

GEO. KELLER & SONS CO.

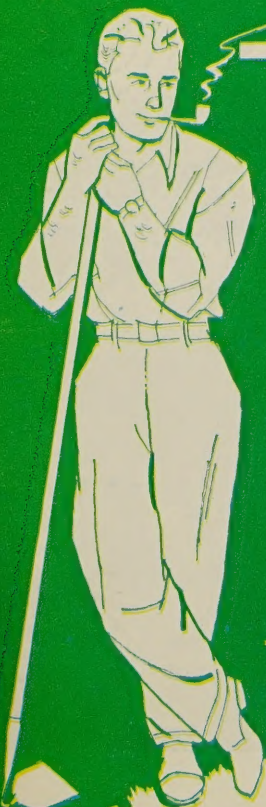
909 Maine St.

Quincy, Ill.

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Garden Annual



1957

WE SUGGEST YOU PLANT

SOMETHING OLD FASHIONED

The charm of the old fashioned garden can be regained with plantings of stately hollyhock, piquant pansies, marigolds, foxgloves, candytuft, dahlia or cosmos. Though old fashioned as far as age is concerned, these have been constantly improved to give you beautiful color throughout the season.

SOMETHING NEW FOR 1957

A few of the introductions for 1957 which will give you modern, bright colors and the best of the improved strains are **Crackerjack** marigold, **Treasure Island** zinnia, **Mardi Gras** snapdragon, **Ortho Polka** and **Twinkle** phlox, which are pictured in sparkling color elsewhere in our catalog.

SOMETHING ODD OR UNUSUAL

Though not new, some of the most exciting flowers can add zest and spice to your garden. **Schizanthus**—the Butterfly flower, is delicately fashioned, with dainty blossoms like miniature orchids in whites, lilacs, blues and pinks. One of the most colorful and interesting novelties is **Peppermint Stick** zinnia—a carnival of striped flowers in wide color ranges. A flower that has long held its place in the garden as an exotic oddity is **Tritoma** or **Red Hot Poker**. The tall spikes are topped by narrow, tubular flowers ranging from pale yellow to orange red.

SOMETHING GOOD AND TRUE

There's hardly a garden role for which one of the many varieties of zinnias cannot be used. A beautiful garden can be planted with zinnias alone, and if all of its charming colors and various forms are used—you'll hardly believe that such a beautiful garden came from one flower.

SOMETHING FOR OLD FRIENDS

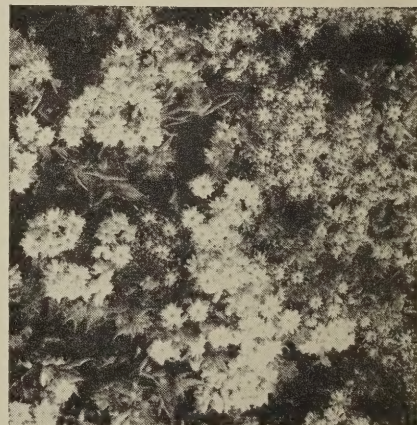
Plant enough flowers to be able to share with your friends. Some of the most popular flowers for the annual cutting garden include zinnias, marigolds, daisies, petunias, larkspur, nicotiana, scabiosa and snapdragons.

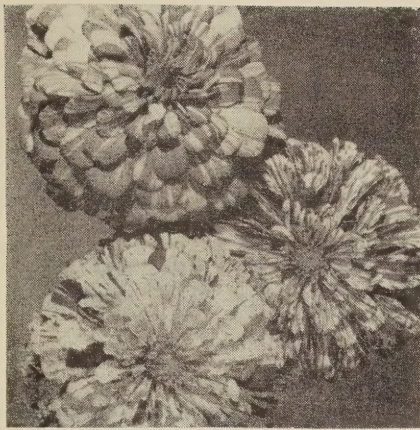
SOMETHING THAT GROWS SMALL

Edging plants are in great demand among home gardeners for planting along the boundary of a flower bed or border. Some of the best include sweet alyssum, dwarf ageratum, lobelia, English daisy, Swan river daisy, dwarf candytuft, dwarf petunias, portulaca and dwarf verbena.

SOMETHING FOR SMALL PLACES

If you haven't room for a garden—plant a window box full of color. Balcony type petunias, nasturtiums, giant morning glories, dwarf petunias, dwarf marigolds, ageratum, annual pinks, lobelia, dwarf phlox or dwarf zinnias all do well in a window box receiving at least six hours of sunshine.





ZINNIA, Ortho Polka

New Peppermint Stick Zinnia with flowers double the normal size.

Seeds Like to Grow

All annual seeds may be sown directly in the garden and there are a number which definitely should be, since they are difficult to transplant.

These include alyssum, California poppy, godetia, kochia, linaria, lupin, evening scented stock, nasturtium, dwarf phlox, poppies, portulaca and salpiglossis.

The technique used is much the same in the garden as sowing in a seed box, particularly as to shallow planting and covering the seeds with porous soil. Identification of the seeds and of their location, are also important, since with slow germinators, it is easy to forget exactly where they were sown.

Seeds are subject to many hazards which human skill cannot wholly avoid, but with the careful selection of the best and tested seed you can count on a high average of successful germination.

Prepare a smooth seed bed, loosening the soil to a depth of six inches. Work 4 pounds of plant food into each 100 square feet, then outline the area to be covered with each variety with a string. Mix the seed with sand to help scatter it over the space as evenly as possible. Then sift a light covering of porous soil over the seed and firm it lightly.

The soil must be kept moist until the seeds germinate and this requires daily sprinkling with a fine spray, taking care not to wash the seed out of the soil.

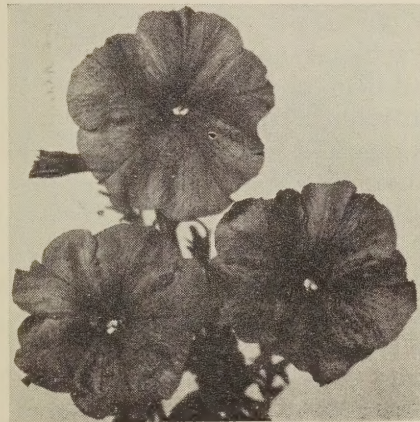
Since seeds have different germinating times, it's good to know the approximate time for each variety.

