts may be sown a	
Pepper Potatoes Pumpkin Radish	12 15 lbs. 1 pkt. 3 pkts.	May 5 Mar. 20 May 20 Mar. 20	Aug. 20 July 1 Sept. 15	4 in. ½ in. ½ in.	3 ft. 3 ft. 4 to 6 ft. 18 in.	2 ft. 6 in. 4 ft. (hills) 1 to 4 in.	100 days 100 days 100 to 120 days 30 to 60 days	20 ft. 200 ft. 12 bills 50 ft.	month before the later, wrinkled varieties. See note on Eggplants. Really a farm crop. When storing, prevent bruising.	
Rbubarb Rutabaga Salsify	6 1 pkt. ½ oz.	Mar. 20 Mar. 20 April 5	Oct. 1 July 20 June 1	% in. 1 to 1% in.	3 ft. 2 ft. 15 to 19 in.	3 ft. 6 in. 2 to 4 in.	50 days 90 to 100 days 100 to 150 days	20 ft. 25 ft.	prints and can be given quice cose. Requires a lot of space and plenty of manure. Sow around August 1st for winter use.	
Spinach Squash Swiss Chard Tomato	1 oz. 1 pkt. ½ oz. 1 pkt. or 43	Mar. 20 April 20 Mar. 20 Seeds Feb. 18 indoors Plants May 5	Aug. 10 July 1	½ in. ½ to 1 in. ½ to 1 in. ½ to 1 in. Seed ½ in.	12 in. 4 to 6 ft. 1½ to 2 ft. 3 to 4 ft.	2 to 4 in. 4 ft. (hills) 5 in. 3 ft.	60 days 100 to 120 days 90 to 100 days 100 to 120 days	75 ft. 12 hills 40 ft. 150 ft.	or source of which use of the conditions and until spring. short rows often. ote on Pumpkins. Like Beets, est results train to stakes or trellis.	jeiuo
Turnips	1 pkt.	Mar. 20	Aug. 31	1/8 in.	15 to 20 in.	2 to 4 in.	50 to 80 days	60 ft.	Sow again in August for winter use.	
Beans	4 weeks	Citation	NUMBER	OF WEEKS BE	BETWEEN SOW	INGS FOR CON	NUMBER OF WEEKS BETWEEN SOWINGS FOR CONTINUOUS HARVEST	ST		

In the case of some varieties where SUPERIOR SEEDS Sweet Corn 2 weeks Onion Sets 4 weeks Peas 2 weeks 3 weeks weeks 2 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 the plants may be hardened off.

SOW MANNS'

Koblrabi Turnips Spinacb

Cucumbers

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

ARTICHOKE
GREEN GLOBE — Tender perennial producing edible flower buds the second year.

ASPARAGUS

loz. 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

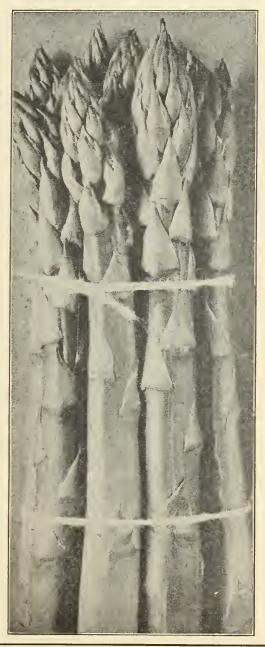
cutting, give a good dressing of manure, or fertilizer.

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.

MARY WASHINGTON—Resistant to disease, large, early and produces remarkably tender dark green stalks.

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; \$20.00 per 1000.





Broccoli Calabrese Heading

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.

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.

PRIC	ED			
ARTICHOKE	Pkt.	Oz.	1/4 Lb.	Lb.
Green Globe	\$.10	\$.85		
ASPARAGUS				
Mary Washington	.10	.15	\$.50	\$1.50
BROCCOLI				
Calabrese Heading	.10	.30	.85	2.50
De Cicco (ex. early)	.10	.35	1.00	3.00
Green Sprouting (Turnip				
Salad)	.10	.15	.40	1,25
40 Day	.10	.20	.60	1.75
BRUSSELS SPROUTS				
Early Morn	.10	.55	1.60	5.00



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.

Top Crop (50 days) Awarded All-America Selections Gold Medal for 1950. Very prolific and vigorous. Resistant to mosalc disease. Pods round, very straight, medium green.

Wade (64 days) Resistant to common bean Mosaic and powdery mildew. Pods 5½ to 6 inches long, round, slender; plants tall, holding pods well off the ground. The extremely dark green color and its slow wilting characteristics make it very desirable for market and home use.

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

Increased yields result from Nitragin Inoculation

Bush Beans

GREEN PODDED

1 pt. to 100 ft. of drill; 1 to 11/2 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 16th.

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 prollfic, 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. Outylelds Bountiful in all tests. Seed white.

Burpee's Stringless Green Pod (Im-

proved) (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.

Contender (55 days) An improved, more productive stringless Black Valentine type. Resistant to bean mosaic and powdery mildew diseases. Pods slim 6½ in. long nearly round, dark green and stringless. Seed buff.



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 large, brittle, 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 18 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

Cherokee Wax $_{6\frac{1}{2}}^{(58 \text{ days})}$ Deep golden yellow less, of excellent quality for home, market and shipping. Seed Black.

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.

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

Let us que	ote lar	ge qu	antities		
GREEN PODDED 1/2	Pt.	Pt.	Qt.	Pk.	Bu.
Black Valentine \$.20 \$.40	\$.75 \$	4.00	\$12.50
Bountiful	.20	.40	.75	4.50	12.50
Burpees Stringless	.20	.40	.75	4.50	12.00
Contender	.25	.40	.75	4.50	13.50
Dwarf Horticultural	.20	.10		1,00	10.00
or Dwarf Cherry.	.25	.50	.90	6.00	22.50
Full Measure	.20	.40	.75	4.50	12.00
Giant Stringless	.20	.40	.75	4.50	12.00
Landreth's			","	1100	12.00
Stringless	.20	.40	.75	4.50	12.00
Plentiful	.25	.45	.80	5.00	15.00
Streamliner	.25	.45	.80	5.00	15.00
Supergreen	.30	.55	1.00	5.00	14.50
Tendergreen or New	.00	.00	1.00	0.00	11.00
Stringless	.25	.45	.80	4.50	14.00
Top Crop	.25	.40	.75	4.50	15.00
Wade	.25	.45	.80	5.50	17.00
Tenderlong 15	.25	.45	.80	5.00	15.00
Ecuacitons 10				0.00	10.00
WAX VARIETIE	S				
Cherokee Wax	.20	.40	.75	4.50	14.00
Pencil Pod Wax	.25	.45	.80	5.00	14.00
Round Pod					
Kidney Wax	.25	.50	.90	6.00	17.50
Sure Crop Wax	.20	.40	.75	4.50	14.00
Unrivalled Wax	.25	.45	.85	4.50	14.00
POLE BEANS					
Horticultural					
Cranberry	.25	.45	.85	5.00	
Kentucky Wonder	.25	.45	.85	5.00	
Lazy Wife	.25	.45	.85	5.00	
White Kentucky	.20	.10	.00	5.00	
Wonder	.25	.45	.85	5.00	
Yard Long, Celestial.					
Tatu Hong, Celestian.		., 100	, 02., 10	C, 10.	, \$1.00
BUSH BEANS					
Red Kidney	.20	.35	.65	4.00	
White Kidney	.20	.35	.65	4.00	
White Marrowfat .	.20	.35	.65	4.00	
White Navy	.20	.35	.65	4.00	

Bush Lima Beans

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

After June first, when 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.

Peerless (70 days) Small plump green variety developed for canners and freezers; prolific and of excellent quality.

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

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.



Burpee's Improved Bush

King of the Garden Pole

Improved Challenger

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 1½ inches broad. The beans are extra large and of excellent quality.

PRIC	ES			
	½ pt.	Pt.	Qt.	Pk.
Baby Fordhook\$.25	\$.50	\$.90	\$5.00
Burpees Improved Bush	.25	.50	.90	5.00
Fordhook, 242 (\$16.00 Bu.)	.25	.50	.90	5.00
Henderson's Bush	.20	.40	.75	4.50
Peerless, U.S. 243	.25	.50	.90	5.00
Wood's Prolific	.20	.40	.75	4.50
FAVA BEANS				
Giant Seville	.25	.45	.80	4.50
POLE LIMAS				
Burpee's Best	.25	.45	.85	4.50
Improved Challenger	.25	.45	.85	4.50
Giant Podded Pole	.25	.45	.85	4.50
King of the Garden	.25	.45	.85	4.50
Sieva (small white)	.25	.45	.85	4.50

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—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.

Early Wonder (58 days) Popular bunching variety 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.

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.



Beet-New Model

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.

PRICES

	FILL	45			
Crosby's Egyptian-	Pkt.	Oz.	1/4 Lb.	Lb.	10 Lbs.
Dark	.\$.10	\$.20	\$.50	\$1.50	\$14.00
Crosby's Egyptian—					
Light	10	.20	.50	1.50	14.00
Detroit Dark Red	7.0			3.50	14.00
(Long Top)	10	.20	.50	1.50	14.00
Early Wonder Tall To	p .10	.20	.50	1.50	14.00
Early Wonder (Regular)	10	.20	.50	1.50	7.4.00
	10	.20	.50	1.50	14.00
Extra Early Flat					
Egyptian	10	.20	.50	1.50	14.00
Green Top Bunching					
Tall	10	.20	.50	1.50	14.00
Lentz (Ex. Early					
Light Red)	10	.20	.50	1.50	14.00
Mammoth Long Red.	10	.15	.40	1.10	9.00
New Model	10	.20	.60	2.00	18.50
25 lbs. and 50 lbs.	, \$1.75	lb.; 1	.00 lbs	., \$16	5.00
Perfected Detroit	10	.20	.50	1.50	14.00



Golden Acre



Selected Jersey Wakefield



Copenhagen Market

Cabbage

1 oz. for 2,000 plants; 1/4 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 open ground. However, the seed may 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 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. 61/2 in. dia. 4 lbs.) Produces larger and heavier heads than Jersey. A week or two later in maturity.

(ROUND HEADS)

Bonanza (70 days. 4 lbs.) Type similar to Copenhagen, stands for weeks after heading without bursting, thus offering longer marketing period.

Racine Market—Yellows Resistant

(72 days. 4 lbs.) Heads firm and compact, deep bluegreen color. Cutting may be spread over long period without the heads discoloring or bursting. Plants small, permitting close planting.

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. 3½ lbs.) 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.

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 midseason 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.

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, $7\frac{1}{2}$ 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.

Cantaloupe

See Muskmelon Page 22



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 Pekin) (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.

*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.

PRIC	ES			
1	Pkt.	Oz.	1/4 Lb.	Lb.
All Head Early	.10	\$.30	\$.85	\$2.50
American Drumhead Savoy	.10	.30	1.00	3.00
Bonanza	.25	1.15	3.50	10.00
Charleston Wakefield	.10	.30	1.00	3.00
Chieftain Savoy	.10	.30	1.00	3.00
Copenhagen Market	.10	.60	1.00	3.00
Danish Ball Head	.10	.40	1.15	3.50
Early Plat 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
Jersey Wakefield (Selec'd)	.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	1.00	3.00
*YELLOWS RESIST.	ANT	VARI	ETIES	
All Head Select	.10	.45	1.35	4.00
Detroit (Res. Golden Acre)	.10	.50	1.50	4.50
Globe (Resistant Glory)	.10	.45	1.35	4.00
Green Globe, Improved	.15	.45	1.35 1.35	4.00
Marion Market	.10	.40	1.15	3.50
Racine Market	.10	.50	1.50	4.50
Wisconsin All Seasons	.10	.45	1.35	4.00
Wisconsin Hollander No. 8	.10	.50	1.50	4.50
CHINESE CABBAGE				
Improved Pekin-Chihli	.10	.20	.60	2.00
Michihli	.10	.30	1.00	3.00

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, silghtly 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 ln.) 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% 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 fiesh is sweet, crisp and tender.



California Bunching



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 1½ in.) Developed especially as a bunching carrot for long distance shipping. Roots about 1½ 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 ln. 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.

PRIC	ES			
	Pkt.	Oz.	1/4 Lb.	Lb.
California Bunching\$.10	\$.20	\$.60	\$1.75
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	1.75
Louisiana Danvers	.10	.25	.75	2.25
Model #122	.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
10 lbs. or more	deduc	t 250 l	b.	



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 hotbeds 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.

Cauliflower Plants See Page 39.

		ICE	S			
C	AULIPLOWER	P	kt.	Oz.	1/4 Lb.	Lb.
Early	Snowball	\$.25	\$3.50	\$10.00	\$35.00
White	Mountain		.25	3.50	10.00	35.00
CI	HARD (SWISS)					
Comm	on Green					
(Spi	nach Beet)		.10	.15	.40	\$1.25
Pordh	ook Giant	• •	.10	.15	.40	1.25

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) 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



Golden No. 14

CELERY	ES			
	Pkt.	Oz,	1/4 Lb.	Lb.
Cornell No. 19	.10	\$1.00	\$3.25	\$10.00
Full-heart Easy Blanching	.25	1.65	5.00	15.00
Giant Pascal	.10	1.00	3.25	10.00
Golden No. 14	.10	1.00	3.25	10.00
Tall Non-bolting				
Golden Plume	.25	1.50	4.50	14.00
Utah Pascal No. 15	.10	1.00	3.25	10.00
CELERY-LETTUCE				
Burpee's Celtuce, pkt., 15c		oz., 3	Sc: oz.	\$1.25



Full-heart Easy Blanching

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 moiet, 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.

Full-heart Easy Blanching (100 days) The most growers who trench celery for early market. A green variety easily blanched, producing maximum size hearts of a yellowish cream color. The stalks are well rounded, crisp and of excellent quality.

Utah Pascal No. 15 (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. Tops very dark green.

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.

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 prevailingly 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.

Golden No. 14 (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, producing large compact plants with very good hearts.

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.

CELERY PLANTS (See page 58)

Coloriac

1 oz. to 200 ft. of row; 1/4 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.

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.

Chives

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.

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 11/2 to 2 ft. high. Large clusters of leaves often show a tendency to form a head,

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.

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) (45 days) Dwarf fast growing annual having finely curled deep green foliage. Used for garnishing and salads.

American Upland (45 days) Dwarf plant with notched oval leaves resembling true water cress. 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.



Large Smooth Prague Celeriac



CELERIAC PRIC	ES Pkt.	Oz.	¼ Lb.	Lb.
Large Smooth Prague\$ CHICORY	.10	\$.50	\$1.75	\$6.00
Witloof (French Endive). CHIVES	.10	.30 1.50	.85	2.50
CORN SALAD Large Dutch	.10		1.00	2.00
COLLARDS		.35	1.00	3.00
Cabbage Collards Georgia or Southern Morris Improved Heading	.10	.15	.50 .45	1.50
New Hardy Short Stem Winter Hardy	.10	.30 .20	.85 .60	2.50 2.00 2.00
CRESS American Upland	.10	.20	.60	1.75
Garden (Curled or Pepper) True Water	.10	.20	.60	2.00 7.00
		.00	2.00	7.00



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 as hybrids mature very uniformly they should be planted at intervals of a week or ten days to assure a continuous supply. 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 freequently but shallow until the tassels appear.

Gold Rush (66 days) A fine quality, first early yellow hybrid; stalks 6 ft., sturdy, vigorous. Ears 8½ in. long, 12 to 14 rowed, well filled; tight dark green husk. Planted early and late to avoid main brood of corn borers and Jap beetles.

Big Mo. (82 days) Withstands adverse growing conditions. Dependable for market and home garden. Stalks vigorous, dark green, very few suckers; ears 8½ in. x 2½ in.; 16 to 20 rows of bright yellow, deep medium width kernels of good quality.

Iochief (83 days) All American Gold Medal Winner. Vigorous, practically suckerless, drought resistant, 6½ ft. tall, frequently 2 ears per stalk. Ears 8½ in. long, slightly tapered, 14 to 18 rows of narrow, deep, tender, golden yellow kernels; fine flavor and holds well.

Golden Cross Bantam (Hybrid) 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.

Aristogold Bantam Evergreen

(86 days) Home and market gardeners main crop variety of excellent quality and appearance. Ears 9 to 10 in. long, with heavy worm resistant husk of a deep green color; kernels deep yellow, 16 to 18 rows.

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 treats and reports of large growers. If you grow White 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.

Iochief

Manns' No. 56 (65 days) The best most sever 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

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, 71/2 to 91/2 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 leaving no signs of rows.

	Pt.	Qt.	Pk.	50 lbs
Black Mexican	.40	\$.75	\$4.00	\$12.50
Country Gentleman		*	*	*
(Shoe Peg)	.40	.75	4.00	12.50
Early Evergreen	.40	.75	4.00	12.00
Early Superior	.40	.75	4.00	12.50
Golden Bantam	.40	.75	4.00	12.00
Golden Evergreen	.40	.75	4.00	12.00
Improved Early Adams	.25	.45	3.00	9.00
Manns' No. 56	.50	.95	4.50	
Stowell's Evergreen Ex.				
Selected	.40	.75	4.00	12.00
White Evergreen	.40	.75	4.00	12.00
Pop Corn-South Ame	rican	Giant-	-25o	lb.
-				
HYBR	IDS			
Aristogold	.65	1.25	6.25	22.50
Big Mo	.65	1.25	6.25	22.50
Country Gentleman Ill. 15	1.00	2.00	10.00	37.50
Golden Cross Bantam	.60	1.15	6.00	22.50
Gold Rush	.75	1.50	7.50	27.50
Ioana	.60	1.15	6.00	22.50
Iochief	.75	1.25	8.00	30.00
Narrow Grain Evergreen				
(14 x 11)	.75	1.50	8.50	30.00
Stowell's Evergreen Hybrid	.60	1.15	6.00	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.

GROW HYBRIDIZED VARIETIES OF KNOWN ADAPTABILITY

Plant Hybrid Corn because of the certainty of a better <u>yi</u>eld and much better quality. It is important to plant only seed proven to be adaptable to this section and grown by experts. Hybrid corn is not necessarily all desirable. The process is expensive, highly technical and requires the skill of a plant breeder. Manns' hybridized corns have been grown by experts and have 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.

OPEN POLLINATED VARIETIES

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 dairymen 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. Kernals closely set, long and compact.

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

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. \$4.35.

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.

U. S. 262A (125-140 days) Heaviest yielding long season variety. Far above all competition in carefully checked Va. State Trials.

PRICES			
	Qt.	Pk.	Bu.
Iowa Silver Mine	\$.35	\$1.85	\$6.00
Lancaster County Sure Crop	35	1.85	6.50
Pride of the North	35	1.85	6.00
Ried's Yellow Dent	35	1.85	6.50
HYBRIDS			
Gold Line 378	40	2.50	9.00
Iowa 939 (Certified)	40	2.50	9.00
U. S. 13 (Certified)	40	2.50	9.00
U. S. 262A	65	3.75	11.00
Kentucky 203 (Certified) White	60	3.35	10.00

Cucumbers

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

Piant 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 piants 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, piant 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.

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 oid favorite with market gardeners and shippers. The handsome dark green cucumbers average 7 inches long and 2 to 3 inches in diameter.

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

Straight 8 (66 days) Symmetrical fruits, well rounded at both ends. Regularly eight inches in length and from 1% 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.

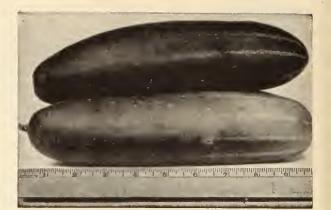
A&C (68 days) A leading market and shipping variety. 9 to 11 inches iong by 2½ inch diameter, blunt at both ends, very dark.

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.

Hybrid Early Surecrop (58 days) Very dark green, disease resistant, shaped similar to A & C or Cubit. Yield and ability to produce over a long period makes it especially desirable.



Cucumber-Marketer



A & C

Japanese Climbing (70 days) Vines are extra strong, vigorous; being a climbing sort, can be grown on treilises, 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.

PRIC	ES			
	Pkt.	Oz.	1/4 Lb.	Lb.
A. & C	3 .10	\$.25	\$.75	\$2.25
Black Diamond				
(or Stays Green)	.10	.25	.75	2.25
Boston Pickling or Green				
Prolific	.10	.20	.60	1.75
Cubit	.10	.25	.75	2.50
Gherkins or Burr	.10	.20	.60	2.00
Highmoor	.10	.30	1.00	2.75
Japanese Climbing	.10	.20	.60	2.00
Klondike	.10	.20	.60	1.75
Longfellow or				
Straight Pack	.10	.25	.75	2.50
Long Green (Improved)	.10	.20	.60	2.00
Marketer	.10	.25	.75	2.25
National Pickling	.10	.20	.50	1.50
Niagara	.15	.40	1.25	3.75
Straight 8	.10	.25	.75	2.25
Sure Crop, Hybrid	.25	4.00	12.50	
York State Pickling	.10	.35	1.00	3.00



Straight Eight

Dandelion

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



Long Island Mammoth out to stand 8 or 10 in. apart. We offer an excellent

market garden strain.

(90 to 100 days) Sow in rows and thin

Egg Plant

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.

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

Full Heart Batavian (Escarolle) (90 days) 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

Green Curled (95 days) This is the hardiest 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.

Florence Pennel

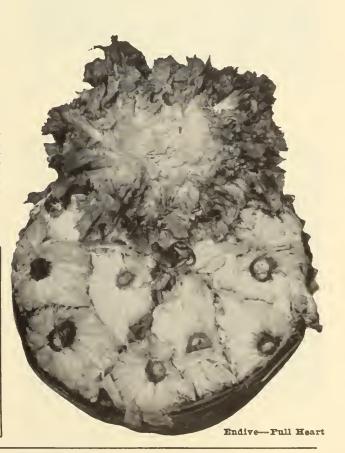
	_			
PRIC	ES Pkt.	Oz.	¼ Lb.	Lb.
DANDELION				
Arlington\$.10	\$.95	\$2.85	\$8.50
Italian (Ciccoria				
Catalogna)	.10	.50	1.50	4.50
DILL				
Long Island Mammoth	.10	.15	.30	1.00
EGG PLANT				
Black Beauty	.10	.60	2.00	7.00
Plorida High Bush	.10	.60	2.00	7.00
ENDIVE				
All Head Cabbaging	.10	.25	.75	2.25
Full Heart Batavian	.10	.20	.50	1.50
Green Curled	.10	.20	.50	1.50
FENNEL				
Florence	.10	-30	1.00	3.00



Florida High Bush

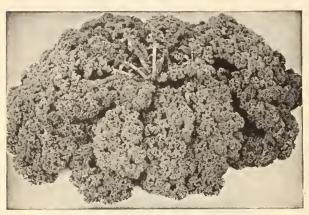
Herbs

PRICES				
	Pkt.	Oz.	1/4 Lb.	Lb.
Caraway	3 .10	\$.15	\$.40	\$1,20
Chives	10	.75	2.50	
Marjoram, sweet	10	.60	2.00	
Sage	10	.50	1.50	4.50
Summer Savory	10	.60	2.00	
Sweet Basil	10	.50	1.50	4.50
Thyme	10	.85	2.50	7.50





Borecole-Dwarf Green Scotch



Borecole-Curled Perfection



Borecole-Superior Extra Curled

Kale

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 curied. 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.