Here are some of the varieties which germinate in five to ten days:

- | | |
|--------------------------|------------------|
| Sweet Alyssum | Sweet William |
| Antirrhinum (Snapdragon) | Dianthus |
| Aster | California poppy |
| Godetia | Marigold |
| English daisy | Nicotiana |
| Calendula | Pansy |
| Calliopsis | Petunia |
| Candytuft | Annual Phlox |
| Celosia | Portulaca |
| Centaurea | Zinnia |
| Cosmos | Nasturtium |

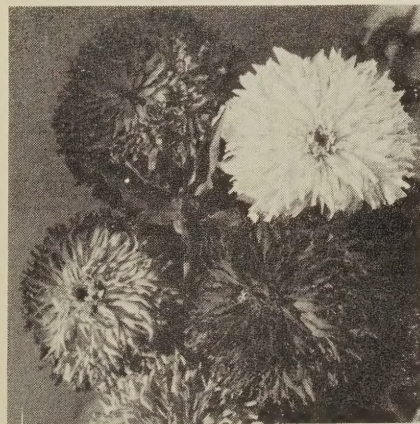
The following require a longer germinating time, taking from ten to twenty days:

- | | |
|----------------------------------|------------------|
| Ageratum | Sweet Pea |
| Dahlia | Forget-me-Not |
| Carnation | Primrose |
| Euphorbia (Snow-on-the-Mountain) | Cypress Vine |
| Gaillardia | Cardinal Climber |
| Kochia | Castor Bean |
| | Verbena |



PETUNIA, Red Satin

Bright scarlet-red All America winner 1957. Dwarf, compact.



ZINNIA, Treasure Island

New hybrid red and gold giant cactus flowered. Very large.

(left) PHLOX, Twinkle

Dwarf star annual in mixed colors. All America winner for 1957.

New

COLORS

CELOSIA, Toreador



Each year, top news in the gardening world is announcement of the All-America winners.

This year three flower entries will charm you. They are Petunia "Glitters," an F₁ hybrid, a real red and white bicolored introduction; Petunia "Red Satin" is an F₁ hybrid multiflora of the richest red yet produced in petunias and the third flower winner is an annual Phlox "Twinkle," a dwarf star annual phlox which makes a delightful bedding and edging subject. 1957 vegetable introductions include: "Champion" radish, a king-sized edition of the popular and useful "Cherry Belle."

"Greencrop" Bush Snapbean is an upright grower, about 24 inches, and puts on a heavy, early concentrated set of very long, large, flat, rather wide dark green pods with white seeds. "Smoothie" cucumber is a very dark green, white spined slicing cuke about 8 inches long. "Black Beauty" Squash is an important and very desirable summer bush squash. It is the earliest black Zucchini with high productivity.

BUSH SNAPBEANS, Greencrop



CORN, Earliest Market King



FOR GREEN THUMBS



DAHLIA, Unwin's
Ideal Bedding Mixed

A miracle is yours

With a packet of seed

More beautiful flowers . .

Garden fresh vegetables

CALENDULA, Chrysanthia



As you've already noticed, this "Garden Annual" comes to you from a neighbor. Unlike most seed catalogs, it's a local affair. That's very important, we think.

For one thing, it means that this book tells about local gardening—and offers you seeds and garden materials suited to your own area and your own growing conditions. It means also, that you don't have to send a thousand miles away to get what you want for your own garden. You can get the very best, right here in your own neighborhood!

Our job, as we see it, is to completely serve the gardeners and growers of our own area. We always work with the needs of our own neighbor's gardens in mind and our stocks are carefully and conscientiously selected to meet local needs—because we sincerely believe that this is an important objective that insures the ultimate harvesting success of our gardening neighbors.

It has always been our policy to offer our customers the best merchandise available and our catalog lists some of the things that we have to offer.

It is the many services we can give you that cannot be pictured nor adequately described that can make all the difference between success and failure in your garden.

We offer a complete, year-round, local garden service and offer only good, fresh seeds—packet or bulk.

Come in and see us soon.

If you have any special problem with your lawn and haven't been able to correct it, call on us. We've been working with lawns right here in this area for years and know the right seed and right diagnosis for nearly any lawn problem you might have.

All this and more information has been compiled in this book to help you towards better gardening, so plan now to use it as a handbook all year round. And plan to come in and see us soon.

By the way, if any of your gardening friends have not received this catalog and would like to have a copy, just let us know. But please do so early, as the supply is limited.

GEO. KELLER & SONS CO.

909 Maine St.

Quincy, Ill.

Handy Flower

PLANTING GUIDE

KEY—For classification of flowers by purpose, location, etc., see the second column below.

A—For dry, hot locations.
B—For a succession of blooms.
C—For shady locations.
D—For poor soil.

E—For edging.
F—For the rock garden.
G—For their foliage.
H—Everlasting for winter bouquets.

I—For their fragrance.
J—For porch or window boxes.
K—Climbing vines.
L—For backgrounds.

	Height (Inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant
Ageratum	4-12	EFJ	5-10	10 Wks.	bushy
Alyssum, Sweet	2-12	BCDEFIJ	5-10	6 Wks.	spreading
Antirrhinum	12-60	CIL	20-25	3-4 Mos.	bushy
Aquilegia	18-36	CEF	15	3 Mos.	branchy
Balsam	14-20	AE	10-12	6 Mos.	erect
Calendula	12-36	D	10-14	12-14 Wks.	bushy
Campanula	18-24	F	8-15	10-12 Wks.	bushy
Candytuft	6-18	BFI	5-10	8-10 Wks.	bushy
Centaurea	18-36	ABCDEIJ	5-20	3-4 Mos.	erect
Chrysanthemum	24-36	AE	5-20	8-10 Wks.	bushy
Celosia	12-36	DEH	20-25	10 Wks.	bushy
Cosmos	36-60	A	5-15	10-12 Wks.	bushy
Coreopsis	18-36	ABD	10-20	4-5 Mos.	bushy
Dahlia, Dwarf	14	F	10	3-4 Mos.	bushy
Delphinium	36-72	L	15-21	3-4 Mos.	tall
Digitalis	30-48	F	10-20	3-4 Mos.	erect
Dianthus	4-15	FI	5-10	12 Wks.	bushy
Eschscholtzia	10-12	CDF	5-12	12-15 Wks.	bushy
Four O'Clock	24-30	AD	5-10	3-4 Mos.	bushy
Gaillardia	18-30	D	15-20	2-3 Mos.	bushy
Godetia	12-24	CD	15-20	2 Mos.	erect
Gypsophila	18-36	BH	15-20	8-10 Wks.	branching
Helichrysum	24-36	H	5-10	3 Mos.	bushy
Hollyhock	48-84	L	5-20	10 Wks.	slender
Kochia	30-36	AB	15-18	Foliage	bushy
Larkspur, Annual	30-72	L	15-20	10-12 Wks.	tall
Lathyrus	60-72	IK	25-40	2-3 Mos.	vine
Lobelia	4-8	EJ	10	10-12 Wks.	bushy
Marigold	8-36	BJ	5-8	6-8 Wks.	bushy
Mignonette	10-12	BI		3-4 Mos.	erect
Moon Flower	12 ft. or more	IK	5-8	4-5 Mos.	vine
Morning Glory	12 ft. or more	AK	5-8	3-4 Mos.	vine
Nasturtium	12-36	DEFK	8-15	2-3 Mos.	bush-vine
Nigella	10-18	BF	10-15	10-12 Wks.	bushy
Nicotiana	30-48	I	20-25	10-12 Wks.	branchy
Pansy	4-8	CEF	10-15	10-12 Wks.	clump
Petunia	10-24	DEFJ	18-20	10-12 Wks.	bushy
Phlox	10-18	ABCFIJ	20-25	8-10 Wks.	bushy
Poppy	18-36	B	20	12-15 Wks.	erect
Portulaca	4-6	ADEFJ	18-20	6 Wks.	spready
Salvia	12-42	A	15-25	3-4 Mos.	bushy
Scabiosa	18-30	I	18-20	2-3 Mos.	bushy
Stocks	12-24	I	5-15	12-14 Wks.	bushy
Schizanthus	18-36	CE	20-25	6-8 Wks.	bushy
Sweet Pea	36 or more	K	15-20	10-12 Wks.	vine
Sweet William	12-24	F	10	12 Wks.	bushy
Verbena	6-12	EFJ	8-10	12 Wks.	spready
Wallflower	12-18	I	5-12	2-3 Mos.	bushy
Zinnia	12-36	AF	5-10	6-8 Wks.	bushy



A Vegetable

PLANTING GUIDE

KEY—For "Time to Plant" in fifth column below.

A—As soon as soil can be worked.

D—After all danger of frost.

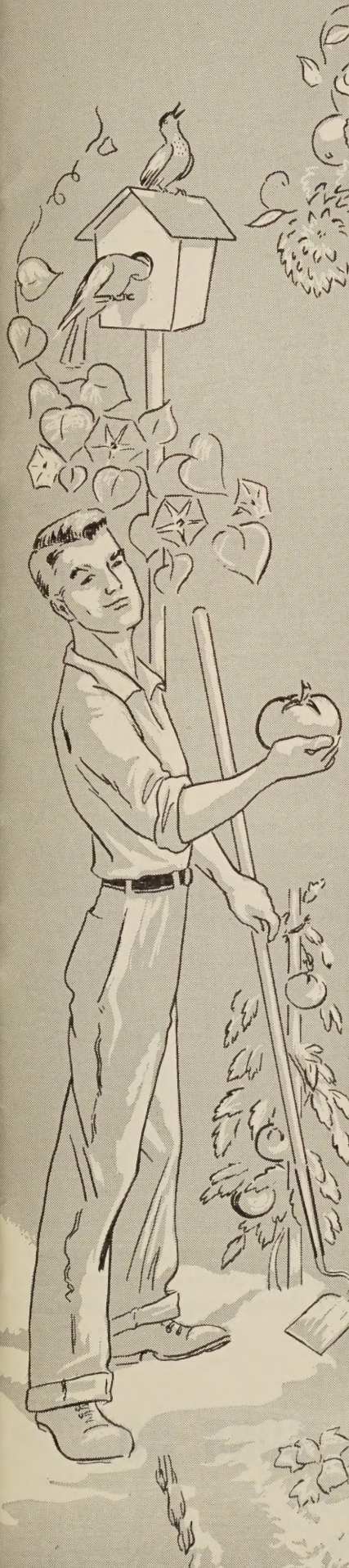
B—Two weeks before last spring frost.

E—When danger of hard freeze is over.

C—Week before last spring frost.

F—In time to allow maturity before freeze.