P	RICES			
BORECOLE	Pkt.	Oz.	1/4 Lb.	Lb.
Blue Curled Scotch	\$.10	\$.20	\$.60	\$2.00
Curled Perfection		.25	.75	2.25
Dwarf Green Scotch	10	.20	.60	1.75
Hardy Winter		Not A	vailable	9
Superior Extra Curled		.30	1.00	3.00
KALE				
Extra Curled Long				
Standing		.15	.40	1.25
Manns' No. 640		.30	.85	2.50
Siberian Kale				
(Extra Early)		.15	.30	1.00
Spring Smooth Leaf				
(Hanover)		.10	.20	.50
Hanover Late Seeding.		.15	.30	1.00

Number of days indicates time from setting plants to first cutting



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.



Kale-Early Siberian

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

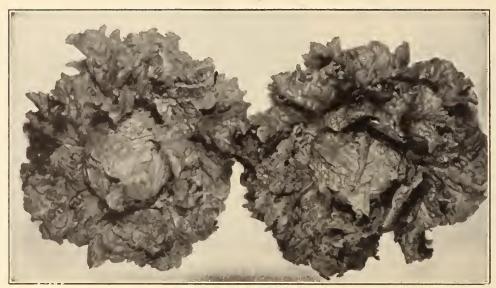
1 oz. to 150 yds. of drill; 4 lbs. per acre

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 OR SCOTCH CHAMPION. (150 days) Of extra large 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.

PRI	ICES			
KOHLRABI	Pkt.	Oz.	1/4 Lb.	Lb.
Early White Vienna	.\$.10	\$.35	\$1.00	\$3.00
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) U. S. No. 1. Tip Burn Resistant. Popular loose-leaf strain, very satisfactory for both market and home gardens.



Imperial Iceberg Mo. 44

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.

Salad Bowl
Loose leaf variety, seems to stand sunvery well, is fast and large grower, short and closely set hold their quality, tenderness and fine texture over a long period. Developed by Dr. Ross C. Thompson of the U. S. Dept. of Agriculture,

PRIC	ES			
	Pkt.	Oz.	1/4 Lb.	Lb.
All Seasons	.10	\$.20	\$.60	\$2.00
Bibb	.10	.35	1.00	3.00
Big Boston	.10	.20	.60	2.00
Cabbage Head	.10	.20	.60	1.75
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
Great Lakes Special				
(M.R.)	.10	.85	2.50	7.50
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	.35	1.00	3.00
May King	.10	.20	.60	2.00
Oakleaf	.10	.40	1.15	3.50
Pennlake	.10	.85	2.50	7.50
Premier Great Lakes	.10	.85	2.50	7.50
Progress (2428)	.25	1.00	3.00	10.00
Salad Bowl	.10	.45	1.35	4.00
Slobolt	.10	.35	1.00	3,00
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) We offer the Cornell type. Entirely free from red edge and popular 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.

Pennlake (77 days) Developed at Penn State College for an early, large, firm-heading type. Tipburn resistant and sure heading on both muck and upland soils.

Premier Great Lakes (80 days) An All American winner for 1949. Upland variety with sure heading tendency and stands summer heat even better than original Great Lakes. Has broad fringed leaves forming well rounded, crisp, solid heads of excellent quality.



White Boston

Progress (82 days) Developed by the U. S. Dept. of Agr. and the N. J. Exp. Sta. An ideal Iceberg type for eastern weather conditions. Resembles Imperial 44 but with a distinct bright green color and greater tip burn resistance. Has been thoroughly tested before being released.

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 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.

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

LETTUCE PLANTS

PRESH DAILY IN SEASON-See Page 58



Pride of Wisconsin

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

Golden Delight (80 days) Fruits are 4 to 5 inches diameter by 5 to 7 inches long, have thick flesh. Skin is slate gray maturing to deep yellow. Distinctly ribbed and rather heavily netted, home garden and market melon.

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.

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.

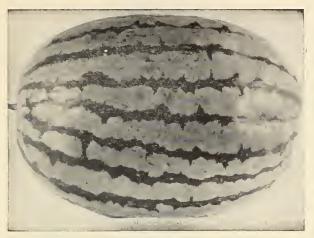
Jasper (90 days) Our stock of this Anne Arundel County variety is a definitely established fixed type which is well netted, uniform in size and shape and of excellent quality. It is prolific, medium early and in general a profitable variety to grow.

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

PRIC	ES			
	Pkt.	Oz.	1/4 Lb.	Lb.
Clark\$.10	\$.30	\$1.00	\$3.25
Craig	.10	.30	.90	2.75
Golden Delight	.10	.50	1.50	4.50
Hale's Best Jumbo	.10	.20	.65	2.00
Hale's Best No. 45	.10	.20	.65	2.00
Hearts of Gold	.10	.25	.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	.90	2.75
Pride of Wisconsin	.10	.20	.60	1.75
Rocky Ford Improved, Jr.	.10	.30	.85	2.50
Sugar Rock	.10	.25	.75	2,25
Texas No. 1	.10	.20	.60	2.00



Hale's Best Jumbo



Dixie Queen



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.
- A temperature not greatly exceeding 60° F. nor much lower than 50° F.
- A fairly moist temperature, avoiding the too frequent and direct application of water to the beds.
 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 \$1.25 ea.



Stone Mountain

MUSTARD Ph	t. Oz.	1/4 Lb.	Lb.
MUSIAND	02.	, .	
Fordhook Fancy\$	10 \$.20	\$.50	\$1.50
Giant Southern Curled	.10 .15	.40	1.25
Tendergreen (Mustard			
Spinach)	.10 .15	.30	1.00
-			_
WATERMELON P	kt. Oz.	1/4 Lb.	Lb.
Blacklee (Wilt Resistant)	.10 .20	.60	2.00
Congo	.10 .30	.90	2.75
Dixie Queen	.20	.60	2.00
	.10 .25	.75	2,25
	.10 .20	.60	1.75
	10 .25	.75	2.25
destroom (on any p)	.10 .20	.50	1.50
New Hampshire Midget	.25 .60	1.75	5.25
Stone Mountain	.10 .20	.50	1.50
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.



White Silver Skin Onion

Southport White Globe (110 days) Pure 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) good storage or market type, medium light, deep globe bottle neck shape, skin dark golden, flesh creamy yellow, crisp, firm and mild.



Early Yellow Globe

Onions

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

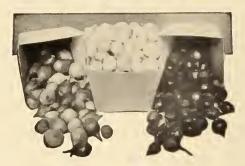
The Onion must have a clean and very rich soil. Use well rotted manure freely, and get the seed in as early as possible in the spring, no matter if it is cold and unpleasant. If onions do not get a good growth before hot, dry weather, the crop is sure to be a fallure. Keep the soil mellow and clear of 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 eath 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 Queen (90 days) Used extensively for a bunch onion, solid flesh of a mild

Early Yellow Globe (100 days) Matures medium large uniform globeshaped 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.

Use a FELINS TYING MACHINE FOR BUNCHING SPRING ONIONS



ONION SETS

FINE QUALITY MARKET GARDENERS STOCK

25c qt.—PL (8 lbs.) \$1.50 Subject to change. Postage Extra Let Us Quote Larger Quantities

PRICES					
	Pkt.	Oz.	1/4 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	.30	1.00	3.00	
Southport White Globe	.10	.45	1.35	4.00	
White Bunching	.15	.45	1.35	4.00	
White Ebenezer	.10	.50	1.50	4.50	
White Lisbon	.15	.50	1.50	4.50	
White Queen	.10	.55	1.65	5.00	
White Silver Skin,					
or Portugal	.10	.45	1.35	4.00	
Yellow Sweet Spanish	.10	.30	1.00	3.00	



Okra or Gumbo

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

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

Emerald (55 days) Plants 4½ feet tall, vigorous pods, thick walled, 6 to 8 inches long and ¾ inches in diameter at center; slightly curved, dark

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

Parsley

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.

PRICES								
OKRA OR GUMBO	P	kt.	Oz.	¼ Lb.	Lb.			
Clemson Spineless	.\$.	10	\$.20	\$.50	\$1.50			
Dwarf Green Longpod		10	.15	.40	1.25			
Emerald		10	.20	.60	2.00			
White Velvet (60 days).		10	.15	.40	1.25			
PARSLEY P	kt.	Oz.	1/4 Lb	Lb.	10 Lb.			
Champion Extra Dark								
Moss Curled\$.	10 8	.15	\$.50	\$1.50	\$12.50			
Green Castle	10	.15	.50	1.50	12.50			
Paramount	10	.15	.50	1.50	12.50			
Plain or Single								

.15

.50 1.50 12.50

.50 1.50 12.50



Champion Extra Dark Moss Curled



Parsley grown in N. J., under Irrigation



Hamburg Parsley



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) 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.

PRICES						
Variety	:	Pt.		Qt.	Pk.	
Alaska-Wilt-resistant	. \$.30	\$.55	\$3.00	
Early Bird		.40		.75	4.00	
Extra Early Alaska		.30		.55	3.00	
Long Podded Alaska		.35		.65	3.50	
Mammoth Podded Extra Early.		.40		.75	4.00	

Peas

1 quart to 100 ft. of drill; 11/2 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.



California Mammoth

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 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.

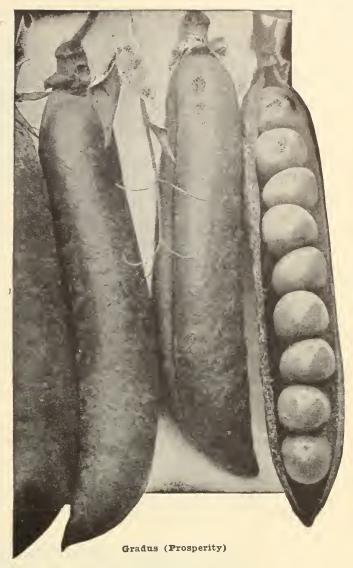
Dark Green Telephone (75 days) A tall-growing, late sort, 3½ to 4 feet in height, having beautiful dark green pods of very large size, containing 6 to 7 large peas of delicious flavor. Continues in bearing for quite a long time.

EDIBLE PODDED PEAS

Dwarf Grey Sugar (62 days) Vines 24 in. bearpointed pods with small gray peas.

PEANUTS

Virginia Bunch (145 days) Earliest, most prolific and easiest cultivated variety.



PRICES	Pt.	Qt.	Pk.
Alderman-Wilt resistant	\$.40	\$.75	\$4.00
Black Eyed Peas (100 days)	.30	.55	3.00
Blue Bantam	.40	.75	4.00
California Mammoth	.40	.75	4.00
Dark Green Telephone-W.R	.40	.75	4.00
Dwarf Grey Sugar	.45	.85	4.50
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
Thomas Laxton	.40	.75	4.00
World's Record (58 days)	.40	.75	4.00



World Beater

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 pepers ever offered. The flesh is quite thick, very mild and remarkably sweet.

Pepper Plants See Page 58.



California Wonder

Peppers

1 or. 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.

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.

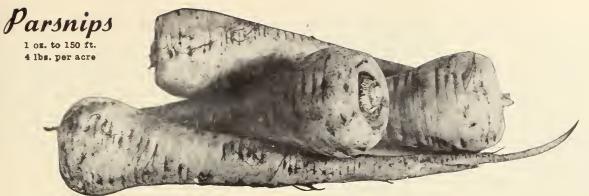
California Wonder (75 days) Its large, smooth, extremely heavy, very mild, thick flesh, make this variety truly a wonder. Combining the excellent quality of the Pimento and the size of Crimson Giant, California Wonder is being grown for all purposes. Plants are sturdy, productive and slightly spreading, 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.



Chinese Giant

PRICES						
1	Pkt.	Oz.	1/4 Lb.	Lb.		
California Wonder\$.10	9 .80	\$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		
Floral Gem	.10	.80	2,50	7.50		
Florida Giant	.10	.80	2.50	7.50		
Half Long Cayenne	.10	.55	1.65	5.00		
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		
Sweet Banana	.10	.80	2.50	7.50		
World Beater	.10	.60	2.00	6.00		



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) 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.	$\frac{1}{4}$ Lb.	Lb.	
All American					
Hollow Crown	.10	\$.15	\$.50	\$1.50	
Special New Market					
Garden Strain	.10	.30	.85	2.50	
PUMPKINS					
Connecticut Field	.10	.15	.40	1.25	
Cushaw, or Crookneck					
Golden	.10	.20	.50	1.50	
Cushaw, Green Striped	.10	.20	.50	1.50	
King of Mammoths	.10	.20	.50	1.50	
Sugar Pie Pumpkins	.10	.15	.45	1.25	

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.

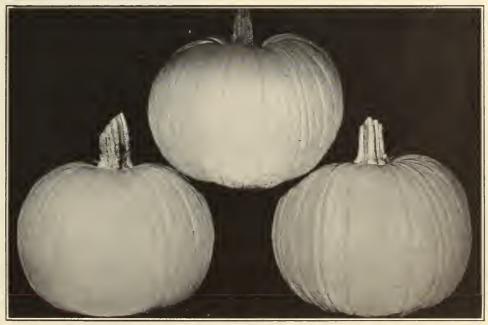
Sweet Potato (110 days) Excellent for pies, pearshaped, creamy white, sweet and delicious; first-class keeper. Weight about 15 lbs.

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

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

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						
P	kt.	1/4 Lb.	Lb.	10 Lb.		
Cherry Belle\$.10	\$.30	\$1.00	\$9.00		
Comet	.10	.30	.90	8.00		
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	.90	8.00		
Scarlet Globe No. 8	.10	.30	1.00	9.00		
Soarlet Turnip	.10	.30	.90	8.00		
Sparkler	.10	.30	_90	8.00		
Tidewater Globe	.10	.30	.90	8.50		
White Chinese or Celestial	.10	.40	1.25			
White Icicle	.10	.30	1.00	9.00		
White Strasburg	.10	.30	1.00	9,00		
(100 lbs., 20c per lb. under 10 lb. rate)						

Light, sandy soil, rich in organio 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)
Prom 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.



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 2¼ 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, 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

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 1½ 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.

PRIC	LLS			
RHUBARB	Pkt.	Oz.	1/4 Lb.	Lb.
Crimson Winter	\$.10	\$.50	\$1.50	\$5.00
SALSIFY				
Mammoth Sandwich Island	.10	.30	1.00	3.00
SORREL				
Broad Leaf	.10	.35	1.15	3.50
Narrow Leaf	.10	.50	1.50	5.00

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 form 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, 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.



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., 80c; 4-lb. bag, \$2.60.



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., 50c; 1 lb., \$2.30; 4 lbs., \$7.50.





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, Very prolific, exceeding all other varieties in early production. Color, lemon-yellow. Vine about half the size of other varieties Vine about half the size of other varieties which permits close planting. An ALL AMERICAN

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 8 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			
Acorn or Table Queen	Pkt.	1/4 Lb.	Lb.
(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
Casserta	.10	.60	1.75
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 Hubard	.10	.60	2.00
Jersey White Bush Scallop	.10	.50	1.50
Zucchini (Extra Dark)	.10	.50	1.50











Early Prolific Straightneck

1 os. 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) either fall or late winter sowing, a truly reselected strain developed by a Holland Plant Breeder for uniformly curied 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 fail 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-haif to one inch deep. When the plants are well started, thin out to 4 to 6 inches apart, or sow the seed thinly and allow aii 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.

Exira Dark Green Savoy (42 days) About than Reselected, but the plants are larger, less liable to boit 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 Bloomsdaie, which it resembles identically. Presto is the earliest and quickest growing sort of spinach. It is much hardier than any other variety and will stand cold and unfavorable weather conditions better than round seeded sorts.

1000	lb.	rate	deduct	10%		
	Oz.	½ Lb.	Lb.		25 Lbs.	100 Lbs.
America\$						
Extra Dark						
Green	.10	.25	.60	4.50	10.00	30.00
Heavy Pack	.10	.25	.60	4.50	10.00	30.00
Long Standing.	.10	.25	.60	4.50	10.00	32.00
Old Dominion	.10	.25	.60	4.50	10.00	30.00
Presto	.10	.25	.60	4.50	10.00	30.00
Reselected	.10	.25	.60	4.50	10.00	30.00
Special Summer						
Savoy	.10	.25	.60	4.50	10.00	32.00
Virginia B. R	.10	.25	.60	4.50	10.00	30.00
New Crop Seed able about Sept			LET	r vs (QUOTE	
New Zealand			Pkt. \$.10		½ Lb. \$.30	
Tampala (Dark 6	ree	n)	.25	((- oz. 85c)	



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.

America (50 days) A long standing heavy yielding, slow growing, warm weather variety with heavy thick, glossy dark green leaves, densely crumpled and savoyed. Plant averages 7 in, tall by 12 in, across at maturity. Won Silver Medal in All America trials.

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.



America



Improved Advance

Tomatoes

1 oz. to 2,000 plants; 1/4 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, 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 earlies 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 variey 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.

ry sharrow or the crop may	, pe p	adiy mj	urcu, (special
	Pkt.	Oz.	1/4 Lb	Lb.
Beef Steak	\$.10	\$1.00	\$3.00	
Burpee's Hybrid Big Boy.	1/8	z\$6.00	Oz	\$35.00
Earliana		.85	2.50	7.50
Early Giant Hybrid	. 1/8 0	z \$6. 00	Oz.,	\$35.00
Garden State	10	.85	2.50	7.50
Greater Baltimore (Ind.).	.10	.40	1.25	4.00
Hybrid C 18x21		oz. \$3.85	5; Oz.	\$12.50
Improved Advance		1.00	3.50	10.00
Jubilee Golden		1.50		
Marglobe (Certified)		.65	2.00	6.00
Oxheart		1.50	4.50	• • •
Ponderosa		1.00	3.50	10.00
Pritchard's Scarlet Topper		.40	1.25	4.00
Queen's (Certified)		.85	2.50	7.50
Rutgers (Certified)		.65	2.00	6.00
Scarlet Dawn		.50	1.50	5.00
Sioux		1,00	2.85	8.50
Southland		1.35	4.00	12.00
Stokesdale (Certified)		.65	2.00	6.00
Stone (Improved)		.50	1.50	4.50
Urbana		2.00	6.00	20.00
Valiant	.10	.75	2.25	6 .50
SMALL F	RUIT	ED.		
Pear Shaped Yellow	.10	.60	1.75	
Red Cherry	.10	.60	1.75	
Red Plum	.10	.60	1.75	
San Marzano (Paste) Red		1.00	3.00	
Yellow Plum	.10	.60	1.75	



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.

Indiana Baltimore (80 days) Large, smooth, solid, bright scarlet; second

early Tomato; a very prolific bearer and fine canning variety.

Southland (80 days) Developed by the U. S. Regional Vegetable Breeding Laboratory as a main crop shipping, canning, home and market garden variety. Nearly globe shaped with thick solid flesh and good scarlet color. Outstandingly resistant to many diseases including some forms of late blight.

Garden State (80-85 days) A main crop canner's variety, developed by Campbell Soup Co., partially resistant to fusariam 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.

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.



Purple Top White Globe Turnip



Turnip-Autumn King

Double Duty (30-40 days) Roots approximately $3 \times 2 \text{ in. tops}$ 18 in. tall, strapleaved 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 decidely 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 Broccoll—Page 11.

RUTABAGA	Pkt.	Oz.	1/4 Lb.	Lb.
Neckless Purple Top\$.10	\$.15	\$.30	\$1.00
New Canadian	.10	.30	1.00	2.8
Special Market Gardeners	.10	.55	1.65	5.00
Waltham (Yellow Globe)	.10	.30	1.00	3.50
TURNIP				
Autumn King	.10	.15	.30	1.00
Double Duty	.10	.15	.30	1.0
Early Snowball	.10	.15	.30	1.0
Golden Ball (Orange Jelly)	.10	.15	.30	1.0
Mammoth Shogoin	.10	.15	.30	1.0
Purple Top White Globe	.10	.15	.30	1.0
Seven Top	.10	.15	.25	.7.
Yellow Aberdeen Purple				

Manns Vegetable Plants, Roots, Trees and Berries

PLEASE NOTE: All plants are quoted f.o.b. Baltimore. On parcel post orders, add 25c per 100.

CABBAGE PLANTS, FROST-PROOF. (Ready in February to May.) 75c per 100.

CAULIFLOWER PLANTS. (Ready in May.) 25c per doz.; \$1.50 per 100.

BORECOLE PLANTS. (Ready in July.)

\$1.25 per 100. CELERY PLANTS. (Ready in July.)

\$1.50 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. Hothed 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., 40c; 100 \$2.50.

RHUBARB ROOTS

Victoria. 20c each; \$2.00 per doz.



PLANT SETTER

No. 15-Automatic, positive and accurate operation, rigid construction, cadmium plated, no rust, removable water spout. \$8.50.

Lynchburg Setter \$5.65.



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. \$2.15 each. Bartlett, Kieffer, Seckel.

PEACHES. 5-6 ft. \$1.75 each. Belle of Georgia, Carman, Crawfords Early, Crawfords Late, Elberta, Heath Cling. J. H. Hale, Shippers Late.

CHERRIES. 9/16 to 11/16 cal. \$2.25 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

GRAPE VINES (2 yr. No. 1)

CONCORD. Blue. DELAWARE. Red. NIAGARA. White. 60c each, 10 for \$5.00.

SMALL FRUITS AND BERRIES

BLACKBERRIES. \ Alfred, \ Eldorado.

10, \$2.00; 100, \$10.00.

RASPBERRIES. Cumberland - black; Latham - red; St. Regis-red, everbearing; Indian Summer-red, everbearing. 10, \$3.00; 100, \$14.50.

BLUEBERRIES. 2 yr. 12-18 in. Burlington, Concord. Jersey, Rancocas, Rubel, \$1.25 ea.; 10, \$10.75.

BOYSENBERRIES. Thornless. 10, \$2.50; 100, \$10.00.



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.

Big Joe Catskill. Midseason

√Chesapeake. Late.

25 for \$1.25; 100 for \$3.00.

Everbearing-Streamliner. 25, \$2.00; 100, \$5.50.

BERRY BOXES

100	
Pints\$2.00	Let us
Quarts 1.75	quote
2 qt. Tills 5.00	quantity
3 qt. Tills 5.50	price.

(Not Mailable)



Manns' Superior Farm Seeds

	Manns Superior Surm Seeus								
Varlety	Lbs. per Bu.	Sow-Lbs. per Acre	Date of Sowing	Fertilizer Requirements per Acre	Uses	NOTE: This chart compiled from Handbook of Agronomy—Va. P. I. and U. S. D. A. Cooperating.			
Alfalfs	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 hasal shoots are 2 ln. high. Do not cut late ln 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, break- fast 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 seld 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 root- stocks 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 soll.	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 tlme they mature.			
Corn Fleld	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 hog- ging down.	Harvest when kernels well glazed and dented, shuck and bottom leaves dry and upper leaves ½ to ½ green. For ensilage harvest in early glaze stage, shucks yellow.			
Clover Alsike	60	5-8	AugSept. FehApr.	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 Crlmson	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 wetsoils. 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 Ladino	60	2	March April or August	200 to 400 lhs. 0-14-7.	Pasture and hay.	For pasture sow with orchard or alta fescue. Thrives 4 to 8 years.			
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 eown 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 (Blennfal)	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. Tolcrant to acid soils but responds to lime.			
Cowpeas	60	1½ to 2 hu.	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 mix- tures, gives early spring and late fall grazing.	Adapted to practially 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 Korean 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	Uges	
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 hroadcast and cover lightly. Cut hay just after blooming. Has about same feeding value as timothy but nabecome injurious if used as a continuous ration for hores.
Oats Winter Spring	32	2 to 2½ bu.	Winter Sept. 15 Spring FebMar.	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, tal' meadow oat grass.
Raps Dwarf Essex	56	6-10	MarApr. AugSept.	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	A ugust- Sept.	Seems to do better on "Sour" solls.	Hay and pasture.	A perennial grass with a creeping hahlt of growth making a coarse loose turf. For hay harvest a little before or during full bloom. Sulted to wet soils.
Rys	56	1 to 1½ hu.	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.
Rys Grass Domestic Italian	24	30-40	Early Fall	Usual Grass requirements.	Annual hay crop, tem- porary pasture or in lawns for a quick covering.	Not an annual but little of it lives more than one year. Grows rapidly and in hunches. Fall seeding usually makes a good crop of hay by June. More drought resistant than Perennial Rye Grass.
Rys Grass Perennial	20	30	FebMay AngOct.	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 polsoning 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, hog- ging off silage and seed.	Responds well to inoculation. Plant very shallow (about 1 ln.) and if crust forms on land before they come up, hreak 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.
Fall Meadow Oat Grass	11	30-40	MarApr. AugSept.	Responds to soll improvement and fertilizer.	Hay and pasture, of most value in a mixture of Red Clover, Alsike and Or- chard Grass.	One of the best poor land grasses and especially adapted to well drained sandy soil. Does not like shade. Very drought resistant, perennial hunch type variety. Cut for hay about the time of hlooming.
Timothy	45		MarApr. AugOct.	200-400 lbs. 4-12-4 except where lt 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 hegins.	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 sapling 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	AugOct.	200-400 lbs. superphosphate, add potash on sandy soils. Responds to lime but will grow on fairly acld 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 hu.	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.