	Seed Needed for 50 ft. of row	Space Between Rows (inches)	Space Apart In Row (inches)	Depth to Plant (inches)	Time to Plant	Days Growing Period	Edible Period	Approx. Yield Per 50 ft. of Row
Artichoke	1/8 oz.	48	48	1/4	A			
Asparagus	1/2 oz.	24	20	1/2	A	2-3 yr.	4-5 wk.	25 lbs.
Beans, Bush	1/2 lb.	24	4	1 1/2	C	50-70	4-5 wk.	20 qts.
Beans, Lima	1/2 lb.	24	3	1	C	60-90	3-4 wk.	32 qts.
Beans, Pole	1/2 lb.	36	8	1 1/2	C	60-90	6-8 wk.	30 qts.
Beans, Pole Lima	1/2 lb.	48	8	1 1/2	C	88	3-4 wk.	1 1/4 bu.
Beets	1/2 oz.	24	3	1/2	A	55-100	4-6 wk.	1 1/4 bu.
Broccoli	1/8 oz.	24	24	1/2	A	80-120	8-10 wk.	25 head
Brussels Sprouts	1/8 oz.	24	18	1/2	A	70-110	6-8 wk.	15 qts.
Cabbage	1/4 oz.	24	12-24	1/2	A	75-130	4-6 wk.	35 head
Chinese Cabbage	1/2 oz.	24	12	1/2	F	75-85	4-6 wk.	40 head
Carrots	1/4 oz.	16	3	1/2	A-F	65-85	6-8 wk.	24 qts.
Cauliflower	1/4 oz.	24	20	1/2	A-F	65-90	1-2 wk.	25 head
Celery	1/8 oz.	24	6	1/4	E	100-140	6-8 wk.	100 stalk
Collards	1/4 oz.	30	18	1/2	F	24-36	until fall	3 bu.
Corn, Sweet	4 oz.	36	9	1	B	65-100	1-2 wk.	100 ears
Corn, Pop	3 oz.	34	8	1	B	115		
Cucumber	1/2 oz.	48	36	1/2	D	60-100	4-6 wk.	100 fruit
Eggplant	1/8 oz.	36	24	1/2	D	110-150	until fall	75 fruit
Endive	1/2 oz.	18	12	1/2	A	80-100	3-4 wk.	50 head
Kale	1/2 oz.	32	22	1/2	A-F	70-100	until fall	50 plants
Kohlrabi	1/4 oz.	24	6	1/2	A-F	55-75	2-3 wk.	1 bu.
Lettuce	1/4 oz.	18	12	1/4	B	90-120	3-4 wk.	50 head
Muskmelons	1/2 oz.	60	48	3/4	D	90-120	3-4 wk.	50 fruit
Mustard	1/4 oz.	24	9	1/2	A-F	28	until fall	1 bu.
Okra	1 oz.	36	15	1	D	50	until fall	450 pods
Onions	1/4 oz.	18	4	3/4	A	110-140	4-8 wk.	1 bu.
Onion Sets	1 pt.	12	6	1/2	A	50-100	4-8 wk.	60 bun.
Parsley	1/4 oz.	12	6	1/2	E	90-120	until fall	45 bun.
Parsnips	1/2 oz.	18	4	1	A	100-150	until fall	1 bu.
Peas	3/4 lb.	24	2	1	A	50-70	1-2 wk.	1 bu.
Peppers	1/8 oz.	30	20	1/2	D	100-140	until fall	300 fruit
Pumpkin	2 oz.	96	60	3/4	D	90-120	until fall	25 fruit
Radish	1/2 oz.	12	2	1/2	A	25-30	1-2 wk.	50 bun.
Rhubarb	1/2 oz.	48	48					100 stem
Rutabaga	1/8 oz.	24	6	1/2				1 bu.
Salsify	1/2 oz.	18	2	1/2	A	130-150	fall	300 roots
Spinach	3/4 oz.	18	5	3/4	AIF	40-60	1-3 wk.	1 1/2 bu.
Spinach, N.Z.	1/2 oz.	36	18	1	E	70	until fall	50 lbs.
Squash, Bush	1/4 oz.	48	48	1	D	60-80	until fall	60 fruit
Squash, Winter	1/4 oz.	72	72	1	D	100-140	fall	35 fruit
Swiss Chard	1/2 oz.	18	15	1	A	50-60	unti fall	25 lbs.
Tomatoes	1/16 oz.	40	36	1/2	D	100-150	6-12 wk.	2 bu.
Turnips, Roots	1/4 oz.	18	4	1/4	A-F	50-70	1-3 wk.	1 bu.
Turnips, Greens	1/2 oz.	12	4	1/4	A-F	50-60		1 1/2 bu.
Watermelons	1/2 oz.	12	4	1/4	D	90-130	3-4 wk.	20 fruit





Dwarf star annual phlox "Twinkle" in choice mixed colors makes a delightful bedding and edging subject. Twinkle covers itself with a twinkling mass of star-shaped flowers. Flower colors are well balanced and include a high percentage of salmon, rose and pink shades.



Among the newest and best of the recent introductions we especially recommend three outstanding varieties.

CARNIVAL Petunia which is pictured in full color on page 20. Carnival plants are bedding type, growing 12 to 15 inches tall, and spreading to 2 feet across when full grown. It's no trick at all to stand in one spot and count 20 different colors, with most of the flowers enhanced by waved, ruffled or fringed petal edges.

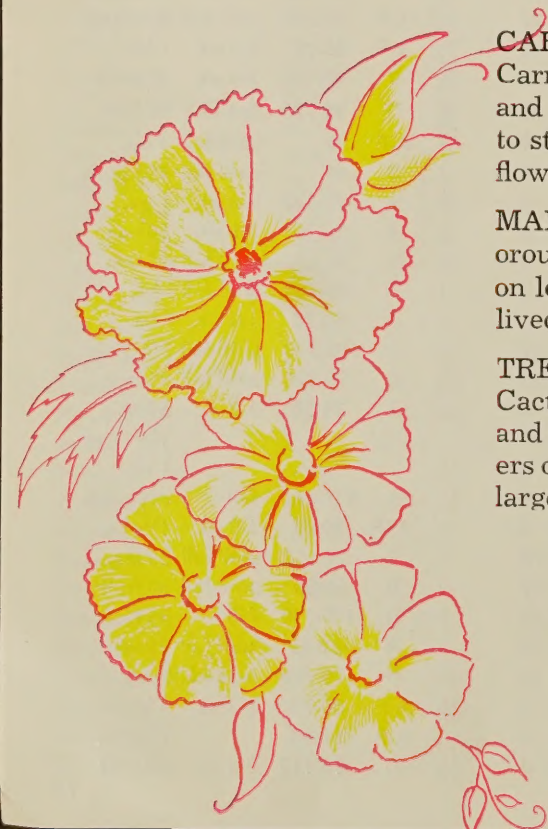
MARDI GRAS Snapdragon, shown on page 21, is extremely vigorous and uniform in plant habit. The florets are closely placed on long-blooming stems, and while the plants are husky and long-lived they are of normal maximum heights. Very colorful.

TREASURE ISLAND Zinnia is a new hybrid Red and Gold Giant Cactus Flowered. A genuine F₂ hybrid zinnia that is easier to grow and grows better under difficult conditions. It produces more flowers over a longer period than other varieties or types of the regular large flowered Zinnia.

GEO. KELLER & SONS CO.

909 Maine St.

Quincy, Ill.



Annuals



PETUNIA, Glitters



CULTURE

The Culture Number shown for each variety refers to the "How to Grow" information which is found on page 38.

Ageratum

(a) Culture I, 4-9"

BLUE PERFECTION—A deep amethyst blue flower. Grows to 9 inches high.

MIDGET BLUE—Small 4-inch plants are covered with azure blooms. Compact. 25c.

Alyssum

(a) Culture II, 4-6"

CARPET OF SNOW (a)—Easily grown dwarf annual. Fragrant snow white flowers last from early summer until frost.

ROYAL CARPET—In drifts of vibrant purple color or used as a neat edging for the flower bed. Excellent companion for Carpet of Snow. 4" high, 10" across.

Anchusa

(a) Culture I, 2'

BLUE BIRD—Bushy plants with sprays of indigo blue, white-eyed flowers.

Antirrhinum (Snapdragon)

(a) Culture I, 1½-3'

Rust Proof

MAGIC CARPET—A delightful new little snapdragon especially well suited to edgings and use in rock garden. Pkt. 25c.

MARDI GRAS—Colors include white, light yellow, canary-yellow, gold, orange, copper, orange-scarlet, light pink, pink, rose-pink, brilliant rose, cream, scarlet, etc., plus bi-colors. Of extremely vigorous and uniform plant habit. Blooms ahead of other snapdragons. Pkt. 25c.

SUPER-MAJESTIC Giant Flowered—Semi-tall. Large garden flowers. 25c.

TALL GIANT, LARGE FLOWERED—Large 3 foot spikes, huge colorful flowers.

TETRA—Immense flowers in many fine colors. Many spikes. All shades. Pkt. 25c.

Arctotis

(Blue-Eyed African Daisy)

(a) Culture I or II, 3'

GRANDIS—Two-inch daisies of pearly white with bluish mauve center. Pkt. 15c.

Aster

(a) Culture II, 1½-2½'

AMERICAN BRANCHING—Four inch double flowers of compact form. Pkt. 15c.

GIANT CREGO Wilt Resistant—Large 4-inch colorful flowers with fluffy effect.

POWDERPUFF—Pink, azure, rose, crimson, white, scarlet and blue. Solidly made of 3-3½" fully-double flowers. Each plant 24" tall, yet takes up less than 12" space—all the flowers are on top. Often 20 long-stemmed cut flowers per plant. Highly wilt-resistant. Early. Pkt. 25c.

QUEEN OF THE MARKET—Early. Short plants. Compact double flowers. Mixed. Marvellous colors. Wilt resistant. Pkt. 15c.

RAINBOW—An especially fine single flower for cutting and contains a range of color not to be found in other asters. Pkt. 20c.

SUNSHINE—4" anemone-like flowers. Loose row of petals, quilled center. 25c.

WILT RESISTANT SUPER GIANT, MIXED—An entirely new class of base branching, heavy stemmed fluffy ostrich feather flowers. 5-6" across. Pkt. 15c.

Bachelor's Buttons (Centaurea, Cornflower)

(a) Culture II or IV, 3'

BLUE BOY—A fine, clear blue. Flowers are large. Colors intense. Pkt. 15c.

JUBILEE GEM—Dwarf, 1' plant. Large, frosty blue blooms. All colors. Pkt. 15c.

Balloon Vine (Love in a Puff)

(a) Culture I, 10' to 15'

A clear, free-growing vine with small white flowers, and balloon-like seeds. 15c.

Balsam (Lady Slipper)

(a) Culture II, 1½-2'

MIXED—Double Camellia-like flowers all summer on bushy plants. Showy. Pkt. 15c.

Bells of Ireland

(a) Culture I, 24"

An interesting novelty with a long graceful stem. Both foliage and flowers are the same attractive light green color. Flowers practically cover the stem. 25c.

Calendula (Pot Marigold)

(a) Culture II or IV, 1½'

PACIFIC BEAUTY, LEMON—Golden flowers with drooping petals. Odorless.

PACIFIC BEAUTY, PERSIMMON—Large, bright, orange, double. Heat resistant.

SUNSET SHADES—Large flowers in shades: lemon, yellow and orange.

CANDYTUFT (Iberis)

(a) Culture III, 1'

WHITE HYACINTH—Large conical spikes of snowy flowers. Fine for edging.

Cardinal Climber
(Imp. Cypress Vine)

(a) Culture III, 10-15'

Slender vine with bright green fernlike leaves. Red flowers. Fast grower. Pkt. 15c.

Castor Bean (Ricinus)

(a) Culture III or VII, 10'

ZANZIBARENSIS—Tall, strong plant for bold effect. Large lobed bright green leaves. Excellent for backgrounds.

Celosia (Cockscomb)

(a) Culture I or II, 1-3'

CRISTATA—Low grower with large crested heads, as rooster combs. Pkt. 15c.

GOLDEN FLEECE—Plumes are huge and dense, on long cutting stems, dozens of them to the plant. Stands any amount of hot weather, pest and disease resistant. Will cut-and-come again all season. 15c.

PAMPAS PLUMES—Tall, feathery heads in new bronze and sunset shades. 15c.

TREADOR—A richer and brighter red than the earlier crimson colored cockscomb. Long blooming season, most compact, largest heads. Cristata type. 15c.

Chrysanthemum (Annual)

(a) Culture II or IV, 1 1/2'

SINGLE PAINTED DAISY, MIXED—Showy daisy-like flowers. Rings of red, yellow, on white, red or yellow. Pkt. 15c.

Clarkia

(a) Culture II or IV, 2'

DOUBLE MIXED—Large double flowers in many gorgeous colors. Graceful plant. Does well in light shady spot. Pkt. 15c.

Cosmos

(a) Culture II or IV, 3-4'

DAZZLER—Wavy fluted petals of a velvety crimson-maroon. Pkt. 15c.

FIESTA—Bi-color. Orange colored with scarlet longitudinal stripes. Pkt. 15c.

ORANGE RUFFLES—Semi-double flowers. Golden orange. Airy effect. Pkt. 15c.

RADIANCE—Beautiful, deep rose flowers have a rich crimson zone in center. 15c.

SENSATION MIXED—Huge single flowers, wavy petals, many colors. Pkt. 15c.

YELLOW RUFFLES—Semi-double. Bright yellow. Airy effect. Pkt. 15c.

Cynoglossum
(Chinese Forget-Me-Not)

(a) Culture II, 15"

FIRMAMENT—Hundreds of tiny indigo blue flowers. Resemble Forget-me-nots. Dwarf plants bloom all summer. Pkt. 15c.

Daisy, Swan River
(Brachycome)

(a) Culture II, 10"

MIXED—Many colored small daisy-like flowers freely produced all summer. 15c.

Dianthus (Pinks)

(a) Culture I or VIII, 1'

GAIETY—Fringed petals in a wide range of flower colors and shapes. Single with lacy appearance. Spicy odor. Pkt. 15c.