FIELD SEED PRICES

These quotations are based on market at time catalog goes to press and will be maintained as far into the season as possible. Buyers of large quantities are requested to write for firm prices stating quantities, as market fluctuations may permit lower prices. Mail orders will be filled at prices prevailing date order is received and any overpayment will be refunded. We are offering only strong germinating, new crop seed, with as low weed content as economically possible. Prices quoted cash, f.o.b. Baltimore, bags included on full bag lots; bags charged extra on smaller quantities.

Prices F.O.B. Baltimore	(1-9 lbs.) Per lb.	(10-20 lbs.) Per lb.	(21-99 lbs.) Per lb.	Bag Lots Per lb.
Alfalfa: Kansas Verified	\$.55	\$.50	\$.46	\$.42
Cert. Atlantic	.95	.85	.75	.68
Blue Grass: Kentucky	1.00	.85	.77	.70
Merion	6.00	5.00	_	_
Clovers: Alsike	.55	.50	.47	.43
Crimson	.35	.30	.26	.24
Ladino	1.35	1.20	1.10	.98
Red (Midwest ver.)	.58	.53	.48	.44
White Dutch	1.00	.85	.75	.65
Wild White	1.25	1.10	.98	.89
Fescues: Alta	.45	.40	.36	.33
Chewings	1.00	.90	.80	.70
Creeping Red	.90	.80	.70	.60
Meadow (English Blue Grass)	.30	.26	.23	.20
Lespedeza: Korean	.36	.33	.30	.27
Oats: Spring (Clinton Cert.)				
Orchard Grass	.35	.32	.29	.26
Red Top Grass	.75	.68	.62	.57
Rye Grass: Italian - Domestic	.20	.18	.15	.12
Perennial	.35	.29	.23	.17
Sorghum: Amber	.28	.25	.22	.20
Milo	.15	.13	.11	.09
Tall Meadow Oat Grass	.40	.36	.33	.30
Timothy	.28	.26	.24	.21

MANNS' PERMANENT PASTURE MIXTURE

\$15.75 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. (Low Lands—sow 25 lbs. plus 5 lbs. Red Top per acre.) Lb., 57c; 100 lbs., \$52.50.



Cyclone illustrated\$4.10

MANNS' SUPERIOR FLOWER SEEDS



Flower Seeds for Particular Purposes

BORDER AND EDGING

Ageratum

- x Alyssum, Saxatile
- x Arabis, Alpina x Bellis Perennia
- 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

r 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
- x Foxglove or Digitalis
- x Hibiscus, Moschata
- x Lathvrus

Clarkia

- 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
- 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, Drummondi Salpiglossis Scabiosa Snapdragon Stocks Strawflower Xeranthemum

Zinnia

TALL VARIETIES

- Amaranthus, Caudatus
- xiCampanula, 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 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

POTTED PLANTS

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

Summer Poinsettia

Ageratum Pansy Alyssum Petunia Aster Phlox Calendula Scarlet Sage Cannas Snapdragon Coleus

Coreopsis Dianthus Verbena Vinca Geranium Heliotrope Wallflower Laniana Zinnia

Chrysanthemums—See page 52

ANNUAL PLOWER GARDEN MIRTURE (2 to 3 ft. tall). Pkt. 15c, Oz. 65c, Lb. \$6.50.

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 Mixed. Height 6-8 inches. Pkt., 10c; 1/4 oz., \$2.00.

DWARF COMPACTUM MIDGET BLUE. Rich blue. Pkt., 15c; ½ oz., \$1.25.

DWARF COMPACTUM PURPLE PERFECTION. Deepest blue. Pkt., 15c; 1/4 oz., \$1.00.

SEMI-DWARF BLUE PERFECTION. Medium blue. Pkt., 15c; ¼ oz., \$1.00.

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., 100; ez., \$1.50.

ROYAL CARPET. Purple, 2 to 3 in. tall but spreading to 10 in. wide. Pkt., 25c; 1/8 oz., \$1.75.



Crego Aster

PROCUMBENS SNOW-CLOTH. Compact mass of pure white flowers. 3-4 inches high by 8 inches wide. white flowers. 3-4 Pkt., 15c; oz., 75c.

VIOLET QUEEN. Dwarf compact free flowering rich violet; does not fade in hot weather. Height 4 inches. Pkt., 15c; 1/4 oz., 60c.

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.

MAXIMUM. (Tall florist varieties.) Yellow, Pink. Pkt., 25c; ½ oz., \$1.15. Crimson, White,

TALL MIXED. 21/2 to 4 ft. Pkt., 10c; 1/4 oz., \$1.00.

TETRAPLOID MIXED. 2½ to 4 ft. Commercial florist strain. Vigorous grower. Florets huge, mostly ruffled, twelve inch flower spikes are usual. Full range of colors, majority of flowers richly veined. Pkt., 10c; 1/4 oz., \$1.70.

SEMI-DWARFED MIXED. 1 to 11/2 ft. Pkt., 10c; 1/4 oz., \$1.00.

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 soll and during the growing period should be well supplied with water.

PRINCESS. Flowers 3 in. in dia. Deeply quilled cushion centers; branching habit, ideal for bedding and cut flowers.

Mixed, Pkt., 15c; 1/4 oz., \$1.30.

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; 1/4 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; ¾ oz., 60c. Mixed, Pkt., 10c; ¼ oz., 50c.

CALIFORNIA SUNSHIME. 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., 60c.



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.

(Love Lies Bleeding.) Plants of erect growth 21/2 feet high producing numerous feather sprays of rich crimson color. Pkt., 10c; 1/4 oz., 25c.

MOLTEN FIRE. Very ornamental and beautiful; 3 feet tall; easily grown, leaves dark bronze, top of plant brilliant Poinsettia red. Pkt., 15c; 1/4 oz., 80c.

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; 1/4 oz., 50c.

ANCHUSA (Summer Forget-Me-Not)

BLUE BIRD. Vivid indigo blue, plants compact and of even growth. 18 in. Blooms throughout the summer. Pkt., 15c; ½ oz., 80c.

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; 1/4 oz., 40c.

BARTONIA (Golden Yellow)

AUREA. Large, showy flowers, 3 inches in diameter; deep golden yellow. Blooms early, 18 inches. Pkt., 15c; 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; oz., 60c.

CALENDULA—POT MARIGOLD

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

EXTRA DOUBLE ORANGE KING. Rich orange red. Pkt., 10c; 1/2 oz., 50c.

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

BALL'S, IMPROVED GOLDEN ORANGE. Long stemmed extra double, excellent for forcing.
Pkt., 15c; 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; 1/2 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., 80c.

CARNATION (Marguerite)

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, flery red, scarlet-carmine, yellow or mixed, height 2 to 3 ft. Pkt., 15c; $\frac{1}{4}$ oz., 60c.

DWARP EMPRESS COCKSCOMB. Dark-leaved, bright crimson. Height 10 in. Pkt., 15c; 1/4 oz., 75c.

TALL EMPRESS COCKSCOMB MIXED. Height 11/2 ft.

Pkt., 15c; 1/4 oz., 50c. CHILDSII. (Chinese Woolflower.) Crimson. Height $2\frac{1}{2}$ -3 ft. Pkt., 15c; $\frac{1}{4}$ oz., 50c.

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., 60c.

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; ½ oz., 40c.

CORNPLOWER, JUBILEE GEM—Dwarf plants, I freely blooming, vivid blue. Pkt., 10c; 1/4 oz., 50c. 1 foot,



Calendula







Arctotis

Didisous

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; 1/4 oz., 25c.

CLARKIA

Very pretty, profuse flowering annuals. Useful for hanging baskets. Height 2 ft. Blooms June until frost. Double mixed. Pkt., 10c; 1/4 oz., 35c.

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; ½ oz., 25c. FIESTA. Semi double flowers, ruffled, 2½ ft. plants, blooms all summer. Red, orange, yellow, suffusion of color. Pkt., 25c; ½ oz., \$2.00.

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., 15c; ¼ oz., 40c.

SENSATION. Extremely early free blooming, flowers 4 to 5 inches, plants 4 ft. with rather heavy foliage. White, Pink and Mixed. Pkt., 15c; ¼ oz., 35c.

DOUBLE EARLY FLOWERING MIXED. Blooms 3 in. Height 4 ft. Pkt., 10c; 1/4 oz., \$1.00.

CYNOGLOSSUM

(Chinese forget-me-not)

AMABLE. Dwarf sweet scented, blue. Pkt., 10c; 1/4 oz., 25c.

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. TETRAPLOID HEDDENSIS. Large long stemmed hybrids, very large double flowers. Plants 10-12 inches. Pkt., 10c; ¼ oz., 50c.

HEDDEWIGI LACINIATUS SINGLE GAIETY MIXED. 10 to 12 in. Large lacy flowers in a brilliant range of colors. Pkt., 15c; ¼ oz., 50c.

DIDISCUS—Blue Lace Flower

COERULEUS. Lavender, blue, lace-like flower; heads blooming profusely from June to September; 1½ feet tall. Pkt., 10c; ½ oz., \$1.00.

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; 1/4 oz., 90c.

EUPHORBIA

VARIEGATA (Snow on the Mountain). Bright green foliage veined and margined with white, top leaves snow white. Height 2 ft. Pkt., 10c; 1/2 oz., 60c.

GILIA

Exceedingly graceful and attractive, with azure blue starlike flowers, borne profusely on plants 3 ft. tall; a good cut flower. Blooms from July until frost. Tall mixed. Pkt., 15c; 1/4 oz., 35c.

GLOBE AMARANTH-GOMPHRENA

One of the best "Straw flowers." Perfect globe shape. Fine for borders and cutting. Height 2 ft. Blooms midsummer until frost. Mixed colors. Pkt., 10c; 1/4 oz., 30c.



Cosmos Radiance







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; 1/4 oz., 70c.

GYPSOPHILA (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; 0z., 50c.

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; 1/4 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; oz., \$1.00.

HOLLYHOCK

SINGLE ANNUAL FINEST MIXED. Pkt. 10c; 1/4 oz., 35c.

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; 1/4 oz., 25c.

LARKSPUR

For Perennial Larkspur see Delphinium.
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. Height 3-4 ft. White, Carmine Rose, Blue, Pink, or Mixed. Pkt., 100; 1/4 oz., 35c; 1 oz., \$1.10; 1/4 lb., \$3.50; 1 lb., \$10.00.

REGAL. Tremendously long thick spikes, full Del-phinium-like florets, compact, basal branching habit; vig-orous and early. Height 3-4 ft. Dark blue, Rose, White or Mixed. Pkt., 15c; ½ oz., 60c; oz., \$1.15.

ROSAMOND. Tall double stock flowered, early, free flowering, pure deep pink. Height 3-4 ft. Pkt., 15c; ¼ oz., 50c.

LANTANA

DWARF HYBRIDS MIXED. Pkt., 10c; 1/4 oz., 60c.

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., 65c.

CAMBRIDGE BLUE COMPACTA. Light blue, large flowered, green foliage. Pkt., 15c; 1/8 oz., 60c.

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; 1/4 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) VARIETIES

AFRICAN. Mixed. Double. Pkt., 10c; 1/4 oz., 45c.

MAMMOTH MUM. Large double fluffy light sulphur-yellow flowers resembling Chrysanthemums. Plants bushy, erect and strong. Height 3 ft. Pkt., 15c; ¼ oz., 50c. MAMMOTH MUM.

GLITTERS. Large, tall, clear yellow. themum flowered. Pkt., 25c; ¼ oz., 90c. Double Chrysan-

GUINEA GOLD. Orange flushed with gold, flowers semi-double. Height 2 to 2½ feet. Pkt., 10c; ¼ oz., 25c

CROWN OF GOLD. Collarette type, rich golden yellow, chrysanthemum formed, fragrant, double. 2½-inch blooms. Height 2 ft. Pkt., 10c; ¼ oz., 35c.

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., 40c.

FRENCH (DWARF) VARIETIES

BUTTERBALL. Extra dwarf double, soft butter yellow. Height 6 to 8 in. Pkt., 15c; 1/4 oz., 45c.

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

FRENCH. Dwarf double mixed. Height 1 ft. Pkt., 100; ¼ oz., 40c.

MELODY. Dwarf French double, solid bright orange. Height 1 ft., Pkt., 15c 1/4 oz., 40c.

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. Height 2 ft. Mixed, Pkt., 10c; oz., 50c.

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., 15c; 1/4 oz., 40c.

MATHIOLA (Evening Scented Stock)

BICORNIS. Lilac, 2 ft. Pkt., 10c; 1/4 oz., 25c.



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.

DWARF MIXED. Very brilliant in all shades of yellow, red and purple. Height 9 in. **Pkt.**, 10c; oz., 25c; ½ 1b., 75c.

DOUBLE GLEAM HYBRIDS. Large well-formed, sweetscented double flowers in an extremely wide range of colors. Height 15 in. Golden, Scarlet or Mixed. Pkt., 10c; oz., 25c; 1b., \$3.00.

TALL TRAILING—CHOICE MIXED. Height 10 ft. Pkt., 15c; oz., 25c; ½ 1b., 75c.

NICOTIANA

AFFINIS. Gives a continuous display of very fragrant flowers through the summer and autumn. Height 2-3 ft. Mixed. Pkt., 10c; 1/4 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; 1/4 oz., 25c.

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., 15c; oz., 75c.



Nasturtium

PANSIES

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. For summer flowers however partial shade will greatly prolong the blooming season. Height 8 in.

MAMMOTH EXHIBITION MIXTURE. True round and solid pansy form of giant size, each color an attraction. Pkt., 10c; ½ oz., \$1.00; oz., \$6.00.

SWISS GIANTS. Mixed reselected Florist strain. In a fine range of colors. Pkt., 15c; 1/8 oz., \$1.00; oz., \$6.00.

TRIUMPH OF THE GIANTS. (Frilled.) Finest for commercial use. Blooms enormous, most striking in brilliancy and color. Pkt., 10c; ½ oz., \$1.00; oz., \$6.00.

SWISS GIANT ALPENGLOW. Rich garnet and ruby red shades with dark blotches. Pkt., 25c; 1/4 oz., \$2.00.

SWISS GIANT CORONATION GOLD. Large golden yellow, without blotches or marking. Pkt., 25c; $\frac{1}{4}$ oz., \$2.00.

SWISS GIANT ULLSWATER. Marine blue with darker blue blotches showing through. Pkt., 25c; ½ oz., \$2.00.

SWISS GIANT. White. Pkt., 25c; 1/4 oz., \$2.00.

PETUNIAS

Of easy culture. For beds, borders, window boxes or hanging baskets.

GIANTS OF CALIFORNIA. Huge blooms in light and dark colors, fringed and ruffled, with attractive deep throats. Height 12 in. Mixed, Pkt., 10c; 1/16 oz., \$7.50.

BALLERINA. Deep pink, fringed grandiflora. Pkt., 25c.

HOWARD'S STAR. Rose-crimson with a five-pointed white star. Height 18 in. Pkt., 10c; 1/4 oz., \$1.70.

DWARF BEDDING VARIETIES (Height 12 in.)

BLUE BEDDER. Mid-blue, ROSE OF HEAVEN. Deep brilliant rose.

ROSY MORN. Pink white throat.
SNOW QUEEN. Large white.

Separate colors or Mixed. Pkt., 15c; 1/4 oz., \$1.70.

DWARF ELK'S PRIDE. Deep Purple. Pkt., 25c; 1/16 oz., \$7.50.

FIRE CHIEF. All American, brilliant red. Pkt., 25c; 1/8 oz., \$3.25.

FLAMING VELVET—Rich, brilliant, velvety crimson. hybrida type, Height 18 in. Pkt., 10c; 1/4 oz., \$1.70.

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; ½ 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; 1/4 oz., 90c.

*STAR PHLOX. (Cuspidata.) With star-shaped flowers, dwarf growth. Height 12 in. Pkt., 10c; 1/4 oz., \$1.10.

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; 1/4 oz., 60c. THE SHIRLEY. Special strain mixed; fine for bedding or cutting; single annual. Height 20 in. Pkt., 10c; 1/4 oz., 25c.

ESCHSCHOLTZIA. (California Poppy.) Spreading plants 1 foot high, suitable for beds and borders, blooming from June until frost. Mixed. Pkt., 10c; 1/4 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-PLOWERING EXTRA DOUBLE MIXED

Pkt., 10c; 1/4 oz., 90c.

*LARGE-PLOWERING SINGLE MIXED. All colors. Pkt., 10c; 1/4 oz., 40c.

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; 1/4 lb., \$1.00.

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. Height 3½ to 4 feet.

IMPERIAL HYBRIDS MIXED. Pkt., 10c; ½ oz., 75c. IMPERIAL GIANT BLUE MOON. Deep lavender blue. Pkt., 15c; 1/4 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; 1/4 oz., \$1.25; oz., \$3.75.

BLAZE OF FIRE. Begins blooming 10 days earlier than any other early flowering Salvia, Dwarf type. Height 12 in. Pkt., 15c; 1/8 oz., \$1.00.

HARBINGER. Dwarf compact plants with bluish green foliage and a profusion of scarlet flowers. Height 16 in. Pkt., 15c; 1/8 oz., \$1.50.

SCHIZANTHUS

*MONARCH HYBRID MIXED. A plant noted for its won-derful variety of coloring and butterfly-like blossoms, fine for cutting, graceful fern-like foliage, height about 18 inches. Blooms May and June. Pkt., 10c; 1/8 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. strawy blo Height 2 ft.

*SINUATA CHOICE MIXED. Pkt., 10c; 1/4 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., 15c; ½ oz., 50c.

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; 1/8 oz., 75c.

DRESDEN PERFETUAL. These fine stocks will live out-doors for several years if protected with a fairly thick layer of straw, which must be lifted early in the spring. Height 20 in. Pkt., 15c; 1/4 oz., 85c.

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

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

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. 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. Fall sowing has proven very desirable in the vicinity of Baltimore by preparing the ground in October and sowing the seed in November. Plant about 4 in. deep and after the ground is frozen hard, mulch with 3 or 4 in. of light litter. Remove the mulch very early in the

Early Flowering Spencer

(FLORISTS WINTER FLOWERING)

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., 15c; oz., 25c; 1/4 lb., 85c; lb., \$2.50.

MANNS' SUPERB SPENCER MIXTURE. Pkt., 10c; oz., 20c; 1/4 lb., 60c; lb., \$2.00.

Cuthbertson Garden Varieties

An ideal strain for gardeners. Superior to other types in vigor, profusion of large fragrant flowers, and longer stems. The chief advantage outdoors is their longer blooming period, due to their ability to withstand warm weather.

COLINE. Intense Vivid Scarlet.

EVELYN. Salmon Cream Pink.

FRANK G. Rosy Lavender.

JANET. Large Frilled White.

LOIS. Clear Rose Pink.

TOMMY. Clear Medium Blue.

Pkt., 15c; oz., 45c; 1/4 lb., \$1.25; lb., \$3.75.

CUTHBERTSON. Finest Mixed.

Pkt., 15c; oz., 35c; 1/4 lb., 95c; lb., \$2.75.



Spencer Sweet Peas

SPIDER PLANT

CLEOME. Plants 4 ft. spreading but open growth. White or pink curious flower heads. Blooms continuously until frost. **Pkt**, 15c; ½ oz., 75c.

SUNFLOWER

(See also Helianthus)

CALIFORNIA GIANT. GIANT. Grown for ornamental or com-Gray striped seed. Pkt., 10c; 1/4 lb., 20c; mercial use. 1b., 50c.

SUMMER POINSETTIA

See Amaranthus Molten Fire.

SWEET WILLIAM

SEE PAGE 55

TITHONIA

TORCH. Orange scarlet, single flowers with gold centers. Easy to grow, blooms all summer until frost. 5 foot tall. Pkt., 25c; ¼ oz., \$1.30; oz., \$3.85.

TORENIA

FOURNIERI. Plants 6 to 8 in., bushy. Blooms July until frost. Flowers, blue with yellow throat. Pkt., 15c; 1/8 oz., \$1.50.

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., 80c.

HYBRIDA GRANDIFLORA. Dwarf mixed. Pkt., 15c; 1/4 oz., \$1.30.

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; 1/4 oz., 80c.

ZINNIAS—DOUBLE

DAHLIA PLOWERED 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., 15c;
1/4 oz., 35c.

DAHLIA FLOWERED MIXED. Pkt., 10c; ¼ oz., 35c.

BURPEE'S HYBRIDS. Giant flowers with quilled petals, wide range of colors. 3 ft. Pkt., 25c; 1/2 oz., 75c.

GIANT FLOWERED MIXED. Height 3-4 ft. Pkt., 10c; $\frac{1}{4}$ oz., 35c.

EARLY WONDER FINEST MIXED. Earliest of all Zinnias. 3 to 4 in, flowers on long wirry stems. Plants have no laterals and practically no leaves. Bred for cut flower use. Height $1\frac{1}{2}$ to 2 ft. **Pkt.**, 15c; $\frac{1}{4}$ oz., 50c.

CROWN O'GOLD PASTEL TINTS. Large well formed flowers each petal tipped with gold. Pkt., 15c; 1/4 oz., 35c.

PASTEL GIANTS MIXED. Pkt. 10c; 1/4 oz., 35c.

PERSIAN CARPET. Flowers 1 to 1½ in. diameter, each plant different easy to grow, thrives on heat, 12 in. height. Pkt., 25c; ¼ oz., \$1.50.

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; ½ oz., 50c.



Dahlia Flowered Zinnia

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., 15c; ¼ oz., 35c.

TOM THUMB FINEST MIXED. Well formed flowers of the Lilliput type, for pot plants and borders. Height 6 to 8 in. Pkt., 15c; 1/4 oz., 50c.

Vines

BALLOON VINE. (Cardiospermum.) Very graceful, rapid grower. Climber with clusters of smail 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; ½ oz., 50c.

CARDINAL CLIMBER. (Ipomae 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., 80c.

COBAEA SCANDENS. Of rapid growth, with fine foliage and large beil-shaped flowers of a beautiful violet blue color. (10-20 ft.) Pkt., 10; ¼ oz., 90c.

CYPRESS VINE. (Ipomoea quamoclit.) Beautiful and very popular, slender vine, with fern-like foliage and a mass of small star-shaped flowers. (10 ft.)
Scarlett. Pkt., 10c; ¼ oz., 50c.



Gourds

GOURDS. A large and interesting class producing a great variety of curious fruits, many of which are peculiarly marked. (12 ft.) Pkt., 10c; ½ oz., 50c.

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; ½ oz. 50c.

KUDZU VINE. Pkt., 15c; 1/4 oz., 35c.