Didiscus (Blue Lace Flower)

(a) Culture I or II, 2 1/2'

COERULEUS—An attractive annual which blooms from July until frost. Flowers are pale lavender. Good cutting flower. 15c.

Eschscholtzia
(California Poppy)

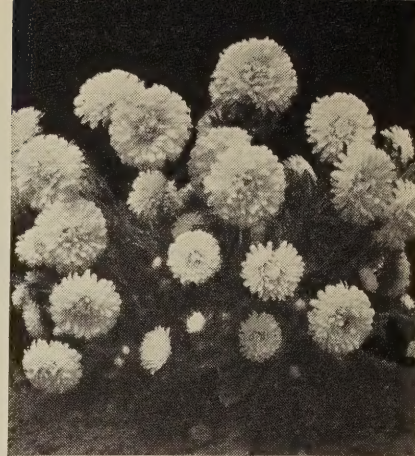
(a) Culture III, 1'

Large single poppy-like flowers in many showy colors. Fern-like leaves. Pkt. 15c.

Everlasting Flowers

(a) Culture II, 1 1/2-3'

MIXED—Contains such favorites as Straw-flower and Globe Amaranth. Fine for dried winter bouquets. Pkt. 15c.



ASTER, Queen of the Market



ASTER, Sunshine

Four O'Clock (Mirabilis)

(a) Culture III, 2'

Bushy plants covered with flowers of red, pink, white, violet, and yellow. Flowers close in sun and open at 4 o'clock.

Gaillardia (Blanket Flower)

(a) Culture II, (hb) VI, 2'

DOUBLE MIXED PICTA (a)—Showy round flowers with tubular petals. 15c.

Godetia (Satin Flower)

(a) Culture I or II, 2'

DOUBLE, MIXED—Azalea-like flowers of many showy colors. Bushy plants. 15c.

Gourds, Ornamental

(a) Culture III, 12'

MIXED—Large and small kinds that will be useful for dried novelties. 15c.



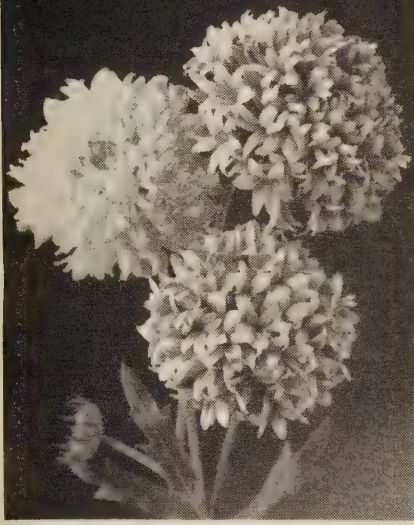
CALENDULA, Lemon



Preparing the Garden Soil

The spade and spading-fork are tools used to dig the soil in preparing for sowing and planting.

Drive the spade or fork straight down, dig a trench and lay the soil from the trench aside at the end. Now spade with the blade not parallel to the trench, but at right angles to it. Lift it up and turn the spade over so that the top-soil, humus and plant food which you have added are dropped underneath and into the trench you have spaced previously. Just before planting any area of the garden, work that part finely and smooth off with a rake before laying the rows.



GAILLARDIA, Double Picta

Gypsophila (Baby's Breath)

(a) Culture I, 1 1/2-3'

ANNUAL WHITE (a)—Open, bell-shaped blooms on branching stems give airy touch to garden or bouquet. Pkt. 15c.

Helianthus (Sunflower)

(a) Culture II, 6'

SUN GOLD—Large double flowers of a brilliant golden yellow. 15c.

Hunnemannia (Mexican Tulip Poppy)

(a) Culture III, 1 1/2'

SUNLITE—Soft yellow double poppy type flower. Bluish fine cut leaves. Pkt. 15c.

Kochia (Burning Bush or Summer Cypress)

(a) Culture III, 2 1/2'

Compact pyramid. Needs no trimming. Bright green foliage makes neat, quick hedge. Turns bright red in fall. Pkt. 15c.

Larkspur (Annual Delphinium)

(a) Culture II or IV, 3'

REGAL DARK BLUE—Tall spikes of large double flowers in a violet blue. Pkt. 15c.

REGAL WHITE—Pure glistening white spikes. Tall, stately, and showy. Pkt. 15c.

REGAL PINK—Lively salmon pink.

REGAL LILAC—Clear lilac with green buds. Fat spike of large florets. Pkt. 15c.

REGAL ROSE—Rose color. Long, thick spikes exceptionally large florets. Pkt. 15c.

GIANT REGAL MIXED—A fine mixture of the above superior strains. Pkt. 15c.

STEEPLECHASE BLUE—The largest flowered of all Larkspurs. In fact it looks more like a delphinium. The intense dark blue flowers are double, freely borne. 25c.

Linum (Flowering Flax)

(a) Culture III, (hp), VI, 1-2'

SCARLET (a)—Bright red flowers in a constant succession all summer. Pkt. 15c.

Lobelia

(a) Culture I or V, 4"

CRYSTAL PALACE—Compact border plant with myriads of tiny bright blue flowers. For all low use. Pkt. 25c.

CAMBRIDGE BLUE—An exceptionally fine variety, easily grown. Pkt. 20c.

Marigolds

(a) Culture I or II,

African

Tall Types, 2 1/2-4'

CRACKERJACK—Full marigold range of colors, primrose, yellow, gold and orange. Turns out uniformly large, double flowers measuring 4 to 5 inches across. Pkt. 25c.

GLITERS—Clear yellow. Double. Bushy with long stem. A garden favorite.

INDIAN CHIEF—The brilliant reddish-orange color of this variety is outstanding among African Marigolds. Flowers are the informal peony-flowered type 2 1/2 to 3" across, nicely ruffled petals.

KON TIKI—This new pure yellow early flowering dwarf African marigold is of the new double type.

MAMMOTH MUMS—Chrysanthemum-flowered, blooms in 2 1/2 months from seed. Deep sulphur yellow. 30 inches high. 15c.

MAN-IN-THE-MOON—The lightest of all yellow marigolds with exceptionally solid, round flower heads composed of broad, crisply ruffled, pale moon-yellow petals. Vigorous with strong stems. 25c.

REAL GOLD—Large carnation-like flowers in striking bright orange color.