MOON FLOWER. (Ipomoea mexicana.) Very pretty, rapid growing vine, with handsome trumpet-shaped flowers. (15 ft.) Pkt., 10c; 1/4 oz., 20c.

MORNING GLORY

Giant Japanese Imperial Mixed. (10 ft.) Pkt., 10c; 1/4 oz., 30c.

Double Rose Marie. Deep rose. Pkt., 15c; 1/2 oz., 60c.

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; ½ oz., 25c.

Pearly Gates. Enormous flowers, 4½ inches across, clear shining white. (10 ft.) Pkt., 10c; ½ oz., 35c.

PASSION PLOWER. (Passiflora.) A most interesting and well known climber, bearing singularly beautiful flowers. Blue and white mixed. Pkt., 10c; 1/4 oz., \$1.15.

SMILAX. Pkt., 25c; 1/4 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; 1/4 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; or., 15c.

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; 1/4 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., \$1.50.

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., 15c; ½ oz., \$1.25.

*COERULEA.—The Rocky Mountain Columbine. Blue, blooms during June. Height 2 ft. Pkt., 10c; 1/8 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; 1/4 oz., 50c.

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. PEt., 10c; ¼ oz., 80c.

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., 15c; 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. Doubled Red. Pkt., 10c; 1/8 oz., \$1.50.

MONSTROSA. Double Mixed. Pkt., 10c; 1/4 oz., \$1.60.



Aquilegia

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; 1/4 oz., 70c.

CANDYTUFT

*IBERIS SEMPERVIRENS. Large heads of white flowers. Height 1 ft. Pkt., 10c; 1/4 oz., \$1.25.

GIBRALTARICA. White flushed lilac. Blooms during June and July. Height 10 in. Pkt., 15c; 1/4 oz., 60c.

QUEEN OF ITALY. Rosy lilac. Pkt., 15c; 1/4 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; 1/4 oz., \$1.10.

MARGUERITE. Half Dwarf. Height 15 to 18 in. Choice double mixed. Pkt., 10c; 1/4 oz., \$1.30.

PERPETUAL (Famous Chaubaud Type). White. Height 2 ft. Pkt., 15c; 1/4 oz., \$2.15. Choicest mixture. Pkt., 10c; 1/4 oz., \$1.30.

CHRYSANTHEMUM PLANTS

Hardy Garden Varieties

40c Each \$4.50 Per Doz.

LARGE FLOWERED

AVALANCHE, white CHARLES NYE, yellow EMBER, bronze MRS. FINDLAY, yellow MRS. P. D. DUPONT, peach ORIENTAL GLORY, red SEPT. DAWN, lavender TIFFANY ROSE, rose

NEW LARGE ENGLISH (Tall Early Flowering)

ALABASTER, white CONQUEROR. red

GOLD STANDARD, yellow LEDA, nink

POMPOMS AND BUTTONS

BURGUNDY, wine CAROLYN YOSICK, lavender

IRENE, white JUDITH ANDERSON, yellow

EARLY WONDER, pink MANDALAY, bronze

RED FLARE, red ZANTHA, yellow

SINGLES

EUREKA GIANT, bronze GALAHAD, yellow KRISTINA, rose

MR. ANDREWS, pink RED HUSSAR, late SILVER MOON, white

DWARF AND CUSHION VARIETIES

BREECE'S RED CUSHION JOAN HELEN, purple EARLY BRONZE, bronze GOLDEN GLORY, yellow

MAJOR CUSHION, pink RED GOLD, red

Varieties marked * suitable for Bock 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., 100; 1/16 oz., \$2.00.

COREOPSIS—Golden Wave

GRANDIFLORA. (Mayfield Giants.) Double and semidouble 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; 1/4 oz., 25c.

DOUBLE SUNBURST. Large, golden yellow, fully double, early blooming fine cut flowers. Height 31/2 ft. Pkt., 15c; 1/4 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.

DOUBLE FINEST MIXED. Many rich colors. Height 4 ft. Pkt., 10c; 1/8 oz., \$1.25.

COLTNESS HYBRIDS. Small, neat single flowers on very dwarf plants, for bedding. Pkt., 15c; 1/4 oz., 80c.

SINGLE MIXED. Height 3½ ft. Pkt., 15c; ¼ oz., 60c.

UNWINS DWARF HYBRID IDEAL BEDDING MIXED. Double and semi-double flowers in a wide range of color. Flowering within four months from sowing. Height 11/2-2 ft. Pkt., 10c; 1/4 oz., 50c.

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.

PACIFIC GIANTS BLACK KNIGHT SERIES. Very dark blue. Pkt., 15c; 1/16 oz., \$1.60.

PACIFIC GIANTS BLUE BIRD SERIES. Clear medium blue, white bee. Height 5 ft. Pkt., 15c; 1/16 oz., \$1.60.

PACIFIC GIANTS GALAHAD SERIES. Clear hugh white. Mildew resistant. Height 5 ft.

Pkt., 15c; 1/16 oz., \$1.25.

PACIFIC GIANTS LANCELOT SERIES. Clear lilac self, a rare color, white bee. Height 5 ft. Pkt., 15c; 1/16 oz., \$1.60.

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

DIANTHUS—Hardy Pinks

PLORISTS' PERPETUAL. Large clusters, fragrant, very useful for cut flowers. Height 1½ ft. Double and Single Mixed. Pkt., 10c; ¼ oz., \$1.25.

*PLUMARIUS — Single Mixed. Large showy single flowers in wide range of colors during May and June. Height 1 ft. Pkt., 10c; ½ oz., 70c.

*PLUMARIUS—Double Mixed. Of very compact growth, double flowers in many colors, during May and June. Height 1 ft. Pkt., 10c; ¼ oz., 70c.

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., 15c; ¼ oz., \$1.70.

DOUBLE GOLDEN BALL. 8 in. dwarf. **Pkt.**, 15c; ½ oz., \$1.15.

FORGET-ME-NOT—Myosotis

*BLENNIAL 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; 1/4 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. Fkt., 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 Gaillardla—shining wine-red petals sometimes tipped yellow. Pkt., 10c; ¼ oz., 90c.

GRANDIPLORA, PINEST MIXED. Pkt., 10c; ½ oz., 65c. THE DAZZLER. Bright golden yellow with crimson-maroon center, rather large. Pkt., 10c; ½ oz., 75c.

GERBERA (Jamesoni Hybrids)

NEW APRICAN 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.



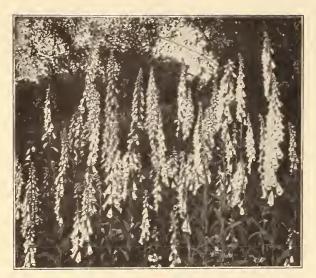
Delphinium



Gerbera



Feverfew



Pozglove



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., 100; 1/2 ox., 50c.

GYPSOPHILA—Baby's Breath

SINGLE (PAMICULATA). Tiny white flowers borne on slender stems. The plants are covered with blooms during June and July. Height 3 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. Ptt., 15c; ¼ 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., 15c; 1/4 oz., \$1.65.

HELIOTROPE (Half Hardy)

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

GIANT FLOWERED. Mixed. Pkt., 15c; 1/4 oz., \$1.00.

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., 100; 1/4 0z., 35c.

HOLLYHOCKS

Excellent for a background to dwarfer 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; 1/4 oz., 90c.

CHATERS SINGLE MIXED. Large, very artistic blooms. Pht., 10c; 1/4 ox., 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; 1/4 oz., 80c.

LINARIA—Kenilworth Ivy

*CYMBALARIA. Small lilac blue flowers, are borne on a charming neat trailing plant. Height 4 to 6 in. Pkt., 10c; ¼ oz., 70c.

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., 45c.

LUNARIA—Honesty

Biennial plant having round, silvery white, paper-like seed-pods which are dried for winter bouquets. Height $1\frac{1}{2}$ to $2\frac{1}{2}$ ft. Mixed. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

LUPINS

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

RUSSEL. New hybrid. Pkt., 10c; 1/4 oz., 90c.

NIEREMBERGIA (Tender Perennial)

PURPLE ROBE. Rich deep violet purple dwarf compact, does not fade, free flowering. Height 6 in.
Pkt., 10c; 1/32 oz., \$1.50.

PENTSTEMON

HYBRID GLOXINIOIDES (Beard Tongue). Beautiful bell-shaped flowers. Height 2½ ft. Choice mixed. Pkt., 15c; ½ oz., \$1.00.

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; ¼ oz., 85c.







Iceland Poppies



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., 15c; 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.

PRINCESS VICTORIA LOUISE. Salmon pink. Pkt., 15c; 1/4 oz., \$1.50.

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; 1/4 oz., \$1.00.

PRIMULA—Primrose

*AURICULA. Many bright colors, including erange, copper, brown, and other pastel shades. An excellent hardy Primrose for the border. Blooms during spring. Height 6-9 in. Pkt., 15c; ½ oz., \$1.25.

PYRETHRUM—Painted Daisy

SINGLE MIXED. A showy perennial with daisy-like flowers, blooming during May and June. Height 2 ft. Pkt., 10c; 1/4 oz., \$1.25.

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., \$1.25.

RUDBECKIA—Cone Flower

MY JOY. Brilliant golden yellow daisy-like flowers with brown centers. Blooms from July until October. Height 3 feet. Pkt., 15c; 1/4 oz., 60c.

SAPONARIA—Rock Soapwort

*OCYMOIDES. Splendid hardy rock plant, with rose pink flowers during spring and summer. Height 6 to 9 in. Pkt., 15c; 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; 1/4 oz., \$2.00.

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. Pt., 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 deep-blue flowers.

LATIFOLIA. Large Pkt., 15c; 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., 35c.

Pkt., 15c; ½ oz., 75c. JTY. Scarlet.

SINGLE NEWPORT PINK. Pkt., 15c; ½ oz SINGLE SCARLET BEAUTY. Scarlet. Pkt., 15c; ¼ oz., 80c. DOUBLE MIXED. Very fine; all colors. Pkt., 10c; ¼ oz., 45c.

DOUBLE EXTRA DWARF MIXED. Pkt., 10c; oz., \$4.00.

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; 1/4 oz., 90c.

VALERIANA (Coccinea)

Very showy red flowered border plant. Does well in poor soil. Height 2 to 3 ft. Pkt., 15c; 1/4 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

HYBRIDA. Choice mixed. Pkt., 10c; 1/16 oz., 50c.

VIOLET

ODORATA SEMPERFLORENS. Blue. Pkt., 25c; 1/16 oz., 70c.

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; 1/4 oz., \$1.50.

ANEMONES

GIANT DE CAEN POPPY FLOWERED

Blue Poppy; His Excellency (scarlet): The Bride (white). 10c each; \$1.00 per dozen; \$6.75 per 100.

CANNA ROOTS

City of Portland. $4\frac{1}{2}$ ft. Rosy pink, green foilage. \$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.

GLOXINIA

Blanche de Maru-Pink Defiance-Scarlet Emperor William-Blue Montblanc-White Roi des Rouges-Red Violacea-Violet

Above colors or Mixed-40c each; \$4.50 dozen.

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. 75c ea.

IRIS

	Eact
Ambassador. Bronze and maroon	\$.20
Black Magic. Deep Purple	
Coronation. Tall Yellow	
El Capitan. Blue	
Germaine Perthuis. Rich blue-purple	
Gold Imperial, Golden	
Mary Barnett. Lovely light blue	
sequotan, Dun and deep led	



Hardy Iris



Hardy Lillies

LILIES

Estate. Hardy pure white Easter lily type, 24 in. tall, blooms Aug. and Sept. 6 to 7 in. cir. bulbs. 45c each; 6 for \$2.25; 100 for \$32.50.

Regal. White shading to yellow in the center with pink tinge on outer edge. Height 3 to 5 ft. Bulbs 7-8 inch size. 40c ea.; 6 for \$1.85; 100 for \$25.00.

Spec. Rubrum Magnificum. Deep pink, healthy. Bulbs 7-8 inch size. 40c ea.; 6 for \$1.85; 100 for \$25.00.

Tigrinum Splendens. Orange-red spotted purple on the reflexed petals. Blooms late Aug. or early Sept. Bulbs 6-7 inch size. 40c ea.; 6 for \$1.85; 100 for \$25.00.

Willmottiae Improved. Dazzling orange, few small maroon spots, large flowering heads of 20 to 25 flowers, very graceful and a superior garden lily. Bulbs 6-7 inch size. 40c ea.; 6 for \$1.85; 100 for \$25.00.

Henryii. Rich orange, reflexed petals spotted brown, stamens long and showy, vigorous and easily grown. Flowers in August. Bulbs 7-8 inch size. 40c ea.; 6 for \$1.85; 100 for \$25.00.

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. Mixed colors, 3 inches up, 60c each.

Imported Holland giants. Red or pink. \$2.75 each.

TUBEROUS ROOTED BEGONIAS

Especially adapted to window or conservatory culture. Double scarlet, pink, yellow. 30c each; \$3.50 dozen.

BLEEDING HEARTS

A beautiful hardy garden plant of graceful habit, 2 to 3 feet high. The foliage is of a highly ornamental fernlike 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. 70c 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. 15c each; \$1.50 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, 10c each; \$1.00 per dozen.

FANCY LEAVED CALADIUMS

Separate Colors or Mixed. 35c each; \$3.50 dozen.



PINK

GEN. EISENHOWER. (75 Days.) Huge, strong grower deep rose-pink.

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

CHAMOUNY. (85 Days.) Cerise-rose with silver edge. DREAM OF BEAUTY. (Medium—80 Days.) Large rose red. Tall, strong grower.

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

NEW EUROPE. (Large-85 Days.) Vivid scarlet red with a small purple stripe in the throat.

STOPLIGHT. Beautiful large glistening deep red.

VALERIA. (70 Days.) Large bright scarlet red.

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. (70 Days.) Large, pure white.

YELLOW AND CREAMS

GOLD DUST. (85 Days.) Fine clear soft yellow.

LADY JANE. (80 Days.) Clear cream with yellow lip, petals give it general appearance of light yellow. Large blooms well placed and of heavy texture, tall and always straight.

SPOT LIGHT. Large, ruffled deep yellow.

WHITE GOLD. (85 Days.) Very large clear light cream shading to a golden throat. Tall and very vigorous.

YELLOW HERALD. (70 Days.) Early, amber yellow, carmine in throat.

ORANGE

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

GLADIOLI

Plant Manns' Gladioli Bulbs. They are strictly 14/2 inches or more in diameter, sound, true to name, and can be absolutely depended upon to produce large, beautiful well-formed blooms. (We recommend planting bulbs not over 2 in, in diameter for best 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

BLUE

BLUE BEAUTY. (Large—85 Days.) Medium light blue with edges overlaid violet blue.

LAVENDER

ELIZABETH THE QUEEN. (Giant-90 Days.) Beautiful clear mauve with darker lines in the throat.

PURPLE

KING LEAR. Ruffled, dark velvety purple.

PURPLE SUPREME. (80 Days.) Tall plant with many well placed bright purple flowers. Silvery edge on the petals. Superb cutflower.

SMOKIES AND OTHER COLORS

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

SILVER GULL. (80 Days.) Silver bluish grey with a creamy blotch. Very distinct.

VAGABOND PRINCE. (Large-75 Days.) Mahogany brown with a glowing flame scarlet blotch on lip petal.

PRICES			Per
Variety	Each	Doz.	100
Bagdad	\$.11	\$1.15	\$8.50
Bit O'Heaven	09	.95	6.50
Blue Beauty		.90	6.00
Chamouny		.95	6.50
Dream of Beauty		1.15	8.50
Elizabeth the Queen		1.00	7.50
Gen. Eisenhower		1.25	9.00
Gold Dust		.95	6.50
Jules Amott		1.15	8.50
King Lear		.95	6.50
Lady Jane		1.00	7.50
Margaret Beaton		.95	6.50
Margaret Fulton		.90	6.00
New Europe		1.00	7.50
Picardy		1.00	7.50
Purple Supreme		1.25	9.00
Rosa Van Lima		.90	6.00
Silver Gull		1.30	8.50
Spotlight	11	1.10	7.50
Stoplight		1.15	8.50
Vagabond Prince		1.25	9.00
Valeria		1.00	7.50
Vredenburg		1.25	9.00
White Gold	09	.95	6.50
Yellow Herald		1.00	7.50

GLADIOLUS MIXTURES

MANNS' SPECIAL VARIETY MIXTURE: 25 Bulbs (mixed) 1 of each listed \$1.75. 100 Bulbs (mixed) 4 of each listed \$6.75.

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.

70c doz.; 25 for \$1.25; 100 for \$4.85

GLADIOLUS NANUS

Interesting early flowering "baby glads"; require plenty of moisture; grow only half size of standard glads.

Amanda Mahy-Salmon	Pink	 	\$.75 doz.
Brilliant-Deep Scarlet			
Byzantinus-Purplish >			
The Bride-White		 	 .85 doz.

ROSE BUSHES

U. S. PLANT PATENTED NOVELTIES

-3 or More, Less 10% -

Patented varieties not listed can be supplied on order at patentees published price.

CHRYSLER IMPERIAL Distinctive brilliant red\$	3.00
COUNTESS VANDAL (38) pink with salmon glow	1.50
ECLIPSE (172) Rich gold	1.75
FASHION (789) Floribunda, luminous coral-pink suffused with gold. Winner of six awards	2.00
FORTY-NINER (792) Orient-red and chrome-yellow	2.00
FRED HOWARD (1006) Buff yellow, golden orange and pink	2.50
HAPPINESS (911) Brilliant red	2.50
HELEN TRAUBEL (1028) two toned petals, pink flushed apricot	2.75
LOWELL THOMAS (595) Lemon-chrome	2.00
MIRANDY (632) Garnet red	2.00
NEW YORKER (823) Fiery red	2.00
PEACE (591) Yellow with edges picoted cerise	2,50
SYMPHONIE (958) Huge blooms, silvery pink	2.50
VOGUE (926) Floribunda, cherry coral. Interna-	

SELECT EVERBLOOMING HYBRID—TEA

tional award winner 2.25

\$1.35 each, any 6 for \$7.25

These standard varieties have stood the test of time, having become popular by their performance in Baltimore gardens.

AMI QUINARD. Blackish maroon.

CALEDONIA. Large, white, very double, long-lasting, slightly fragrant, long stems, hardy.

EDITOR McFARLAND. Solid glowing pink.

ETOILE de HOLLAND. Bright red, large, loose, semi-double, very fragrant.

GOLDEN CHARM. Yellow sport of Talisman.

GOLDEN DAWN. Sunflower-yellow turning to lemon, well-formed. Fragrant, profuse, continuous.

K. A. VICTORIA. Double Pure White.

MRS. P. S. DuPONT. Yellow tinged with reddish gold.

POINSETTIA. Long buds, poinsettia-scarlet.

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.

THE DOCTOR. Pink, fragrant, long pointed buds.

CLIMBING ROSES

	-801000,	20001100	,	 0100111011
CLIMBING	CRIMSO	N GLOR	Y	 \$2.25
CLIMBING	PEACE			 2.75

DAHLIAS

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.

A—8 to 12 inches B—4 to 8 inches

M—Miniature 2 to 4 or 6 inches

C—Cactus ID—Informal Decorative

SC—Semi-Cactus FD—Formal Decorative

STC—Straight Cactus IC—Incurved Cactus

ADA N. (ID-A) Purple. \$1.00 each.
ARTHUR GODFREY (FD-A) Orange Blend. \$2.00 each.
BLUE ORCHID (ID-A). Lavender. 75c each.
CHEROKEE BRAVE (ID-A). Dark red. 60c each.
ELEANOR K. (SC-A). Yellow, prize winner. \$2.00 each.
FIVE STAR GENERAL (FD-A). Pink with yellow. \$1.00
J. A. KERNOCHE (FD-A). Red and white. 50c each.
JANE COWL (ID). Orange. 35c each.
JANE LAUSCHE (SC-A). Lavender and white. 75c each.
JERSEY BEAUTY (FD). Pink. 35c each.
JIM MOHR (FD). Extra large, salmon pink. 60c each.
KELVIN (ID-A). Pink. 75c each.
KELVIN SUNRISE (IC-B) Yellow, red tip. 50c each.
LAVENDER GLORY (ID). Lavender. 50c each.
LAVENDER GLORY (ID). Lavender. 50c each.
MARILYN DALE (SC-A) Fuchsia rose. \$1.50 each.
MICHIGAN WHITE (SC-B). \$1.00 each.
MRS. HESTER A. PAPE (ID-A). Red. 75c each.
POT-O-GOLD (FD). Beautiful golden yellow. 85c each.
PRINCE OF PERSIA (ID), Red. 50c each.
RALEIGH (ID). Miniature, Pink. 50c each.
RALEIGH (ID). Miniature, Pink. 50c each.
SHERWOOD PEACH (ID-A). Orange and red. 60c each.
SUNSHINE (ID-A). Large yellow. 50c each.
VICTORY (FD-A). Pink. 50c each.
VICTORY (FD-A). Pink. 50c each.
VIRGINIA RUTE (SC-B). \$1.00 each.
WHITE FAWN (FDM). White. 30c each.



Spray Guide

INSECT OR DISEASE	DESCRIPTION	MATERIAL TO USE (See List)	WHEN TO APPLY
Ants	Sweet or grease eating.	Magikill—J	When ants appear.
Aphis	Small green, red or hlack lice feeding on the tender terminal growth of many plants.	C—E—X	When pests first appear. Wet insects tho oughly. Repeat as necessary.
Asparagus Beetles	Olive colored, hoth adults and grub like larvae.	A-E-N-S-X	When gruhs first appear, preferably whe plants are wet with dew.
Bag Worm	Builds ½-inch to 2-inch tapering bag-weh.	A—M—P—X	When insects first appear or when evidence of feeding is observed. Repeat as neede
Bean Beetles	Copper-colored beetles with eight hlack spots. Yellow larvae, which also devour leaves.	E—K—M—N—S	When pests first appear.
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 at 10 to 15 inches long. Just after blosson fall.
Blights	Bacterial disease that attacks young shoots and leaves, cansing brown or black spots and sudden wilting.	B—F—Q—T—Y	Make first application when growth starts spring. Repeat weekly until plants sta hlooming.
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	Pale green-white, striped caterpillar. Don- hles or loops as it crawls.	A—E—N—S—X	When larvae first appear.
Caterpillars	Wooly or naked. Feed on leaves.		When insects first appear or when evidence is observed. Repeat as needed.
Celery Leaf Tler	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—D—S Corn Earworm Drops	Apply to silk when it first shows through tips of each ear. Repeat two or three tim within week.
Cucumber Beetles	Yellow and black striped.	A—E—I—S—X	When vines begin to run. Repeat at fr quent intervals.
ut-Worms	Destroy plants by cutting stems.	Snarol	When first appear.
amping Off	Causes plants to snddenly wilt as though rotted at the ground level.	Semesan Formaldehyde	Treat seed or soil.
owny Mildew	White, down mold on pods of lima bean, or nnder side of melon leaves.	B—F—S	At weekly intervals.
lea-beetles	Extremely small black beetles on blades of grass.	J	During warm weather.
Grape Berry Moth	Lays eggs from which small worm develops in fruit.	E—S	Just after blossoms fall. Repeat at month intervals until July.
rubs	White or colored larvae.	A—D—J	Apply to soil, Fall or Spring.
orn (Tomato) Worm	as Large green worms.	A—E—N	When bngs or worms first appear.
apanese Beetles	Bronzy-green about % inch long.	J	When first appear.
eaf Beetles	Yellow beetles with twelve spots on wings.	A-E-N-S-X	When pests first appear. Repeat at week intervals.
eaf Hoppers	Small greenish insects that suck plant juices.	C-E-N-X	When pests first appear. Repeat as necessary.
eaf Spot	Fungus disease causing brown spots on leaves.	B—F—Q	Repeat at intervals.
lealy Bug	White, cottony appearance.	E—V	Every few days nntil nnder control.
lites	Very small sncking insects on azaleas, Holly, etc.	Н	Protect new growth and repeat as necessar
otato Bug or lister Beetles	Gray, black or striped beetles np to % inch long.	A—D—P—X	Spray or dust plants as soon as they bre through and every ten days thereafter.
owdery Mlldew	White growth on leaves.	B—F—Q	When white growth makes its appearan
ed Spiders	Small mites that feed on foliage, causing it to assume a rusty appearance.	H—V	When pests first appear; on strawberry to Strawberry Dust (85-15).
lose Beetle	Long-legged clay-colored beetles on roses and peonies.	A—E—S—X	When pests first appear. Repeat at weel intervals.
lust	Orange-colored pustules (fungus) in streaks or patches on leaves or stems.	B—Q—V	When first appears, or early and weekly a preventative.
cale	Attacks bark of tree.	L—R	As late dormant spray.
pittle Bug	Bug surrounded by foamy substance.	D-C-E-J	When first appear. Spray must penetra foam, repeat as necessary.
hrips	Tiny winged or wingless insects that rasp leaves and suck juices from plants.	D-C-E-X	When pests first appear. Repeat as nec sary.
Vhite Flies	Small whitish flies. In larval stage, tiny, scale-like, greenish objects.	E-0-V	When pests first appear. Repeat as nec sary.

LIST OF MATERIALS INDICATED IN ABOVE CHART

A—Arsenate of Lead.
B—Bordeaux, Kopper King.
C—Black Leaf 40. C-Black Leaf 40.
D-DDT.
E-D-X, Red Arrow, Evergreen.
F-Dusting Sulphur, Fungtrogen.
G-Grape Dust.
H-Kilmite.

I-Cucumber-Mellon Dust J-Chlordane. J-Chlordane.
K-Kryacide.
L-Lime and Sulphur Solution.
M-Garden Guard.
N-*Rotenone Dust.
O-*Fish Oil Soap.
P-Paris Green, Red River Potato Mix

Q—Sulfocide.

R—Scalecide.

S—*Sing Shot.

T—Tomato Dust.

V—Volck, Emo.

X—Nicotine-Pyrox. Y-Dithane.

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 Shafer, 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.

INSECTICIDES



ALL ROUND SPRAY

For roses, azaleas, shrubs, vegetables, vines, other flowers. A carefully formulated multi-purpose product designed to provide protection against both insects and fungi such as rose chafer, azalea flower spot, thrip, black spot, downy

mildews, leaf spot, many rusts, aphis, cabbage worm and many others. For dusting as well as spraying. Lb. \$1.10; 4 lbs., \$3.50.

ANTROL SET Set 40o Individual feeders Bach 100 ANTROL SYRUP 4-oz. bottle 200



ANTROL SPRAY (Chlordane) with sprayer. 89c pint; \$1.19 qt.

ANTROL ANT TRAPS 25c Each X-THA 250 Bach ANT-X JELLY 1 os., 350 MAGIETLL JELLY 1 oz., 400; 3 oz., \$1.00



ACKE ARSENATE LEAD = 3 == A POISON A

ARSENATE OF

(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., 65c; 4-lb., \$1.80.

ARSENITE OF ZINC (1 lb. makes 50 gals.)

Ranks next to Paris Green in strength. It has gained consider-able popularity in cer-tain sections for use on potatoes and other hardy ground crops to destroy chewing in-sects, Mixes well with sects. Mixes well with Lime Sulphur solution



which is used to combat psyllid on potatoes. 1 lb., 40o; 4 lbs., \$1.15.

BENZO-PUME POWDER PRESSURE PUMIGATORS

Especially recommended for control of greenhouse red spider. ½ lb. size for 5,000 cubic feet of air space.

50c ea.; 12 for \$3.20

75c ea.; 12 for \$5.50

"BLACK LEAP 40" (1 oz. makes 6 gallons)

Oz., 360; 5 ozs., \$1.05; 1 lb., \$2.42; 2 lbs., \$4.15; 5 lbs., \$7.40; 10 lbs. \$12.65.

BORDEAUX MIXTURE

(1 to 2 lbs. makes 121/2 gallons)

Prevents large losses caused by blight, rot, mildew, scab, anthracnose and certain other fungous diseases. It nose and certain of fungous diseases. It stimulates plant growth and greatly increases the harvests. 1 lb., 50c; 4 lbs., \$1.35.



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. Recom-

mended to combat chewing insects on potatoes, vegetables, cotton and certain fruit trees. 1 lb., 35c; 4 lb., \$1.00.

CARBOLA-WITH LINDANE

Carbola applied to the walls, ceilings, partitions, nests, etc., of your poultry houses will help to prevent contagious diseases among your flock. 5 lbs., 85c; 10 lbs., \$1.35; 50 lbs., \$5.50.

CARBOLINEUM-AMERICA

Kills chicken mites and blue bugs in poultry houses, makes wood Ter-mite proof and Stops Rots. Gal. \$2.15.

CARBON DI-SULPHIDE

For control of insects in grain; 1 qt. per 100 bu. Qt., 65c; gal. (approx. 101/4 lbs.), \$2.00



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., 90c.

5% CHLORDANE DUST Do not use on food crops 1 lb. canister, 40c; 5 lbs., 75c.

> 40% CHLORDANE (Wettable Powder) 4 lb., bag, \$2.85.

46% CHLORDANE EMULSION Quart, \$2.50.

> 6% CHLORDANE DUST 1 lb., 65c; 4 lb., \$1.50.

SYNKLOR 48-E

½ pt., \$1.25; gal., \$8.00.

COPPER ARSENATE (Basic) 4 lbs., \$2.00

COPPER DUST

Duo-copper 7%-5 lbs., 85c; 50 lb. bag, \$5.00

COPPER SULPHATE (Blue Stone)

Powdered: 30c 1b.; 5 1bs., \$1.15; 10 1bs., \$2.00.

CORN EAR WORM DROPS (2 ozs. treats 100 ears)

2 oz., 35c; quart, 85c.

CROW REPELLENT

NO-CROW—Treat corn and other seeds to repel crows, birds, moles, etc. Economical and easy to use. Liquid, ½ pt., 500; pt., \$1.00.

CUCUMBER-MELON DUST

1% Rotenone, 3.9% Zineb Lb., 50c; 5 lbs., \$1.50; 50 lbs., \$10.50







CYANOGAS ANT KILLER—A gas-producing powder. 4-oz. spout can is enough to treat ant nests in average lawn. 40c.

CYANOGAS A-DUST — Kills rats, moles, woodchucks (groundhogs) and other rodents instantly. "It's the gas that kills 'em." 1 lb., \$1.00; 5 lbs., \$3.85.

CYANOGAS G-PUMIGANT — Most widely used greenhouse insecticide. Regular use insures insect-free house all season. 5 lbs., \$3.85; 25 lbs., \$12.90.

D.D.T. (Liquid)

30% - pt., \$1.00; qt., \$1.85; gal., \$4.75.

Wettable Powder 50% D.D.T. (Garden). One tablespoon makes 1 gallon. 1 lb., 75c; 4 lbs., \$2.35.

D.D.T. (Dust)

10%-Lb., 40c; 50 lb. bag, \$7.50.

5% D.D.T. DUST 5 lbs., 85c; 50 lbs., \$5.00.

DDT HOUSEHOLD SPRAY 5% Qt., 65c; gal., \$1.80.

DE-K-PRUP

A compound that makes wood and fabrics immune to attack against 400 sq. ft. wood, 20 lbs. fabric. Color, green. Gal., \$2.85; 5 gallons, \$13.50. mildew, rot, termites and other wood destroying insects. One gallon covers

DIMITE .

2 oz., 70c; Quart \$5.00.

Dusting and Spraying Materials



DU PONT DORMANT SPRAY OIL 1 qt. makes 18 gal., \$1.15.

DU PONT FERMATE FUNGICIDE 8 oz., makes 20 to 38 gal., 75c; 3 lb., \$2.25.

DU PONT FLORAL DUST 8 oz., 79c; 1 lb., \$1.15; 3 lb., \$2.65.

DII PONT FRUIT TREE SPRAY 1 lb. makes 13 gal., \$1.15; 3 lb. makes 39 gal., \$2.75.

DU PONT FUNGICIDE-A (Parzate) 6 oz. makes 20 gal., 85c.

DU PONT 50% METHOXYCHLOR (Marlate)

(Wide range—low toxidity) 8 oz. makes 15 to 32 gal., 75c; 4 lb., \$3.40.

DU PONT ROSE DUST 8 oz. Dust Gun, 69c; 1 lb. Canister, \$1.00.

DU PONT TOMATO DUST As Spray, 2 lb. makes 10 gallon. 8 oz. Dust Gun, 69c; 2 lb. Bag, 85c.

DU PONT VEGETABLE GARDEN DUST

8 oz. Dust Gun, 79c; 1 lb. Canister, \$1.15; 3 lb. Bag, \$2.65.

SEED DISINFECTANTS

ARASAN — For dry application to prevent seed decay and damping off of corn, peanuts, sorghum, vegetables, grains and legumes.
34 02., 25c; 8 02., \$1.00; 2 lbs., \$3.20.

SEMESAN — For vegetable and flower seeds. One ounce to 15 to 30 lbs. seed. 1/3 oz., 20c; 2 oz., 60c; 12 oz., \$2.85.

SEMESAN, JR.—For corn. 2 ounces to 1 bushel corn. 12 oz., 62c.

SEMESAN BEL.—For potatoes. 1 lb. to 60-80 bu. potatoes. 2 oz., 50c; 1 lb., \$2.30; 4 lbs., \$7.50.

CERESAN (New Improved) — For wheat. 1/2 oz. for 1 bu. seed. 4 oz., 50c; 1b., \$1.30; 4 lbs., \$4.35.

CERESAN M. For small grains and peas. 14 oz., \$1.25; 3 lb., \$3.55.

DITHANE Z-78

A versatile fungicide that can be used as spray or dust on potatoes, tomatoes, celery, cantaloupes, cucumbers, beans, azaleas, gladiolus and for the control of blue mold on tobacco seedlings. 3 lb. pkg., \$3.00.

DOG REPELLENTS

CHAPERONE, 4 oz., 60c; 12 oz., \$1.25; qt., \$3.00.

DOG CHECK. 3 oz., 60c; 8 oz., \$1.00.

DOG SKAT. 4" tube. Hang on trees or shrubs. The odor does the work. Dogs and cats hate it. 50c ea.; 6 for \$2.50.

DOGZOFF. 3 oz., 60c.

FUMEOGEN. 8 oz., 50c.

REPELLENT ROPE. Emits odor repugnant to wide range of animals. Non-poisonous, non-injurious to hands and harmless to pets. Protect vegetable gardens by placing rope on ground around entire garden. Circle flower beds and shrubs. Protect bulbs by burying the rope in 3 inch trench around the bed. 100 ft., \$1.50.

(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, vege-tables and flowers. 1 oz., 35c; ½ pt., \$1.75; qt., \$5.50; gal., \$14.50.

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 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.

EMO-NIK (1 pt. makes 121/2 gallons)

Complete contact spray combining nicotine in its most active form with Emo a summer oil emulsion. 4½ oz., 45c; pt., 90c; qt., \$1.40.





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.

PISH OIL SOAP

Keeps trees, plants and vines clean and healthy, effectively controlling sucking insects and many forms of scale. 1 lb., 45c; 5 lbs., \$1.75.

ACME SPRAY SOAP-1 1b., 45c.

PORMACIDE PORMALDEHYDE DUST

Is a seed and soil treating comnound 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.

FRUIT SPRAY OR DUST

1 lb. makes 6 gallons

Contains Methoxychlor, Ferbam, D.D.T. and Sulphur. Controls insects and diseases. 2 1b., \$1.25.



An effective and scientific preven-An elective 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. ½ pt., 75c; pt., \$1.25; qt., \$2.00.

GARDEN AND ROSE DUST

An all-purpose product for controlling the majority of sucking and chewing insects and fungus diseases on all flowers and vegetables-especially effective on roses. 1b. Dust Gun, \$1.35;2 lb. Canister, \$1.65.



GRAPE DUST

A readily diffusible, lightweight powder fungicide, very efficient in destroying mildews and preventing blights. 1 lb., 40c; 5 lbs., \$1.50.



KILMITE (20% TEPP)

Tetra-ethyl-pyrophosphate; kills 17year locust. Controls red spider and Azalea mites. 2 teaspoons per gal. water. 4 oz., 60c; 1 qt., \$4.50; gal., \$12.50.



KOPPER KING

(1 to 2 lbs, makes 50 gals.) (Basio Copper Sulphate) 1 lb., 75c; 4 lbs., \$2.00.

Dusting and Spraying Materials (Continued)

KRYOCIDE D-50. Dust mixture containing suiphur. 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. 3 lbs., 90c.

LIME AND SULPHUR SOLUTION 1 gal, 95c; 5 gal, \$3.25.

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., 60c; 12½ lbs., \$3.85.



LINDANE INDUSTRIAL

Pt., 50c; qt., 85c.

LINDANE 25% WETTABLE 1 lb. makes 50 to 100 gal., \$4.00.

LINDANE SPRAY 5%

Controls most ail common insects 3 Controls most all common insects a ways—when eaten—by contact—by fumes; protects foliage and flowers indoors and out (non-discoloring). Recommended as a safe residual spray for fly control. 4 oz. (makes 6 gal.), 80c; pt., \$2.70.

MAGNESIUM ARSENATE

Dust Mixture. 4 lb., pkg., 60c; 100 lbs., 312.00.

MARVEL SPRAY

4 oz., \$1.00; ½ pt., \$1.75.

MOLE-NOTS

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, Harmiess to soil or grass. ½ 1b., 50c; 1½ 1bs., \$1.25.

"NICO-FUME" POWDER PRESSURE-PUMIGATOR

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 1b., 55c ea., 6—\$2.80, 12—\$4.60 1 1b., 85o ea., 6—\$4.60, 12—\$7.95

ORTAZOL POWDER (Dinitro)

Use in the dormant period to control aphis 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

ACME PARIS GREEN POISON & ---

(1 lb. makes 30 gal.) A rich, emeraid color and of fine fluffy physical character. Containing 55% arsenious oxide, it will give quickest control where extreme measures are necessary.

1/4 1b., 25c; 1 1b., 75c; 5 1bs., \$3.35.

PEACH BORER CONTROLS PARA-SCALECIDE

(1 galion to 7 gallons water) (Use 1 pint solution to each three-year-old tree.)

Is effective and safe on young or old trees. Qt., \$1.45; gal., \$3.25.

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., 50c; 5 lbs., \$2.00; 25 lbs., \$7.50; 100 lbs., \$24.00.

PARATHION DUST 1%

Excellent control for wide variety of insects. Kilis quickly with no harmful residue. Very dangerous harmful residue. Very dangerous however to humans and animals when being applied -use only with protecting mask. 100 lbs., \$8.45.

PESTEX (Pest Repellent)

Does not kill but repels dogs, rabbits, squirrels, moles, rats, mice, stariings, pigeons, crows, etc. 2 lbs.,

PHYGON (Wettable)

A fungicide for the control of all Leaf Blights and Fruit Rot of Tomatoes, Black Spots of Roses, Apple Scab and many other plant diseases caused by fungi. A seed protectant to be dusted on Beets, Tomatoes, Spinach, Swiss Chard, Peppers and other seeds, before planting to prevent decay and "damping-off." 41/2 oz., \$1.00.

POMO-GREEN

With Nicotine-1 lb., \$1.00.

PRUNING PAINT

Hammonds, ½ pt., 65c.

PYROX (With Nicotine)

It not only kilis leaf-chewing in-sects, prevents blight and other dis-eases, but it also kills sucking in-sects, such as aphis, thrips, and leafhoppers. 20 oz., 60c; 5 lbs., \$2.25; 25 lbs., \$8.50; 50 lbs., \$13.50.

RED ARROW

1 oz. makes 8 gal.

Economical and efficient spray, non-poisonous, will not injure biossoms, foliage or fruit; positive death to almost all types of insects. 1 oz., 35c; 4 oz., \$1.00; 1 pt., \$2.85; qt., \$5.00; gal., \$18.20.

RED RIVER POTATO MIX

WITH D.D.T. (Special Formula for Potatoes Only)



(1 to 11/2 lbs. makes 121/2 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, 80c; 4-lb. bag, \$2.60.

ROSE DUST

Controls insects and diseases. 1 lb., 60c; 5 lbs., \$1.85.

ROSE SPRAY

Lindane-Rotenone Aerosol 12 oz., \$1.69.

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 %% 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. 1 lb., 25c; 5 lbs., 85c; 50 lbs., \$4.85.

1% Rotenone — 50 lbs., \$5.75; (Tubacide) with sulphur, 50 lbs., \$6.00. Let us quote larger quantities.

ROTENONE GARDEN GUARD

(1 lb. makes 10 gailons as spray, 15 to 25 lbs. per acre as dust.) 1-lb. sifter carton 50c; 4-lb. bag, \$1.00.



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.

SCALE-TOX

Dormant spray, miscible oil-Qt., 60c; gal., \$1.35; 5 gal., \$7.00.

SCALECIDE (1 gallon to 15 gallons water.) Qt., \$1.15; gal., \$2.75.

5 gals., \$9.30; 15 gals., \$22.00; 30 gals., \$35.60; 55 gals., \$53.00.

SELOCIDE

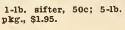
1 galion makes 100 to 400 gallons. Kiiis Red Spider. Gal. \$3.00.

SLUG SHOT

Guaranteed to destroy potato bugs, cabbage worms, lice, fleas, beetles, striped bugs, etc., on currants, egg piants, meions, turnips, beets, etc.; canker worms and caterpillars on fruit and orna-mental trees.

OMPLETE

DORMANT SPRAY





Dusting and Spraying Materials (Continued)

SNAROL



Sure death to snails and slugs. Harmless to vegetation, not affected by rain or sprinkling. 1 1b. 35c; 2½ 1b., 75c; 6 lb., \$1.65; 50 lbs., \$10.75.

SNAROL CUTWORM BAIT

Contains toxaphene. 1 lb., 50c; 6 lbs., \$2.00; 50 lbs., \$13.00.

SPERGON

A seed protectant in powder form to be applied to seed before planting to prevent seed decay and "dampingoff," particularly in cold wet weather. Recommended for Peas, Beans, Lima Beans, Corn. It is easy to apply to the seed and non-injurious to the user. 1 oz., 25c; 5 oz., \$1.00; 1 lb., \$2.25.

GLADIOLUS DUST

2 oz., 25c; 1 lb., \$1.50.

STRAWBERRY DUST

Repels red spiders, stops clippers cutting off the blossoms. 10 lbs., \$1.85; 25 lbs., \$3.00; 100 lbs., \$8.50.

SULFOCIDE

(1 quart to 50 gallons

Sulfocide is a highly concentrated non-poisonous liquid sulphur fungicide—entirely distinct from lime at 150.

Pt., \$1.00; qt., \$1.50; gal., \$3.00; 5 gals., \$9.75; 15 gals., \$24.00; \$42.00; 55 30 gals., gals., \$70.00.



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. \$2.00.



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, 59c. Recommended to con-

SULPHUR

Commercial Flour of Sulphur. 10 lbs., 75c; 25 lbs., \$1.50; 100 lbs., \$4.50. Superfine Dusting Sulphur. 10 lbs., 75c; 25 lbs., \$1.50; 50 lbs., \$2.75.

> SULPHUR (DRITOMIO) 5-1b. bags, 75c.

TEROGEN

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 aphis, fleas, beetles, etc. 1 lb., 10c; 10 lbs., 50c; 100 lbs.,



TOMATO DUST ACME

1-lb. sifter top, 60c. 4-lb. bag, \$1.50. PRATT'S 1-lb. sifter, 45c. 5-lbs., \$1.25. D1-C7 1% DDT-7% Copper 5 lbs., 75c; 50 lbs.,

\$5.50.

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.,

TRI-OGEN

(Contains FERMATE)

"Three Way" plant treatment. Insecticide protection against chewing and sucking insects; fungicide protection against powdery mildew and black spot; plus plant stimulants. Especially recommended for Roses, Asters, Snapdragons, Chrysanthemums, and many other plants including vegetable garden produce.

E Economy Kit (makes 8 qts.) \$1.50 A Small Kit (makes 16 qts.).. 2.35 B Medium Kit (makes 64 qts.). 6.00 C Large Kit (makes 32 gal.) ... 9.00

TRI-OGEN DUST General purpose three-way insecticide-fungicide dust. 5 lbs., \$5.00.

VEGETABLE DUST OR SPRAY (Pratt's)

Combined insecticide and fungicide containing rotenone and copper. Effective and safe. 1 lb., 75c; 3 lbs.,

VOLCE 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., \$9.95.

Weed Killers

CRAG HERBICIDE 1

At rate of 2 to 3 lbs. per acre (mineral soils), 5 to 6 lbs. per acre (organic soils) it kills weed seeds in the process of germination. Controls such weeds as chickweed, purslane, carpetweed; and crabgrass, for periods of two to four weeks depending upon climatic conditions. Harmless to foliage. 8 oz., \$1.65; 2 lbs., \$5.00.

DUPONT AMMATE

Poison ivy weed killer. 1 lb. to 1 gal. water treats 100 sq. ft. 2 lbs., \$1.00; 6 lbs., \$2.70.

наммоноз WEED KILLER

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-Qt., 90c; gal., \$2.40.

BARWEED

A 2.4-D weed killer and when applied to weed foliage kills the plant by starvation without harming common grasses. Economical and easy to use.

8 oz. makes 8 gal. treats 1600 sq. ft., 75c.

WEEDONE (New Improved)

Contains powerful 2, 4, 5-T and 2, 4-D, the two most effective chemicals for killing lawn weeds, poison ivy, poison oak, honeysuckle and over 90 other weeds and woody plants without killing the grass. Non poisonous to animals or humans. Prevents resprouting of tree stumps. 8 oz., \$1.00; 1 qt., \$2.75; 1 gal., \$6.95; 5 gal., \$25,00.

Weedone Sprayer59c ea.

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.

WEEDONE BRUSH KILLER 32

Kills a greater range of weeds and woody plants than either 2, 4-D or 2, 4, 5-T spray used alone. No vapor injury to nearby susceptible crops. Prevents re-sprouting of stumps. 1 qt., \$3.95; 1 gal., \$8.70; 5 gals., \$41.25.

WEEDONE Concentrate 48

economical formula for hard-to-kill weeds. It is soluble in water for ground spraying and miscible with oil for airplane spraying. Gal., \$5.63; 5 gal., \$26.90.

P. C. CRAB GRASS AND CHICK WEED KILLERS

Crab-Nott (Standard) 86%. 4 oz., \$1.00; 16 oz., \$2.95; 6 lbs., \$10.95. (Special — containing 2,4-D). 4 oz., \$1.25; 16 oz., \$3.50; 6 lbs., \$12.50. Weedone (46% Potassium - Cynate). 6½ oz., \$1.00; 26 oz., \$3.00; 6½ lbs., \$3.85

Millers (76% Potassium-Cynate). 16 oz., \$2.20; 4 lbs., \$8.00.



Sprayers



14G

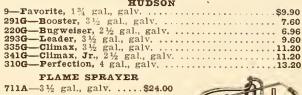




No pumping, at-taches to water hose. One filling sprays 3 gallons. \$5.95.