YELLOW SUPREME—Light yellow, large flowers of carnation form. Pkt. 15c. covered with tiny, double orange yellow

French

Double Dwarf Types, 1/2-1'

COLOR MAGIC—12 inch mounds covered with variegated colored flowers. An unusual cross in French Marigolds. Flowers in combination of deep gold and red.

GOLDEN PYGMY—Dwarf, compact plant covered with tiny, double orange yellow flowers. Pkt. 20c.

LEMONDROP—Clear lemon yellow of the miniature type. Profuse bloomer. Pkt. 15c.

MELODY—Foot high plants with loads of orange ball-like flowers. Pkt. 15c.

RUSTY RED—Compact, with bright red, 2" blooms. Reddest of all. Pkt. 15c.

SPRY—Compact plants with showy yellow flowers bordered with mahogany. Distinctive and showy. Pkt. 15c.

SUNBRITE—An extremely early, medium height golden yellow in the carnation type which will bloom 2 or 3 weeks ahead of the other varieties. Pkt. 15c.

SUNKIST—Compact plants with masses of golden orange blossoms. Pkt. 15c.

Single Dwarf Types, 1/2-1'

FLASH—Plants have many 1 3/4" flowers in tangerine and red shades. Pkt. 15c.

NAUGHTY MARIETTA—Open 2 1/2" flowers are rich gold with maroon at base of petals. Fine for edging. Pkt. 15c.

Mignonette (Reseda)

(a) Culture III, 1'

Low grower with tiny, white blooms that are very sweet scented. Pkt. 15c.

Morning Glory (Ipomea)

(a) Culture III, V or VII, 12'

CANDY PINK—Reported to be the first pink morning glory. The big 4 inch diameter flowers are of a lovely and cheerful shade of rose-pink salmon. Pkt. 25c.

DARLING—Sky blue with five deep blue mid-ribs forming a star. Pkt. 15c.

HEAVENLY BLUE—Sky-blue flowers. Flowers close in bright sun. Pkt. 15c.

PEARLY GATES—A shining white form of Heavenly Blue. Pkt. 15c.

SCARLET O'HARA CLIMBING—Large velvety scarlet flowers. Very showy.

MIXED—Many lovely shades. Pkt. 15c.

Nasturtium

(a) Culture III or V

Dwarf or Bush Kinds 1'

CHERRY ROSE—Giant double, very sweet-scented. Rose flushed cherry. Pkt. 20c.

GOLDEN GLOBE—Semi-double flowers of bright gold. Sweet scented. Pkt. 15c.

SCARLET GLOBE—Fiery scarlet double. Old-fashioned beauties. Pkt. 15c.

MAHOGANY GLOBE—Deep velvet mahogany red double flowers. Pkt. 15c.



Planting Depth for Seeds

Very fine and small seeds must never be sown with more than a thin layer of soil over them—barely covered. The upper layer of soil should be finely pulverized, then the seed scattered and merely raked in. Then lightly tamp the soil with the back of the spade or a board enough so that they will germinate.

The general rule for the larger seed is to plant them two or three times as deep as their own diameter. Plant seed somewhat more shallowly in heavy or clay soils and a little deeper in sandy ones, since the sandy soils are drier and the heavy soils more moist and the ideal condition wanted is a medium amount of moisture.

Petunia's **REDS ARE NEW**



PETUNIA, Ballerina

Petunias, without a doubt give more all-around satisfaction than any other annual. Constant hybridizing has brought us a wealth of color in these free-flowering annuals and reds are in the spotlight this year. Winner of the 1957 All-America Award was "Red Satin," an incredibly vivid and shining scarlet-red flower.

The new reds in Petunias are admirably suited to low beds of dazzling color, or to create a bright band of scarlet for borders or edgings.



PETUNIA, Fire Dance

PETUNIA, Prima Donna



PETUNIA, La Paloma



ZINNIAS FOR

Zest

The modern zinnia is America's most popular, most colorful and easiest annual to grow. Summer with its blazing skies and brilliant greens demands the vivid splashes of color with bold plantings of the brightest zinnias. Ranging in color from creamy white to brilliant red . . . bicolors and muted pastel tones make this versatile annual a must in any garden.

To insure a beautiful zinnia garden, buy a good seed, wait until the soil is warm to plant your seed. Water young plants, cultivate shallowly. Dust for mildew.



ZINNIA, Cactus Flowered

ZINNIA
Persian
Carpet



ZINNIA, Peppermint Stick



Tall or Vine Kinds 3-10'

GOLDEN GLEAM—Large golden flowers. Double and fragrant. Pkt. 15c.

SCARLET GLEAM—Fiery orange scarlet flowers. Double and fragrant. Pkt. 15c.

SALMON GLEAM—Delicate golden salmon double flowers. Pkt. 15c.

GLORIOUS GLEAM HYBRIDS—A mixture of all the Gleam colors. Pkt. 15c.

Nemophila (Baby Blue Eyes)

(a) Culture II, 6"

Many cup-shaped sky-blue flowers on low spreading plant. Pkt. 15c.

Nicotiana (Flowering Tobacco)

(a) Culture I or II, 2-3'

SENSATION—Long-tube starry flowers. Fragrant at night. White, light, pink.

Pansy

(a) Culture I, II or VIII, 8"

COLOR CARNIVAL—F₂ generation seed, possessing exceptionally large blooms on vigorous plants. The color range is remarkable, containing combinations of deep rich colors, predominantly red and wine shades. Pkt. 50c.

FELIX—Appropriately named for "Felix the Cat." Each large ruffled flower is marked with the long dark "whiskers" and the color range is unusual with plenty of smokies, wine shades and bronzes. Growth compact, neat, sturdy stems. 25c.

SWISS GIANTS—Large flowering strain with fine range of gorgeous colors. Best of the improved pansies. 35c.

Petunia

(a) Culture I or IV

Small Flowered, 10-14"

BALCONY—Trailing kinds for use in window boxes. White, red, rose, or blue. 20c.

COMANCHE—The reddest of red petunias, richer, brighter, more uniform scarlet red. Single flowers 2½ to 2¾ inches in diameter. About 13 inches high. Pkt. 50c.

ENGLISH VIOLET—A fine purple-violet color. Spreading plant. Pkt. 20c.

FIRE CHIEF—Brilliant Red. Compact, and dwarf flowers profusely. Pkt. 15c.