711A



HUDSON

BROWN OPEN-HED

68**D**—3 gal., galv.\$12.30 64D-4 gal., galv. 13.75



Champion No. 1—All brass 4 4 gal.\$31.78 4 ¼ gal.\$31.78 347G—Du-More, (Knap-sack) 4 gal., galv...\$32.40



SINGLE ACTION
222—Vapor, pint, tin
403—Master Fog, quart, tin
3G—Smith, quart, galv. .70 1.15 205—Bantam, 5 oz., glass. 26S—Lowell, 8 oz., tin 409—Rapid, 2 qt. tin. .29 No. 12—G.S. Junior

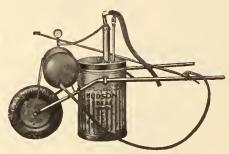


HAYES-ETTE \$3.45



CONTINUOUS SPRAYERS

428—Critic, 24 oz., Glass\$1.90
447—Eclipse, 1 qt., Stainless Steel 4.00
431—Comet, quart, tin
433—Mercury, quart, tin
436—Cardinal, 3 qt., galv 2.00
26BG—Brown, 1 qt., tin, glass jar
14Q—Blizzard, 1 qt., copper
8P—Bronx, 1 pt. glass bottle
8Q—Bronx, 1 qt. glass bottle
560—Chapin, 24 ounce glass jar



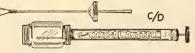
HUDSON IDEAL

SPRAYER

HUDSON POWER SPRAYER

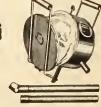
No. 1044H—Defender—15 gallon heavy gauge, galvanized steel tank with open top, drain plug in bottom of tank. 1½ g.p.m. discharge. 0 to 250 pound pressure gauge. 1 h.p. engine. Cushion tired wheel. 16" x 2" overall. Positive piston pump, mechanical and over-flow agitation. Rugged frame of steel pipe. 10 feet of % inch Kem-Oil (oil- and chemical-proof) spray hose and adjustable spray

Dusters



BROWNS CRYSTAL

No. 806B-Capacity 12 to 25 lbs. Stauffer Knapsack. Hopper ca-



No. 103

1.30 Browns Crystal ...

FLAT-PAR PLANT POROBR

, ELECTRIC SEED BED HEATER

SEED UP IN 30 HOURS ROOT CUTTINGS IN 6 DAYS CUT GERMINATION TIME BY 2/3 TRANSPLANT 2 WEEKS SOONER

Above user reports show what Gro-Quick soil coble will do. 6 coble sizes for 1 flot to large beds. New cotalag, plans free. For hat-beds, cold frames, greenhouse benches, flots, cabinets. Uses house current. J40A 40' cable & thermo. for 1 sash

S80A for double sash bed (36 sq. ft.)

AT-AIR THERMOSTAT\$4.50 AUTOMATIC MICRO SWITCH \$3.00

HOT BED GLASS 1 Box will glaze 3 sash. Size 8 x 10; 90 panes, \$6.50; Size 10 x 12; 60 90 panes, \$ panes, \$6.50.

PEERLESS GLAZING POINTS Pound box, 85c.

TWEMLOW'S OLD ENGLISH GLAZING PUTTY Semi-Liquid

For bedding glass in sash and fill-ing cracks or seams in roof joints or frames of greenhouses or hotbeds. 16-pound can (1 gal. capacity), \$4.00

CAULKING COMPOUND
Gun type, Grey, \$3.50 gal.; White,
\$3.65 gal.

CAULKING GUN
Model D1—Barrel size 9½ x 2½ in.
Capacity, one pint. ½ in. nozzle,
ratchet rod, breech cap., \$4.50.

FOR applying liquid Putty to sash or greenhouses. 12-oz. size, \$1.25.

SPRAY BULBS Centrospray, 12 oz.....\$1.75

> PENCE RODS \$1.75 doz.

TONKIN CANES
6 ft., 5%" to 3%" dia., 20c ea.; \$2.00 doz.; \$15.00 per 100.

BAMBOO PLANT STAKES
2 ft. Light 20c per doz.; \$1.00 per 100
3 ft. Light 25c per doz.; \$1.35 per 100 4 ft. Light 30c per doz.; \$1.75 per 100

HYACINTH STAKES—Green 18 in., 80c 100; \$4.75 per 1,000.

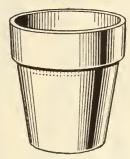
PLANT PROPS

16" 70c doz.; 30", \$1.60 doz.; 42", \$1.90 doz.; 66", \$3.10 doz.; 78", \$4.30 doz.

WOOD STAKES
3 ft. Green 6c ea.; \$5.00 per 100



PLOWER POTS



A complete line of regular pots, azalea pots, bulb pans and saucers. Size given indicates top diameter.

				S	auc.
Size	Ea.	Doz.	100	1000 E	ach
2 "	\$.03 \$.30	\$ 2.10	\$16.75	\$
2 1/2"	.04	.40	2.60	20.45	
3 "	.05	.50	3.25	26.00	.04
4 "	.07	.70	5.15	41.00	.05
5 "	.12	1.25	9.30		.07
6 "	.18	1.85	14.00		.10
7 "	.27	2.75	21.00		.15
8 "	.38	3.75	30.25		.20
9 "	.60	6.00			.25
10 "	.80	7.90			.40
12 "	1.45	14.50			.60

NEPONSET FLOWER POTS

Red Shipping per 100 per 1000 Dia. in. \$... \$ 8.60 8.60 1.20 8.70 9.15 in. 1.30 3 1/2 in. 2.00 14.70 18.15 in. in. 3.00 22.25 Let us quote Vita Pots

PLOWER BOXES



Green, 7½" wide and 5¾ inches deep. 20 in., \$3.25; 26 in., \$3.75; 32 in., \$4.25.

WINDOX BOX STANDS 32 in., \$5.50; 44 in., \$6.00.

GALVANIZED WATERING POTS 8 qt.\$2.50 10 qt.\$2.75

WOODEN LABELS

Painted $3\frac{1}{2}$ in. $x\frac{5}{8}$ in. Copper Wired.. ...\$4.20 4 in.x % in. Wide, Pot, per 1000... 3.25 5 in.x % in. Wide, Pot, per 1000... 3.60 6 in.x % in. Wide, Pot, per 1000... 4.00 8 in.x % in. Wide, Pot, per 1000... 6.00

Prices, per 100 — 3½ to 6 in., 65c; 8 in., 85c; 10 in., \$1.25; 12 in., \$1.75.



No. 1 Kit. Consists of 24 labels, 1 oz. etchant, one applicator. 95c.





WATERPROOF PLANT BANDS (Fertilized)

Ready-to-use Plant Bands.

		BAND 10	
2x2x2½	in	.100, \$.60;	1000, \$4.40
21/2×21/2×	3 in	.100, .80;	2000, 11.70
3x3x3 ir	1	.100, .95;	1000, 6.75
4x4x3 in	a	.100, 1.20;	1000, 8.85
4x4x4 ir	1	.100, 1.65;	1000, 11.10

VITA	A E	BA:	N.	D	1)	C	D	s	in	te	egrati	ng)
2x2x21/2	11	1.										.2000	\$9.10
21/2×21/2	x3	in										.2000	11.90
3x3x3 i	n.											.1000	6.90
4x4x4 i	n.											.1000	11.45

PE	RENNIAL	POTS
Height	Top Dia.	Per 1000
5 1/2 "	5"	\$36.50
6 1/2 "	6"	51.50
0.14 "	7"	62.85

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.), \$47.85.

WINDOW SILL SEED FLAT BB22 — Waterproofed plant boxes for starting seedlings and plants in-doors, consisting of a two compart-ment seed starter and two transplant boxes. Set, 29c.

| METAL SEED FLAT | 15x13x2\% | ins. deep. Sub-irrigated, brass drain screw. \(\frac{\partial 2.15}{2.15} \) No. 39E 20x5x2\frac{1}{2}'' \(\frac{\partial 2.15}{2.35} \) No. 40E 20x8x2\frac{1}{2}'' \(\frac{\partial 2.15}{2.35} \)



CEDAR PLANT TUES

(Richmond Style)

Made of Selected Virginia White Cedar, bound with electric welded hoops, painted

No.	Inside Top Dia.	Inside Bot. Dia.	Inside Depth	
5	10	7 1/2	9	\$1.65
7	12	9	11	2.40
9	14	11	13	3.35
11	16	1232	15	4.15
13	18	14 1/2	17	5.75



WATER HOSE



PLOWLINER. $\frac{5}{8}$ in, 1 braid, 25 ft. lengths, \$3.85; 50 ft. lengths, \$5.85. (Couplings included.)

MAINLINER. 5% in. 2 braid, 25 ft. \$4.75; 50 ft., \$9.85 (Couplings included.)

SURPRISE. ¼ in. 2 braid, black, smooth, 50 ft. lengths, \$12.75. (Couplings included.)

SUPPLEX LP. (Green). Plastic; tested under all climatic conditions and guaranteed for five years. 25 ft., \$4.65; 50 ft., \$7.95; 75 ft., \$11.75.

SPRAY HOSE. 3% inch, 25c per ft.



HOSE NOZZLES

161	.\$1.05	155\$1.25	
139—Shut	off nozzle	\$2.75	



OK-Trim Electric Hedge Trimmer \$16.75



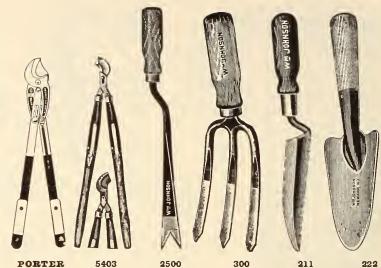
GRAFTING WAX

Trowbridge Brand. 1/4 lb., 40c; 1/2 lb., 60c; lb., 90c.

PRUIT PICKER — Without pole, 85c.

MOLE TRAPS

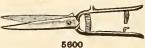
200 Roddick (Illus.) \$2.00



PORTER	5403	2500
LOPP	ING SHEAT	RS
PORTER P		
inch steel han	dles, adjus	table draw-
cut		\$7.50
5406-20-in. ho	il	4.85
5403-22-in. hc		
illustrated .		8.85
528-27-in. Ste		
	RAGUS KNI	
2500J-Short h		
	GUS BUNG	
No. 2		
Handy		15.00
	RMOMETE	
5140-7½ in. in.	idoor, maroc	n lac. \$1.00
5126-6 in. i		
5316-8 in. c	utdoor, whi	
anamal		1 25



•	
A-3 Tines, 94 in, handle\$.20
B-3 Tines, 18-in, handle	.35
BB-3 Tines, 33-in, handle	.50
C-4 Tines, 10-in, handle	.35
D-4 Tines, 101/4-in, handle with	
square blade	.50
E-4 Tines, 101/4-in, handle with	
"V" blade	.50
SL-12-V shaped cutting edge	.50
3½ ft. handle	.75
G-4 Tines, 57-in. handle	1.75
H-4 Tines, 38-in. handle with	7 05
square blade	1.85
K-4 Tines, 48-in. handle with	
"V" blade	1.85
GRASS SHEARS	
11	



Miracle	
Snip-Itt	\$1.60
Standard	2.10
	Miracle Snip-Itt

	milita of o	-
Doo-Klip	Snip-Itt	\$1.60
Doo-Klip,	Standard	2.10
5600 (Wis	ss), Illustrated.	2.50
	long handle	
	ong handle	
	COBN KNIVE	S
Little Gia	CORN KNIVE	S \$.55
Little Gia	COBN KNIVE	S \$.55
Little Gia	nt	S \$.55 \$5
Little Gia Cumberlar Black Dia	corn knive nt nd Valley mond	S\$.55 \$.60
Little Gia Cumberlar Black Dia	nt	S\$.55 \$.60



HOLE-IN-ONE TOOL \$1.00

HAND	GARDEN	FORKS	
	Long hdl.		

GARDEN TROWELS	
217J-6 in. Transplanting	
215J—6 in. Steel Blade	
222J —5½ in. Strawberry	 .30



10 ft 5.00
12 ft 5.50
PRUNING HOOKS
Without Pole
111—Telephone\$3.85
166-Pruning shear
and hook 3.40
167—Pruning, curved
saw, shear and
hook 4.50
168—Pruning straight
saw, shear and
hook 4.50
HEDGE SHEARS
HEDGE SHEARS
0

8 ft.\$4.50

	1 20074
Doo-Klip-9 in	.\$4.25
3½ E (Wiss) 8½ in	. 4.75
K100 —9 in	. 4.00
P406—8 in 10 in	
¥555—Lewis	
10 in	. 4.25

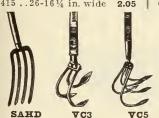
	PR.										
118-18											
162—20 165—10											
		•									



615—(Flower) 6½ in, cuts and	
holds stem in one operation\$2	2.75
908-(Wiss) 8 in. Anvil 2	
119-Snap Cut, 8 in, Anvil 2	
P115—Heavy Duty	
2110 Hoavy Daty	

119











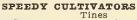


SPADING FORKS

		$-\mathbf{F}$	at T	ines	3
SAHI	· · · ·		4-11	in.	\$3.35
#001			4-11	in.	2.65
#002	long		4-11	in.	2.65

VICTORY CULTIVATOR

				_		Ī				Tines	
											\$1.75
VC5 #152											2.00
# 192.	.0	•	•	•	•	٠	•	٠	٠	0	2.20



Tines	
4SC 4	\$2.05
50 Yoho 4	1.50
51 Yoho 3	1.35
151-4 Gardex 4	2.20

GARDEN HUES	
L5 (Ladies)	
5 in. blade	31.55
RHSG-61/2 in. blade.	
SG-6½ in. blade	
F-6½ in. Yoho	

SHRUBBERY HOE

SL19—1 blade #171 Ga				
mW.C	101770	NG	ĦΛ	TC

TWO	PR	ON	G	HO	ES	
2PWF-						
SL7-318	in.	bla	de		. 1	.9
923-23/4	in.	bla	de		. 1	.60
TET A	DD:	74.17	7.7	0.70	C	

WARREN HOES SL6—4¾ in. blade...\$1.80 W7—4¾ in. blade... 1.95

				- (0	val	Т	ines	S
E8						. 8-	16	in.	\$5.50
									6.00

	. T	mes	
EHDM5	5	-16 in.	\$6.00

	RAPII)	1	H	C):	E		
8	Gardex								\$3.65

CULTIVATOR HOE 932 Gardex\$1.85

SCUFFLE HOE

110-7			7	in.	wide	\$1.95
120-7			7	in.	wide	1.95
121-7				L	adies	1.95
21-5				L	adies	1.85

NURSERY HOES

N 2 ½ — 2 ½	in.	blade	. \$1.80
$5L4-2\frac{1}{2}$	in.	blade.	. 1.80

ONION HOE

STO7—7									
blade							\$1.	8	5

HAND PLOW

















USGT

SHOVELS

Rd. Pt. Long Hdl.	
R248 Razor Back Sq. Pt. Long Hdl.	\$2.35
HAUL	1.25
No. 2-701 Ingersoll	2.25
S248 Razor Back	2.25
Sq. Pt. "D" Hdl.	
GPD-Snow	1.40
No. 6-956	2.55
Rd. Pt. "D" Hdl.	
FSH-Floral	1.95
R2UD Razor Back	2.25

SPADES GSUD Razor Back "D" Handle \$2.50
GS48 Razor Back
long handle 2.50

CHAMPION POTATO

SCOOP

No. 70—Heavy Wire, "D" handle\$4.15

SIDEWALK SCRAPERS RHSC—7x4½ in. blade\$1.20 SSC—7x6 in. blade... 2.00

WEED CUTTERS

uwsc		٠	•	•	٠									\$1.	6	5
------	--	---	---	---	---	--	--	--	--	--	--	--	--	------	---	---

LAWN EDGER

Te-Bla	de-	-9x4	3/4				\$1.9	95
Planet	Jr.	No.	2	٠	•		2.7	75

GRASS TRIMMERS

USGT	Union			5	31.20
No. 61	N "SW	ing	Cli	p"	1.45

SOIL KNIFE HOE

SL23	•					٠			\$1.60

SNOW PUSHER

.....\$2.25

BROOMS

Palmyra							\$1.15
12B-BAS	SS .						1.25
Stable I	Push	٠				٠	1.25

AXES

Collins, 3 to 4 lbs....\$3.75

MATTOCKS

5 lb., 3½ in. cutter .. \$2.15 (Handles extra)

SNATH or SCYTHE HANDLES

Grass Snath, light...\$3.15 Bush Snath, heavy... 3.45

SCYTHE STONES Darby Creek (Flat) .. \$.35

BRUSH HOOKS

No. 18N-36 in.\$3.00 7N36P-Brush Killer. 2.85

POTATO HOOKS

Tines 4BOL4-6½ in. \$2.25 5BOH5-7½ in. 2.90



GRASS HOOKS

No.	V3					. 5	\$1.1
Lit	tle G:	iant					
L	ong	Hand	dle				1.25
No.	6N-	-Offs	et	Hd	11		.85
	Gum						.65
			_			•	



32"-	34"	Gı	a	S	s		٠		٠		٠		\$2.68
24"-	28"	W	e	e	d								2.65
22"	Bus	sh	۰	٠		٠		٠	۰	۰	۰	٠	2.65

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	Fibreboa	rd Sette	er		\$.95
100	Hotkaps	with	Fibreboa	rd Sette	e r .		3.15
	Hotkaps						
1000	Hotkaps	\$1	18.35 per	1000; 1	0,000, \$1	8.05 per	1000
Fibre	board Se	tter .					.20
Steel	Setter .						1.95

FLYING DISK

Scares birds, dogs, cats and other pests away from the garden. Set of 10-.25c.

TWIST-EMS



B-8 in. box of 100, 25c. D-16 in. box of 100, 50c. 250 foot continuous roll \$1.00. Utility Twist-ems, per 1000, 8 in. \$1.75. 12 in. \$2.75; 16 in. \$3.45.

No.								RU	B	в	EF	t . :	В	A	N	D	s					
8							7_8	in.	x	16	iı	n.,							.8,500	per	lb.	\$2.15
																						2.15
14			 				2	in.	Х	18	iı	1							.3,750	per	lb.	2.15
16			 			2	12	in.	\mathbf{X}	Te	iı	n.,			٠.				.3,000	per	lb.	2.15
2						R	ed	Ty	F	3aı	nd	ls.							.1,600	per	lb.	1.65

Asparagus Tape, 1000 yd. tube \$3.25.

Binder Twine, 5 lb. \$1.65; Bale \$13.80.

Cotton Cord, 3, 4, 6 and 8 ply Lb. 85c; 10 lbs. \$8.00.

Jute Cord, 2 ply, 60c per lb.; 10 lb. \$5.80.

Raffia, Natural color, first quality, 75c lb.

BACK BANDS

351-L50

KNEE PADS

JUDSON. Top quality molded rubber with soft sponge rubber cushion, adjustable straps, nonslip, grips wet or slippery surfaces. For "Every down on the knee job". Pair, \$2.35.

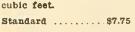
AERIFIER

Loosens and aerates soil under turf without disturbing the turf surface, by actual removal of soil cores. Equipped with hollow spoons properly curved to enter and leave the soil without tearing.

Aeriforke—3 pronged fork type\$.7.7	5
Aerifier-18 revolving forks,	
pushes like lawn mower 35.9	0

GARDEN CART

Light, strong, welded all-steel body, steel axle and wheels with solid rubber tires. 18 in. wide, 27 in. long; capacity 2% cubic feet.





WHEELBARROWS



No. 3. 26 inches long, 19 to 22 inches wide. Sideboards 12 inches high, tread $2\,\%$ in. \$22.50.

No. 3-162. Bed $26\frac{1}{2}$ in. long by $18\frac{1}{4}$ and $23\frac{1}{2}$ in. wide, $10\frac{1}{2}$ in. deep, wheel 16 in. x 2 in. semi-pneumatic tire. \$20.05.



No. M4-22B. Size of tray 37 by 28 in., capacity 4 cubic feet, with 2 ply 4:00 x 8 pneumatic rubber tired wheel, roller bearing.

\$31.05

No. 174 Size of trav 37 by 28 ins.; capacity 4 cubic ft. No. 174 \$19.90



Middy No. 275. Three cubic ft., 10 in. x = 2.75 semipneumatic tire.

\$14.65



WHIZ Home Barrow

3 cu. ft. heaped capacity, tray 32½ in. x 25 in. rein-forced rolled edges, tubularsteel frame, channel steel legs; 10 in. cushion tired wheel protects turf from indenta-tions and permits easy wheeling. Oilite bearings re-quire a minimum of care—no punctures\$15.70

JAX-Delux. Square front-ball bearing. \$15.70.

HANDLES

Axe, 36 in., Bent. \$ 85 Cultivator, Rough, pair 2.00 Hammer, 14 in. 15 Hatchet, 14 in. Bobolink .25 Hay Pork, 4½ ft., with ferrule .90
Hammer, 14 in. .15 Hatchet, 14 in. Bobolink. .25 Hay Pork, 4½ ft., with ferrule .90
Hatchet, 14 in. Bobolink
Hay Fork, 4½ ft., with ferrule
Hay Pork, 6 ft. with ferrule
Hay Fork, No. 38A, 6 ft. with ferrule
Hoe, No. 228, 41/8 ft. socket
Manure Pork, IDL top, heavy, with ferrule 1.25
Manure Fork, No. 102A, 4½ ft. with ferrule 1.00
Mattock, 36 in. Natural, Bobolink
Plow, Rough, pair 2.25
Rake, 6 ft., with ferrule
Rake, No. 331, 51/2 ft
Shovel, 4½ ft., single bend
Shovel, 4½ ft., double bend
Shovel, No. 1004, Razor Back, 4 ft
Shovel, No. 1005, Razor Back, 27 in. "D" Hdl 1.00
Sledge, 36 in
mparame a conj mich zenianovi vivi i i i i i i i i i i i i i i i i
Window Brush, 12 ft 1.00

WATER BALLAST LAWN ROLLERS

Equipped with ball bearings and scraper.



602-18x24,	Empty	85	lbs.,	Filled	265	lbs.	De	lu	хe		\$21.35
701—14x24,	Empty	70	lbs.,	Filled	175	lbs.					14.80
702-18x24,											
704—24x24,											
No. 4 Dunh	am—18:	x24	• • • •					• •	٠.		19.10

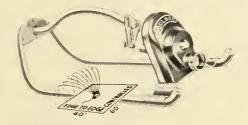
SPRINKLERS

5044		 			ò		 			 						. 5	\$1.10
Belfont		 					 							٠			.85
156—Tulip																	
5040—Ring																	
5011—Greelawn																	
133—Gold Label																	
5018-Propeller,	Jr.							٠	٠	 ٠			٠	٠			2.90



Naturain units are 5 feet long. Primary Unit comes complete with end cap and adjustable stand. Use any number of Extension Units with one primary unit according to size of lot and water pressure

Primary Unit		.\$2.95
Extension IIn	ite	2 75 62

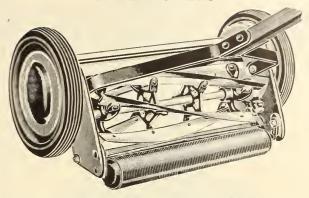


No. 600 Deluxe Swingin' Spray. Rectangular, oscillating. \$11.95.

No. A5-2 Walking Sprinkler. Most popular for medium to large lawns using 50 to 100 ft. hose. \$28.95.

No. B3 Walking Sprinkler. Heavy Duty for estates, parks using 75 to 125 ft. hose. \$36.95.

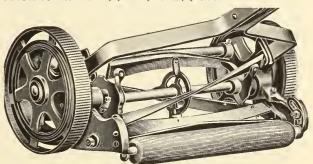
LAWN MOWERS



QUIET TURPMASTER BALL BEARING

Streamline design; 5 blades, self sharpening; 10 in. dia. wheels, semi-pneumatic rubber tires, Chromium hub cap, rubber roller, steel handle. 14 in., \$23.50; 16 in., \$24.50; 18 in., \$25.70.

GRASS GROOMER BALL BEARING
Attractive streamlined mower 5 blades, self-sharpening; 10 in. dia. wheels, semi-pneumatic rubber tires, rubber roller. 16 in., \$22.50; 18 in., \$23.50.



STERLING

Light weight; 5½ in. dia. ball bearing revolving cutters. Four heat treated crucible steel knives; 8 in. dia. wheels. 12 in., \$16.00; 14 in., \$16.25.

SPECIAL
10 in, solid rubber tired wheels; five Ball bearing; 10 in knives. 16 in., \$18.30.

DIAMOND LAWN EDGER AND TRIMMER

The diamond is one-half a small lawn mower with edging device. Will cut very close to wall or tree. Takes the place of Grass shears or grass hook; revolving cutter has 4 knives; 8 in. dia. wheel. \$18.30.

VOGUE

Blades, rib tread tires, built-in sharpener. 16 in., \$27.00.

5 Blades, semi-pneumatic rubber tires. 16 in. \$34.50; 18 in. \$36.00; 16 in. Hi-Cut, \$36.00.

ECLIPSE ZEPHYR 5 Blades, rib tread tires. 16 in., \$30.00.

GRASS CATCHERS

For hand lawn mowers 14 thru 18 inches. \$2.50. For power mowers. \$3.75.



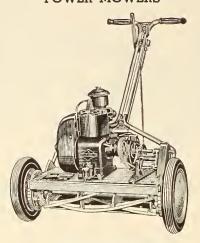
A popular type of glove-for MEN and WOMEN-specially designed for garden wear.

Size 6, 7, 8..... \$1.50 Pair

Size 9, 10..... \$1.65 Pair

Soft Touch. Feel like fine kid leather, washable, water-proof material, durable, retain sense of touch. \$.85 pair.

COOPER POWER MOWERS



COOPER KLIPPER

A mower of superior quality, designed to give years of economical, trouble free service. Exclusive patented adjustment provides a simple and quick method for adjusting cutting height from a low of ½ in. to a high of 2% in. giving a far greater range of adjustment than any other mower. Cushion rubber tires 10" x 1¾"; rope starter, speed control operated by lever and throttle on upper segment of handle. Powered by Briggs and Stratton motor motor.

18" cut—1 H.P....\$125.00

20" cut-1.6 H.P....\$139.50

COOPER IMPERIAL

27 inch roller type, powered by 3.1 H.P. Briggs and Stratton motor; all steel welded deck heavily reinforced for continuous service on large lawns, cutting height adjustable % in. to 2 in. Gears steel cut and hardened, speed ½ to 6 miles per hour. \$440.00.

Triplex attachment; Used with Imperial 27"—increases cut to nearly 65 inches—includes set of two-19 inch units with one wheel riding attachment. \$247.50.

ECLIPSE POWER MOWERS



ECLIPSE ROCKET POWER MOWER

Briggs & Stratton 4 cycle motor, semi-pneumatic tires, 5 blades, self-sharpening, 20 in. cut. \$149.60.

ECLIPSE PARKHOUND POWER MOWER-21 inch cut. \$190.30

TURFMASTER (Dille and McGuire)

Mowing unit backed by 80 yrs. manufacturing experience plus Briggs and Stratton Motor means top performance and durability.

21 in.\$149.60



New Model M-1 3 H.P. **GARDEN TRACTOR**

Mows lawn, cultivates, cuts weeds, removes snow... makes light work of many other jobs! Patented "Quick-Hitch". Attach implements in less than one minute, without tools. 5 forward speeds, with new "Lo-Lo" speed. Fully enclosed gears, Briggs & Stratton N lad 9 Finging. COME IN FOR FREE DEMONSTRATION!

SIMPLICITY TRACTORS

MODEL D-Four Speeds; 11/2 H.P. Tractor with	
4.00x12 Rubber Tires (Less Equipment)\$1	50.00
5331—Cultivator with rubber tired wheel and depth	
The state of the s	30.00
	22.50
	59.00
	65.00
	7.50
5317—Lawn Mower Hitch for Hand Lawn Mower	
	26.25
5399—6½ in. Plow with 10 in. Swivel rolling coul-	
	26.50
	19.50
5350—Counterweight	7.00
5327—Gang Tool Holder with six duck feet. Pair	5.65
5615—Lawn Roller	13.00
5614—Riding Sulky, 4.00-8 full pneumatic tires and	
foot brake	48.00
5348-Seeder, one row with marker and hitch	32.00
5349—Fertilizer Spreader for Seeder	11.00
MODEL L-1-2 H.P. Tractor 5x12 pneumatic tires. 1	70.00
The state of the s	48.00
	30.50
	30.50
Jord - 0-12 III. Disc Harrow	00.00

FOB Factory

Free Descriptive Catalog Mailed Upon Request

Planet Jr. Garden Tools



SHOVEL STEEL





3825 3824 TURNING SHOVEL



FURROWER

C	ULT	VA!	ron:	STEE	LS

HOES

	Size		No.	Size		
4064	1 x8	\$.32	1888	1 1/4 x 10	S	.38
	14x8			1 34 x 10		.40
2367	$1 \frac{3}{4} \times 8$.34	1199	2 1/4 x 10		.48
	21/4×8	.40		3 x10		.55
2369	3 x8	.48	1201	4 x10		.65
2370	4 x8	.59				

SHOVEL

S	TEE:	LS	1	IOES	
No. 2539 2540	Size	\$.65 .75	No. 4059/60 4061/62	Size 4 1/4 " 6"	Pair \$1.80 1.95



Garden Plow with cultivator tooth, sweep and plow. \$8.75.

12—Double Wheel Hoe. \$19.95 119-\$8.75 119W-\$9.75

HILLERS AND PLOWS

1167/8 495/6		Hiler		\$2.30 2.85
TURNING SHOVELS		FUR:		ERS
No. Size		1161	10"	\$1.70
3822/3 5" \$1.30 3580/1 6" 1.55	pr.	2621 1162	12" 15"	2.30 3.05
3824/5 6" 1.90	pr.			

IMPROVED SWEEPS

No.	Size		Mo.	Size	
1494	5"	\$.60	1498	15"	\$1.60
1495	8"	.75	1499	18"	2.15
1496	10"	.95	2731	3"	.50
1497	12"	1.25		1000	
				101	

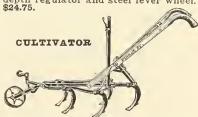


92**D** (Illustrated.) Weight 45 lbs.

90D—Expands to 32 inches, contracts to 12 inches. Weight 54 lbs.



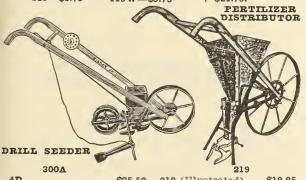
8—(Illustrated.) \$31.50.
9D—Same as illustrated, less the depth regulator and steel lever wheel. \$24.75.

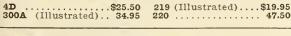


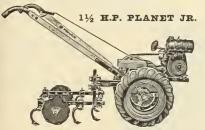
101D—As illustrated, less wheel, weight 44 lbs. \$17.50.
100D—As illustrated, less lever exillustrated, less wheel,

pander and wheel, weight 38 lbs.

4D—As illustrated, less wheel and lever expander, weight 49 lbs. \$16.95. 9D—As illustrated, less wheel, weight 56 lbs. \$21.25.







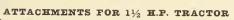
PLANET JR.

1 H.P. Tractor with 14" O.D.x 234" tires. The Multi - purpose Planet Jr. Tractor with its 1 H.P. engine is light, easy to handle, easy to park and useful for many different operations. The power unit for small home owners. (Less Equipment)

\$107.00

1½ H.P. Tractor with 4:00x12 Rubber Tires (Less Equipment) (Model BP-1)...\$162.50

21/2 H.P. Tractor with 5:00x12 Rubber Tires (Less Equipment) (Model B8)\$214.50



AB56—Field Mower\$72.50 B62—Disc Harrow\$43.50
AB35—Two Row Seeder 72.50 B21—6 in. Plow with Coulter ... 35.50 B12—Cultivator\$29.95 B1—Narrow One row Cultivator 31.95
B2—Narrow Two row Cultivator

FOB Factory Pree Descriptive Catalog Mailed Upon Request

HOLLAND TRANSPLANTERS ECONOMY • ACCURACY • DEPENDABILITY

Transplants perfectly cabbage, strawberries, tomatoes, tobacco, and all plants which are transplanted.



Mr. H. Castellini and two assistants operating 3 row Self-propelled Transplanter

MECHANICAL ONE ROW. 53 gal. capacity galv. water barrel; with either pole or tractor hitch; Steel wheels; less fertilizer attachment. \$216.00.

MECHANICAL TWO ROW. Row spacing can be adjusted from 2½ ft. to 4 ft.; plant spacing from 16 in. to 5 ft.; (12 in. spacing available at small additional cost.) 53 gal. capacity galv. water barrel, with new type tractor hitch; steel wheels. \$432.00.

ONE ROW FERTILIZER ATTACHMENT, \$54.00.

TWO ROW FERTILIZER ATTACHMENT, \$108.00.

TWO ROW POWER DRIVEN CELERY PLANTER. For celery, onion, and all other small plants set from 3 in. to 12 in. apart in the row. Equipped with 2 H.P. Fairbanks-Morse Water-Cooled Gas Engine. \$416.00.

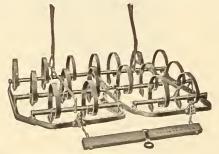
CELERY PLANTER UNITS, \$94.00.

WATER BARREL AND ATTACHMENTS. For watering plants. \$20.00.

FOB Factory

Illustrated Folder Mailed Upon Request

RODERICK LEAN SPRING TOOTH HARROWS ALL STEEL—"SPW" SERIES



PIPE BAR—Adjusting Lever—Low Frame—Adjustable Teeth—One Short Center Runner.

 No.
 Teeth
 Section
 Weight
 Price

 7SPW
 17
 2
 274 lbs.
 \$62.75

"TPW" SERIES ONE LEVER CONTROL TRACTOR SPRING TOOTH HARROW

With special draw bar and tractor clevis, plain teeth.
Section Teeth Width Weight Price
3 25 9 445 lbs. \$116.75



FELINS VEGETABLE TYING MACHINE

Save Hours of Labor with this Machine. Bigger and Better Than Ever. \$99.50

"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. Sp	outs We	eight	Price
600- U 1-9-1	6 ft. 1-Hor	se	32	5 lbs	.\$110.43
800-U1-9-1	8 ft. 1-Hor	se	37	5 lbs	. 127.00
800-LA-ELI-T	R. 8 ft. Tr	actor	40	0 lbs	. 136.57

Many other models and sizes 3 ft. to 13 ft. wide.

Extra Spouts Complete \$1.65 Each

RODERICK LEAN SPIKE TOOTH HARROWS "VOW" LEVER HARROW



Diamond teeth, 5-bar guarded end adjusting lever.

No. 14VOW-50 teeth, two section, with drawbar, 71/2 ft. cut, weight 180 lbs. \$47.95.

No. 15VOW-60 teeth, two section, with drawbar, 9 ft. cut, weight 200 lbs. \$53.05.



MANNS' CHICKS

PROM UNITED STATES APPROVED—MARYLAND STATE SUPERVISED AND INSPECTED PLOCKS PROVEN TO BE PULLORUM PREE



WE GUARANTEE DELIVERY

100% LIVE VIGOROUS CHICKS

With Profit Producing Characteristics Bred Into Them



Manns' 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.

Rock-Red Cross	.\$16.00	per	100
New Hampshire Reds	. 16.00	per	100
White Leghorns	. 16.00	per	100
Leghorn Pullets			
Heavy Breed Pullets	. 32.00	per	100

25 add .04c each— 50 add .02c each

TURKEY POULTS,

Broad Breasted Mammoth Bronze. 95c ea.; \$85.00 per 100 Beltsville White. 15 for \$12.00; \$65.00 per 100

High Quality . . . Economical

FUL-O-PEP Feeds

Starter • Grower • Egg Ration
Chick Grains • Scratch Feed
Rabbit Pellets • Pigeon Feed

PRICED RIGHT

LEE'S POULTRY REMEDIES

ACIDOX, 4 oz., 50c; 12 oz., \$1.00; 32 oz., \$2.00; ½ gal., \$3.50; 1 gal., \$6.50.

FLOCK WORMER. 8 oz. \$1.25.

GERMOZONE, 4 oz., 50c; 12 oz., 90c; 32 oz., \$1.75; ½ gal., \$3.00; gal., \$5.25.

GIZZARD CAPSULES-Adult 50-85c; 100-\$1.40.

GIZZARD CAPSULES-Pullet 50-60c; 100-\$1.10.

GIZZARD CAPSULES—Chick 50-45c; 100-85c.

LEEMULSION, 4 oz., 60c; 12 oz., \$1.25; 32 oz., \$2.50. **SULFAMERAZINE**. 4 oz. \$1.25; 12 oz. \$3.00.

TONAX, 2 lb., \$1.00.

VAPO-SPRAY, pt., 60c; qt., 90c; gal., \$2.50.

CONKEYS POULTRY REMEDIES

DIA-TAB TABLETS, 25-25c; 55-50c; 125-\$1.00.
INHALENT SPRAY (Concentrated) ½ pt., 65c; ½ pt., \$1.00.
OLD RELIABLE POWDER, oz., 25c; 2½ oz., 50c; 7 oz., \$1.00.
PICK-END BITTERS, 2¾ oz., 25c; 7¾ oz., 65c.
POULTRY TONIC, 1½ lbs., 30c; 3⅓ lbs., 65c.

AVICOL

For white diarrhea. 60 tablets, 50c; 180 tablets, \$1.00.

DON SUNG

Makes hens lay. 45 tablets, 50c; 135 tablets, \$1.00.

GROUP-OVER

For Colds, Roup and Canker. 3 oz., 50c; 8 ozs., \$1.00.

PHENOTHIAZINE

Very effective for worming livestock, can be mixed with feed or given individually. 1 1b., \$1.25.

"T, S, F,"

Kills chicken lice. 1/2 lb., 50c; 1 lb., 75c.

TOXITE

Disease Control Spray—Controls poultry Coccidiosis, Round Worms and Red Mites which are transmitted by contaminated litter. Qt., 90c; gal., \$2.25.

CHARCOAL

CHARCOAL—Fine or Coarse. 10c lb.; 50 lb. bag, \$4.00. GRIT, Coarse and fine, 100 lbs., \$1.00. OYSTER SHELL, coarse and fine, 100 lbs., \$1.25.

CAPONIZING SETS

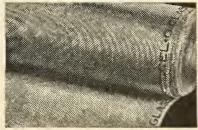
Dr. Salsbury—Set\$5.35

WRITE FOR PREE POULTRY BOOKS

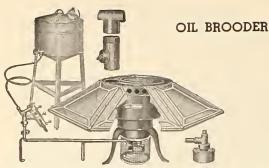
CEL-O-GLASS

Now guaranteed for 5 years. Unbreakable weather proof, transmits violet rays (Glass does not). Ideal for poultry house, fronts, windows, and doors, and many other uses.

36 inches wide, 45c per ft.; 50 ft. rolls 39c per foot.



R-V-LITE VITAPANE



-54 inch; 8-gallon tank; 700 chicks. \$27.15. 256B-Without Fuel Stand.

ELECTRIC BROODERS

No. 50—Galv. 24"x36"x91/2" deep, feed and water trough included, thermostat controlled, 100 chick cap. \$19.00.

UB42—Galv. Metal, 500 watt enclosed type heater, with thermostat, size 36 in. by 42 in., capacity 200 chicks. \$20.00.

302. Galv. metal chick battery unit with 150 watt acra heater, micro switch and wafer thermostat. Size 23 x 36 inches. Capacity 100 chicks. \$17.95.

202—Square type canopy, 26 gauge galvanized steel, lined with Masonite presdwood. 500 Watt enclosed Acra Type heater with thermostat. Size 36 in. by 36 in; capacity 150-200 chicks. \$23.25. lined with Acra Type



REEL TOP FEEDER

-24 in., galv.\$.50 H6360-36 in. galv. ...\$1.20 H5480-48 in. galv.\$1.80 H224-

GRILL TOP FEEDER



H7480-48 in. galv. ...\$2.60

FOUNTAIN AND FEEDER

CG6—(Crystal). Mason Jar. 15c. Fits any

SINGLE WALL **FOUNTAINS**



HA82	gal.	galv.			\$1.60
HC3-3	gal.	galv.			2.20
HC5-5	gal.	galv.			3.00
	_	_			

SPIRAL BANDS

Dark blue, light blue, red, green, white.



Size Per 100 ¼ in. \$.20 5/16 in. .30 9/16 in. .60 11/16 in. .65

FLOCK FEEDERS

H25S—60 in. galv. ... \$6.90 H28S—96 in. galv. ... 10.40



TOP FILL **FOUNTAINS**

HK5—5 gal. galv.....\$4.40 **HK5H**—5 gal. with

FOUNTAIN HEATERS

H5H—Oil, fits any 15 or 15 1/4 in. pan. \$3.20. H82-Lamp with burner and wick. \$2.10.

H570—Elec., fits any 5 to 10 gal. fountain. \$7.20. 3/4 in. .70 Trumbull Electric \$5.65

FEEDER AND WATERER



G16L-16 in. dia. 41/2 in. high, 16 qt. capacity. \$2.45

GALVANIZED PIPE

2 ft. lengths. 4 in., 35c.

ELBOWS

HPC5-5 in., 35c.

4 in., 40c; 5 in., 45c. GALVANIZED CAPS

ROOF SADDLE

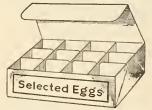
440. Adjustable. 4 in., \$1.25 HRS5—5 in., \$1.65. N12—Non-adjustable. 4 in., 45c.

CHICKEN HOUSE FLOOR SCRAPER

Pointed sides for corners. \$2.15.

WAFER THERMOSTATS

EGG CARTONS



Carry Safe, 3x4. 100, \$1.75; 250, \$3.85. Eagle, 3x4. 250, \$3.50. Swanee, 2x6. 250, \$5.75. Hawk, 2x6. 250, \$4.25.

EGG PRESERVATIVE



EGG CANDLER



700\$2.00

8910

842 — Capacity 20 lbs. by ounces in two revolutions; adjusted by set screw at top; 8 in. dial, figures in black on white enamel. Heavy galv. scoop and chain. \$9.50.

WIRE EGG BASKETS

44 Cap. 12 to 15 doz....\$1.25

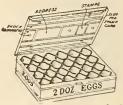
EGG CLEANERS



-10 ft. Cleaning Cloth .80 Humane Poultry Killer.\$2.25 517 Egg Grading....\$2.00



METAL EGG CRATES



	April 1000	-	_							
-dozen	size									\$2.00
-dozen	size									2.75
-dozen										
-dozen	size									3.75
Postage Extra										

SCALES

8910—Spring balance. Capacity 100 lbs. by 1 lb. \$6.00.

895—Spring Balance. Capacity 50 lbs. by 1 lb. \$3.25.





POULTRY NETTING Galvanized After Weaving

Hex-Cel

150-FOOT ROLLS

2-inch Mesh	1-inch Mesh
20 gauge	20 gauge
24 inch \$4.70	12 inch\$5.10
36 inch 6.60	18 inch 7.30
48 inch 8.75	24 inch 9.50
60 inch. 10.70	36 inch13.75
72 inch12.65	48 inch18.00

25 to 150 foot lengths 2-inch mesh 3c per sq. ft. 1-inch mesh 5c per sq. ft.

BARBED WIRE GALVANIZED

4 point, 12 gauge, 6 ins. between barbs. 80 rod reel \$9.50

POST HOLE DIGGERS \$3.65

EARTH AUGERS 8-8-14 in.\$11.45

TOWNSEND WIRE STRETCHER

No. 500. Has hickory handle and malleable clamp; can be quickly adjusted. \$3.35.

STEEL FENCE POSTS

5 ft., 85c; 6 ft., \$1.10; 7 ft., \$1.25

STICKIT WICKIT FENCING

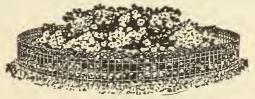


21" High, 12" Wide,

Doz.

In cartons of two dozens (makes 24 feet of fence)

FLOWER GUARD



Designed for protecting Plower Beds 22-inch, per foot, 14c; 100 ft. roll, \$12.00.

HARDWARE CLOTH

2x2\$.11 sq. ft.	4x4\$.12 sq. ft.
		8x8	
100 sq.	ft. or more	deduct 1c per sq. ft.	

ORNAMENTAL GATES

Heavy steel frames, filled to match the fence; fittings for 1% in. iron posts included.

Width	Height	Price
	36-inch	
	42-inch	
42-inch	 48-inch	8.35

How to cure a BALD-HEADED TERRACE



USE BEMIS EROSIONET

Sow Manns' DEEP ROOTING TERRACE MIXTURE and roll out the **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; 25c yd. 100 yds. or more; 20c yd.

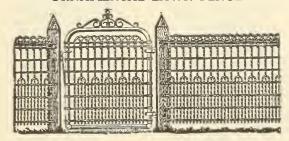
HOSE REELS

REAL-REEL — Portable; unreel only hose actually needed; 5 ft. accessory hose connects leakproof coupling on side to water supply. Holds 150 foot of hose. Sturdy, all metal constructed. \$14.95.

CHAIN LINK FENCE

No. 9 gauge, zinc coated, 50 ft. rolls. Per foot-36 in., 41c; 42 in., 49c; 48 in., 55c; 60 in., 68c.

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
Per ft. 100 ft. Per ft. 100 ft.
Single Loop ...\$21 \$19.50 \$24 \$22.00
Double Loop ... 28 25.00 .32 29.00 48-inch Per ft. 100 ft. \$.28 \$25.00



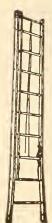
ELECTRIC FENCE CONTROLLER

SHOX-STOK: Precision built for long life, waterproof steel case, charges up to 15 miles of fence. Complete with fence tester, cord and plug.

Delux Electronic Model, Interrupted impulses. Fuse protection against overload......\$21.95

Electric Model P.H.5, No moving parts, continuous shock\$15.95

EXTENSION LADDERS



Equipped with automatic locks, rope, and pulley. Rails are edge grained Spruce and Hickory rungs. (An allowance of 2 ft. should be made for iap on ladders 20 to 32 ft. and 3 ft. from 34 to 48 ft.)

In lengths from 20 to 32 ft. inclusive 900 ft.

sive, 900 ft.
In length from 34 to 48 ft. inclusive, 90c ft.

SINGLE STRAIGHT LADDERS 10 to 24 ft., 900 ft.

CHERRY SEEDERS

\$3.85

GLASS CHURNS

			hurns					
4	quar	t2	quart.					. \$3.35
			quart.					

GLASS JARS ONLY

2 qt., 75c; 4 qt., \$1.25; 6 qt., \$1.40; 8 qt., \$1.65.

CYLINDER CHURN



No. 1-3 Gal. (churns 1½ gal.) \$7.50.



PARCHMENT BUTTER PAPER

Sizes 6x9, 9x12....L1
Postage Extra .Lb., 35c

DANDELION BUTTER COLORING

3	oz.									\$.60
1	lb.									2.25

ICE CREAM FREEZER



Snowball (Triple Action). 2 qt., \$8.35; 4 qt., \$10.65; 6 qt., \$13.75.

HUDSON BARN EQUIPMENT

2A-Stall, \$14.70. 181 W-Stanchion, \$5.15. 181-Stanchion, \$4.52.

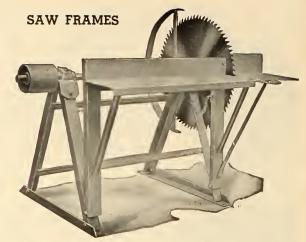
\$5.80.

89A-Water Bowls,



262—Hay Carriers, \$33.00. 268—Harpoon Fork, \$8.00. 249S—Rafter Brackets, 9c ea.

290—Hanger Hooks, 30c ea. 401-Track, 40c ft.



No. 9—All steel saw frame; 3 to 5 H.P. with 30 in. blade and 50 lb. flywheel. \$68.50.

BLADES (Cross Cut)—Bore 1%-inoh 18-inch, \$6.85; 24-inch, \$10.80; 26-inch, \$12.65; 28-inch, \$14.75; 30-inch, \$16.85.

SAWS

AA3-24 in. 8 pt. Penna. Hand Saw	\$4.25
400-3 ft. Penna. One Man Saw	
400-3½ ft. Penna. One Man Saw	
800-5½ ft. Penna. Cross-Cut Saw	
800—6 ft. Penna. Cross-Cut Saw	
1½—Penna. Buck Saw	2.00

FARM BELT

Rubber coated canvas transmission belting; 4 in. wide; 4 ply; flat sides; black, 450 ft.

DAIRY SUPPLIES

Bag Balm, \$1.00. Kow-Kare, 1¼ lbs., 750; 2¾ lbs., \$1.35. Conkeys Stock Tonic, 2¾ lbs., 550; 6 lbs., \$1.10.

CALF WEANERS, No. 103 Medium, 85c; No. 2, \$1.00. TEAT DILATORS for Cows, box of

PERFECTION ANTI-COW KICK-MILLERS DAIRY SPRAY. \$2.00 per gal.

GRINDSTONES

VICTOR. Tubular steel frame, adjustable steel seat, treadie type, baibearing journals and crank attachment. Stone 19 to 22 inches in diameter by 1% to 2%-in. face. \$16.80.



LOOSE GRINDSTONES (centered) 20-22 in. dia. by 2 in face. \$8.75. Loose Grindstones, 60 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.

83-With both Flat and Bevel Tool Wheels..16.10

171-4½x1½ Dimo-Grit Tool Wheel 3.25 DG31/2—Beveled Wheel only



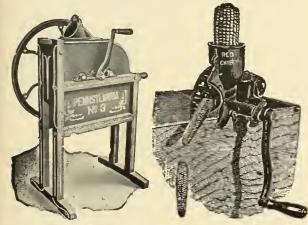
Let Us Send Complete Free Catalog For Quick Service Mail Your Order To Us Prices P. O. B. Baltimore



HONEY JARS

5439-Plain Round, 1 1b. size, \$1.60 case 2 doz. 6222-Plain Round, 2 lb. size, \$1.15 case 1 doz. 6558-Honey Jar, 5 1b. size, \$1.50 doz. White coated caps included

CORN SHELLERS



No. 3 \$40.00

Red Chief \$5.00

RURAL MAIL BOX

1-18%	in.	long,	6 %	in.	wide	, 8 3/4	in.	high.	 	 	. \$3.	.00
2-23 3	in.	long,	11	in.	wide,	13 %	in	. high	 	 	. 7.	.00

SALT BRICKS

Worcester	\$.20
Worcester	Mineralized—
	4 lb. brick, 25c; case of 15 bricks, \$3.00

MEAT CURING PRODUCTS

Mortons Sugar Cure, (Smoke Salt) 71/2 lbs., \$1.00. Mortons Tender Quick, 4 lbs., \$1.00. Mortons Sausage Seasoning, 10 ozs., 50c. Mortons Meat Pump, \$2.00.

ROOFING MATERIAL SMOOTH SURFACED



Weight Per Lbs. Roll Panamoid, medium45 \$2.40 2.95

5V-GALVANIZED METAL ROOFING

8 ft. or 10 ft. sheets. \$14.50 per 100 sq ft.

KUR-A-LEKE

A semi-liquid mastic or cement-like composition, not affected by extreme heat or coid; absolutely water tight and fireproof. It "kures" the leaks in wornout tin, galvanized iron or composition roofings. Gal., 95c; 5 gals., \$3.50.



COW TIES

41/2 ft. \$.35 each

TIE OUT CHAINS 20 ft. \$.90 each 30 ft. ... 1.20 each

HALTER CHAINS 41/2 ft.\$.30 each

TRACE CHAINS

Lucky Mule, elec. welded; 71/2-10-2. \$2.25 Pair. Victory: 7 ft .- \$1.50 pair

OLIVER PLOW REPAIRS



	Mould-	Land-	Solid	Slip
	boards	sides	Shares	Shares
AC-2	. \$2.80	\$1.20	\$.75	
10	. 4.50	2.00	1.25	\$1.50
13	. 4.55	2.25	1.30	
19	. 6.80	2.45	1.50	1.80
20	. 8.15	3.10	1.75	1.85
E	. 9.80	2.95	1.95	2.20
40 & 40-4X	. 9.90	3.65	2.10	2.35
83	. 9.00		2.50	
84-88 12 in	.10.15		2.50	
SLIP	POINTS		35c	

SYRACUSE PLOW REPAIRS

	Mould-	Land-	Solid	Slip
	boards	sides	Shares	Shares
1-78			\$2.05	
604			1.00	\$1.80
603 & 503	. \$6.00	\$2.40	1.60	2.15
602 & 502	. 7.50	2.80	1.80	2.55
601 & 501	. 8.05	3.70	2.20	3.45
1462		2.50	1.80	
1463	. 6.00	2.10	1.60	
X1441 FQD, Hook				
or Bolt			2.35	
SLIP POIN	I TS , A an	d B	35c	

CHATTANOOGA REPAIRS

	Mould-	Land-	Solid	Slip
	board	side	Share	Share
65	\$7.50	\$2.95	\$1.75	\$2.05

Plant Food Elements

Plants require nitrogen, phosphorus, potassium (the three most important), oxygen, hydrogen and carbon (obtained from air and water) and the minor eiements 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-These minor elements are calcium, sulphur, magnesium,

AGRICO Fertilizers

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.



AGRICO FOR GARDENS

this special-Use or this special-purpose Agrico for flowers of greater health and beauty—and for larger yields of vegetables, richer in min-erals and vitamins. Use 40 lbs. per 1000 sq. ft.



AGRICO FOR BROADLEAF EVERGREENS

This AGRICO pro vides all needed plant ioods ior acid-loving plants, — also acidities the soil, essential ior best results. Use approximately 1½ lbs. per 100 running feet.

				100	* * * * * * * * * * * * * * * * * * * *
100	lbs.	(2-50's)	\$5.00	\$4.55	.\$5.80
50	lbs.		2.55	2.30	. 3.00
25	lbs.		1.70	1.70	. 2.20
10	lbs.		.85	.85	. 1.15
5	lbs.		.48	.48	63

VERTAGREEN

For lawns, flowers, shrubs, fruits, vegetables and trees. It contains, in concentrated readily available forms, major and minor plant food eiements needed for healthy, vigorous growth. 1 lb., 15c; 5 lbs., 53c; 10 lbs., 95c; 25 lbs., \$1.70; 50 lbs., \$2.80; 100 lbs., \$4.55.

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

- 1	1b\$.15	5 1bs\$.53	10 1bs\$.95
25	lbs 1.70	50 lbs 2.80	100 lbs 4.55



10 Tablets, 100; 30 Tablets, 25c; 75 Tablets, 50c; 200 Tablets, \$1.00; 500 in pot, \$2.00; 1000 Tablets, \$3.50. (By mail add 10%.)

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.

PHOSPHOBUS 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, ceiery, 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.

ES-MIN-EL

Essential minor elements not present in depleted soils. Use with fertilizer or separately, about 1 lb. per 100 sq. ft., 50 lbs., per acre. 5 lbs., \$1.25; 100 lbs., \$10.25.

HY-GRO SOLUBLE PLANT FOOD

13-26-13-Plus Trace Elements

3 oz., 25c; 2 lbs., \$1.40; 10 lbs., \$4.50; 100 lbs., \$26.00. (Gat Spray Head \$1.50)



NUTRI-LEAF (16-16-16)

The Miracle Plant Food Concentrate Soluble Fertilizer and Foliage Spray 3 lbs. to 50 gal. water or spray

										.е								
																		.60
																		1.00
																		1.75
30	lbs.	(1	0	-:	3	S)		٠				٠	٠	٠	٠	8.50

HYPONEX

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 bb. makes 100 gallons. 1.00
10 lbs. makes 1000 gallons. 8.00
25 lbs. makes 2500 galions. 15.00



TRACEL—(8-16-7)

Complete soluble fertilizer with trace elements. 1/2 lb., 65c; 1 lb., \$1.00; 15 lbs., \$9.00.

VHPF—(6-25-15)

1 lb., makes 30 gal.

Vitamin Hormone plant food soluble fertilizer plus all essential minor elements, in quickly available form. Used as starter solution, side dressing, etc., with outstanding results. 1 lb., 75c; 3 lbs., \$1.50; 30 lbs., \$7.50; 150 lbs., \$32.50.

VIGORO SPREADERS

BR—18 in., 20 to 25 lb. capacity......\$10.00 Junior—18 in., 45 to 50 lb. capacity... 12.50 Standard—24 in., 80 to 90 lb. capacity. 40.00



SALEM SPREADERS

Automatic shut off; six quantity adjustments.

16	in.,	22	lb.	cap.,	\$8.25
20	in.,	40	lb.	cap.,	12.75
30	in.,	80	lb.	cap.,	19,40

BUCH SPREADERS

No.	115	in.,	28	lb.	capacity\$6.15
No.	2 —20	in.,	40	lb.	capacity12.70
BTO	2 .20	in	60	116	canacity 14.80

Plant Foods for Organic Gardens

Blood Meal lb. (3 lbs., 50c)\$.20	5 lbs. 	10 lbs. \$1.50	25 lbs. \$3.50	100 lbs. \$10.85
Bone Meal, Raw	.40	.75	1.60	
Bone Meal, Steamed			••••	5.25
Cottonseed Meal	.50	.85	2.00	7.00
Cow Manure	.40	.75	1.40	4.00
Ground Phosphate Rock	k	•••••	•••••	1.85
Pulverized Ground Limestone	80	lb. 75c;	160 lbs	s. \$1.25
Sheep Manure	.40	.75	1.40	4.00
Tobacco Stems (Meal)	••••	*****	*****	2.50



Rootone

Assures better germination of seeds, produces better plants with longer roots, greater top growth and vigor. Rootone kills fungi and prevents dampening off.

 $\frac{1}{4}$ oz. will treat $2\frac{1}{2}$ lbs. seed or $\frac{400}{10}$ cuttings, $\frac{25c}{10}$.

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.

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

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. 34 oz. pkt., 25c; 3 oz., \$1.00; lb., \$4.00.

When sprayed on blossoms of tomatoes or beans it produces better set and larger crop. 2/5 oz., 25c; 2-oz., \$1.00; 12-oz., \$5.00.

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

ROSE FOOD

An organic plant food especially for roses. Miller's (Analysis 7-8-5)....5 lbs., 85c. lbs., \$2.85; 100 lbs., \$9.75.

TRIOGEN. Analysis 5-10-5. 5 lbs., \$1.00; 10 lbs., \$1.70; 25 lbs., \$3.20; 100 lbs., \$9.40.

SPHAGNUM MOSS

Finest quality. Free from sticks and other refuse. ½ Pk., 25c; Bu., \$1.65; Bale, \$3.45.



ESSKAY 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 Strubs. It builds up the soil and leaves no acid residue. 10 lb. bag, 90c; 25 lb. bag, \$1.75; 50 lb. bag, \$2.90; 100 lb. bag, \$4.25.

GREEN NUTRO

Natural Soil Builder

Available 0-2-5; Total 0-18-7 Finely ground natural rock containing phosphorus, pot-ash and thirty minor and trace elements plus an activated carbon base. On lawns and gardens use 10 lbs. per 100 sq. ft. Large areas ½ ton per acre. \$2.75 per 80 lbs. \$50.00 ton.

AFRICAN VIOLET SOIL

Specially prepared organic potting soil for African Violets. 41b. pkg., 35c.

ACTIVO

Popular composting chemical makes rich organic fertilizer out of vegetable waste. Stretches fertilizer; activates soil. No. 2 Size (approx. 2 lbs.) makes about 425 lbs. compost, \$1.00. No. 7 Size (approx. 6 lbs.) makes about 1400 lbs. compost, \$2.49.

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. Equatable manure—Odorless. 5 lbs., \$1.25; 20 lbs., \$2.95. Equal to

Inoculate all Legume Seeds with OVER FIFTY YEARS OF SERVICE When ordering, Always state name of seed. COMBINATION (AB) SOYBEANS (S) Size Retail Retail 1 bu. each.....\$.50 2 bu. each.....90 2 bu. ea.\$.35 25 bu. ea.2.50 (One can) Swt., Bur, Hubam Clovers 1 bu. each\$.50 CLOVERS (B) BEANS (D) Red. Alsike, Crimson, White and Ladino. 1 bu. each\$.50 Navy, Pinto, Wax, String, Kidney and Great Northern LESPEDEZA (L) 1 bu. ea.\$.50 100 lb. size (Inoculates up to 100 lbs.) ..\$.50 PEANUTS. PEAS, (C) VETCHES (All Varieties) COW PEAS (E) 2 bu. ea.\$.35 100 lb. size (Inoculates up to 100 lbs.) ea.\$.50 5 bu. ea.55 GARDEN SIZE—Peas, Beans, Sweet Peas, Lupines, Lima Beans and Edible Soybeans. Enough for 8 lbs. seed - Retail Price 15c each

Fortilizors

LIST PRICE

Analysis	Per Ton	100 lbs.
10-10-10	\$70.55	\$4.85
For: Asparagus, pastures.	Corn, Peas, Potatoes	and non-legume
0-14-7	\$42.80*	\$3.15
	ver, Soybeans, Cowpe Barley, Pastures, Tu	
10-6-4	\$62.10*	\$4.65
For: Top Dresser ard, Turnip	, Spinach, Kale, Cabba Greens.	ge, Lettuce, Must-
3-12-6	\$47.45*	\$3.50
For: Sweet Corn,	Field Corn, Tomatoes	s.
4-12-8	\$52.90*	\$3.85
For: Snap Beans Potatoes, Ca	, Tomatoes, Asparagus arrots, Parsnips, Turni	s, Potatoes, Sweet ps.
5-10-5	\$48.55*	\$2.90
	s, Sweet Corn, Straw Leafy Vegetables.	berries, Potatoes,
0-20-0	\$35.65*	\$2.35
	20% Superphosphate	1 1 0
* Ton Price, le deduct \$2.00 addi	ss 10% C.O.D. If hat tional per ton.	uled from factory

Agricultural Chemicals, Etc.

	ıs.
lb. lbs. lbs. lb	
Aluminum Sulphate\$.10 \$.75 \$1.50 \$4	.50
Asparagus Salt	.15
Borax	
Calcium Chloride60 1.25 4	.50
Copper Sulphate	
(powdered)	.00
Epsom Salts	.00
Hydrated Lime,	
(50 lbs., 75c)25 1	.25
Iron Sulphate (Crystal)20 1.00 2.00 4	.00
Muriate of Potash	.00
Nitrate of Soda	.75
Sulphate of Ammonia10 .75 1.50 5	.00
Sulphate of Potash	.00
Super Phosphate (20%)10 .40 .75 2	.35
Top Soil, (500 lbs., \$6.00)20 .50 1	.45
7: - Culphata 00	

BUCKWHEAT HULL MULCH

During the growing season it keeps soil cool and moist, discourages weeds, presents smooth clean appearance. In winter it reduces alternate freezing and thawing, thus protecting roots from destructive heaving. Does not form crust but permits even light rains to reach the soil. Packed in 50 lb bags (covers about 65 sq. ft. 2 in. deep), \$1.60; 250 lbs., \$7.75; 500 lbs., \$14.50; Ton, \$50.00.

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 Beitsville 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 "dampening 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. 20 lb. bag, \$2.25; 12 lb. bag, \$1.75; ½ Bu., 85c; ½ Pk., 40c.

Soil Conditioners

(FOR CLAY SOIL)

1 lb. treats approx. 10 sq. ft. 6 in. deep or 300 sq. ft. for surface mulch.

Convert hard clay soil into good tillable top soil. These chemicals act upon the intensely fine particles of clay, combining them into larger loam-like particles. Two formulations are offered; dry and soluble. The thoroughness of mixing the dry form determines the quality of the resulting soil. The liquid form too, acts only by direct contact with the clay particles and it is therefore necessary to carefully break up the clay, the finer the better, so the solution can give maximum results. Choosing between the dry or liquid form is a matter of opinion as to which is most convenient to the individual gardener and his particular soil problem.

Either form properly applied will enable roots to thrive

Either form properly applied will enable roots to thrive and produce normal plants. Soil conditioners do not replace plant foods, therefore it is necessary to fertilize



KRILIUM (Merloam). Dry formulation. Mix thoroughly with clay soils, 6 in. deep for gardens or ½ in. deep for surface treatment on crusted lawn soils or to help control erosion. 1 lb., \$1.39; 5 lbs., \$4.95.



SOILIFE

DRY DUST. ½ 1b., \$1.00; 1 1b., \$1.40; 3 1bs., \$3.00

WETTABLE FLAKES (Concentrated). ¼ lb., \$1.25; ½ lb., \$2.00; lb., \$3.75; 2 lb., \$6.75.

A.C.P. SOIL CONDITIONER

Contains the two types of acrylo-nitie plus fertilizer, plant hormones and essential mineral elements. Powder can be worked into the soil or mixed with water and sprinkled on. ½ 1b., \$3.55; 10 1b., \$10.90.



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 ibs. 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., 90c; 50 lbs., \$1.40; 100 lbs., \$2.25; 500 lbs., \$10.00; 1000 lbs., \$17.50; ton, \$32.00. 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. Standard Bale (approx. 36x19x19) 100 to 120 lbs. when packed. German Horticultural \$4.65; Bu., 75c; ½ pk., 20c.

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

2 MINUTE ACIDITY KIT — Tests for acidity only. Complete with instructions and charts..................\$1.49 HOME GARDEN MODEL (as illustrated) — Contains enough soil testing solutions to make 20 individual tests.

POPLAE GARDEN MODEL—Makes 50 individual tests for nitrogen, phosphorus, potash and acidity. Cased in handsome sturdy imitation leather..................\$5.89

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. \$14.95

DELUXE—Widely used by large growers, nurseries and government departments. Makes 200 individual tests for nitrogen, phosphorus, potash and acidity. In handsome steel carrying case with complete instructions. \$29.95

TESTING PLUID 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 Asparagus A Barley A Beans C Beets A Bent Grass E Blue Grass E Blue Grass A Broccoli B Cabbage A Carrots A Calliflower A Cellery A Chicory B Clover B Clover B Clover A Cowpeas C Cranberries E	Cucumber B Currants C Eggplant B Endive B Gooseberry C Grapes D Kale E Laurel E Laurel E Lettuce A Muskmelons B Oats C Onions A Parsley A Parsnlps D Peas B Peppers C Plums D	Potatoes D Pumpkin D Radish B Raspberries B Red Clover B Rhubarb B Rye C Spinach B Squash C Strawberries C Tobacco C Tomato C Turnip C Rutabaga C Watermelon B Wheat A
	PLOWERS	

		PLOW	ERS			
Azaleas Anemone Aster	Heart C a	FLOW Forget Me Fuschia Gardenia Genista Geranium Gerbera Gladiolus Godetia Heather Heliotrope	Not.A B E A A A B B B	Nas Orci Pan Peo Prir Poir Petr	turtium hid sy ny nula nsettia unia	B mA D B B B B
Centaure Cineraria Chrysant	aB Lhemum B B	Holly Hyacinth Hydrange	E a Blue E a Pink	Rho Ros St. Sali Scal	dodende Paulia pigloss biosa	iron .C B B isB
Columbir Cosmos Cyclamer Dahlia Delphinit Didiscus	B nC B umC	Iris Lady Slip Larkspur Lilac Lily Lupine	perE B C C	Sna Stoo Swa Swe Tuli Viol	pdrago ks insonia et Pea ips	nB aA sB
Easter L Euphorbi Feverfew Ferns 4pH	laC 7B C	Marigold Mignonett Morning (Myosotia 6pH	eB	Woo Yuc Zini	odbine ca	B B B
E	D	l c	l B		Δ	

Neutral

-Alkaline

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.)

Acid

BIRD FEEDERS



DIOGENES (IDA), Old fashion lantern design. Made of sturdy metal has glass chimney. Easy to fill, feeds seed automatically. \$4.95

BIRDS FILLING STATION (BH52), Has two cake holders and will hold 4 to 5 pounds of seed. Seed reservoir is glassed in so that one can see when to refill. \$4.25

BIRD CAFE (W16), Glass top protects food from snow and rain, easily attached to window sill from inside. Contains cake holders. \$5.45

COMMUNITY DINER (CDD), For clinging and perching birds. Filled with Seed Suet and Pressed Peanut Suet moulded into paper cups. \$1.65

CHICADEE TIDBITS (CT24), Refills for above box of 24 cups. \$1.25

BIRD SNACK (SS1), Seed Suet Cake. \$35c ea.

WILD BIRD SEED, 5 lb., 75c; 25 lbs., \$3.50; 100 lbs.,

SUNFLOWER, Giant plump seed, 3 lbs., \$1.00; 25 lbs., \$7.50; 100 lbs., \$24.50.

WARFARIN. The amazingly effective rat killing ingredient perfected by the Wisconsin Alumni Research Foundation.

K.R.O. CONCENTRATED. Warfarin Rat and Mouse Killer. Active ingredient .5% Warfarin. 2 oz. makes 2½ lbs. Active ingredient .5% Warf bait. 2 oz., \$1.00; 4 oz., \$1.75.

D-CON READY MIX. Active ingredient .025% Warfarin. 1 lb., \$1.69.

SLA-RAT. Contains .025 % Warfarin. 8 oz. can, 65c; 1 lb., 21.00.

RED SQUILL RAT KILLERS are Non-Poisonous to Pets or Live Stock.

K.R.O. Ready Mix. 6 oz., 35c; 1 lb., \$1.00.

K.R.O. Powder. 2 oz. (Mix with 2 lbs. bait) 75c.

RAT NOTS. 9 "Nots", 25c; 50 "Nots", \$1.00.

MOUSE NOTS. 9 "Nots", 25c; 50 "Nots", \$1.00.

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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 ½ 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

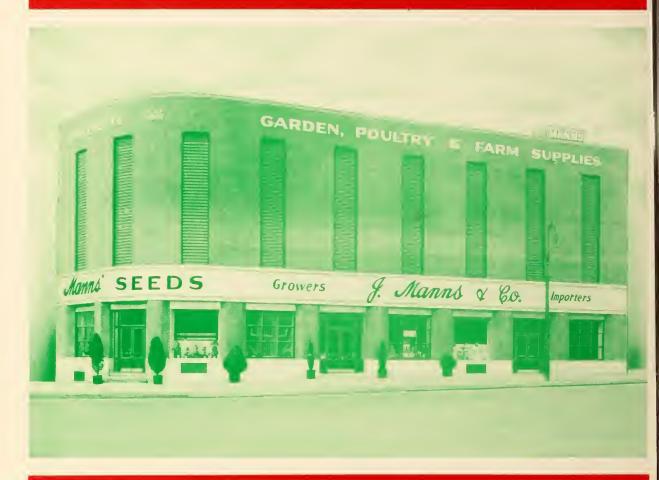
The presence of moss is often considered an indication of acid soil, but it is more often the result of low fertility. During March apply nitrate of soda (1 lb. per 100 sq. ft.) This will kill the moss but not injure the grass. In about two weeks the dead moss may be raked from the lawn and if there are bare spots they should be reseeded at once.

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