GLITTERS—The first real red and white bicolored introduction. All America 1957 award winner. It grows only 8 inches high, nana compacta type, an excellent and very showy dwarf bedder and edger. Pkt. 50c.

LIPSTICK—A vigorous new petunia with an unusual glowing color. Plants are compact, early and free-flowering.

POW WOW—New small flowering varieties developed as companions to Petunia Comanche. All have the same general habit, vigor and flowering characteristics as Comanche. **Apache** is bright rose red; **Mohawk**, bright rose pink; **Sioux**, salmon and **Paleface**, late 1955 All America Bronze Medal. Pure white. Pkt. 50c.

ROSE OF HEAVEN—Best of the rose colored strains made famous by Rosy Morn. Color is slightly deeper and uniform. 15c.

SILVER MEDAL—A lovely salmon. Good size flowers on compact plants. 50c.

Large Flowered, 12-20"

BALLERINA—Bright. Deep rose fringed grandiflora type. Delicately fringed. 50c.

CARNIVAL—New strain of grandiflora Petunias that covers a much wider color range than ever before available. Large flowers produced in profusion on compact spreading plants. Very showy. Pkt. 25c.

FIRE DANCE—Exquisite new hybrid bedder, dwarf fringed grandiflora. Rich scarlet with a bold flash-light yellow throat. Pkt. 50c.

FLAMING VELVET—A velvety blood red. Best of its color. Grows profusely. 20c.

GIANTS OF CALIFORNIA—Huge flowers of many fine pastel tints. Pkt. 25c.

LA PALOMA—Pure white with a yellow throat, 100% grandiflora 3½ to 4 inches. Well fringed and extremely free flowering. Very uniform and vigorous, semi-dwarf and spreading which make it excellent for pot, bedding, boxes and borders. Pkt. 50c.

LITTLE GIANTS MIXED—Compact plants with medium flowers in many colors. 25c.

POPCORN—Large, pure white, plain edged flowers. Early blooming, exceedingly dwarf and compact. Pkt. 50c.

PRIMA DONNA—Improved F₁ hybrid in the giant dwarf fringed grandiflora class. A bright rose-pink petunia excellent for home gardens. True large size and delightfully fringed, wavy petals on 12-inch bedding type plants. Pkt. 50c.

RED SATIN—Incredibly vivid and shining scarlet flowers. Blooms freely everywhere, and heat or sunshine will not fade the color of this F₁ hybrid multiflora All-America 1957 winner. Pkt. 50c.

SNOW STORM—Large plain glistering white flowers with creamy shading in throat. Very beautiful. Pkt. 50c.

THEODOSIA—Large ruffled flowers of deep rose pink with golden throat. Very showy and lovely. Pkt. 25c.

Phlox (Annual)

TWINKLE—All America award winner 1957. Choice mixed colors, makes a delightful bedding and edging subject. Growing only six inches high, yet having as large flowers and heads as on the old larger type. Twinkle covers itself with a twinkling mass of star-shaped flowers. Pkt. 35c.

Poppy

(a) Culture IV, 1½-3'

SHIRLEY, MIXED—The easily grown, lovely annual poppy. Many bright colors. Grows easily and self-sows. Pkt. 15c.

Portulaca (Moss Rose)

(a) Culture III or IV, 6"

SINGLE MIXED—Brilliant colors.

DOUBLE MIXED—All double. Pkt. 20c.

Salvia (Flowering Sage)

(a) Culture I, 2-3'

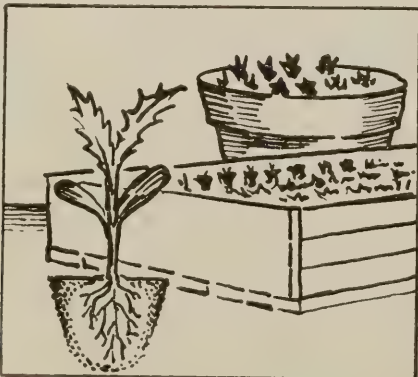
AMERICA or GLOBE OF FIRE—The well-known Scarlet Sage that is a blaze of vivid scarlet in summer. Pkt. 25c.

ST. JOHN'S FIRE—Finest all-purpose salvia. Brilliant scarlet, blooms from mid-July until frost. Begins to flower when only a few inches high. Pkt. 35c.

Salpiglossis (Painted Tongue)

(a) Culture III, 30"

MIXED—Large petunia-like flowers of rich velvety colors, veined with gold. 15c.



Technique of Transplanting

Transplanting a green and growing plant is far different from moving dormant shrubs since it administers a shock to the plant which is like the effect of a serious surgical operation.

It is important to disturb the roots as little as possible. Dig a hole large enough to hold the plant roots with room to spare, and deeper than necessary. Mix a teaspoonful of plant food with the soil at the bottom of the hole and put in an inch of fresh soil. Now hold the plant where it is to stand and pour over the plant roots, half a pint of the solution in the bucket. While the water remains in the hole and around the plant roots, draw in soil to fill.

Scabiosa (Mourning Bride, Pincushion Flower)

(a) Culture III or IV, 2'

BLUE MOON—Large double flowers of deep lavender blue. Pkt. 15c.

CORAL MOON—New coral shade. Large double flowers on firm stems. Pkt. 15c.

IMPERIAL GIANTS, MIXED—Large globe-shaped flowers in a wide range of red, white, coral rose and blue. Pkt. 15c.

Schizanthus (Butterfly-Flower)

(a) Culture II or IV, 1½'

MIXED—Small flowers shaped like multi-colored butterflies. Delicate cut leaves. Free flowering and very decorative.

Sea Lavender (Statice)

(a) Culture I, 2'

MIXED—Small tubular flowers in colorful branching spikes. Decorative. Pkt. 15c

Snow-On-The-Mountain (Euphorbia)

(a) Culture III, 2'

Bright green foliage edged with white. Good for edging or contrast. Pkt. 15c.

Stocks (Gilliflower)

(a) Culture I or IV, 1-2'

DWARF TEN WEEKS—Low growing with strong spikes. Many fine colors. 15c.

GIANT IMPERIAL—Excellent double flowers on tall stems. Bright colors. 15c

Sweet Peas

(a) Culture III, 3'

CUTHBERTSON—Fine new heat resisting strain, very early, free flowering and fragrant. Colin, scarlet; Janet, white; Lois, rose pink; David, navy blue; Frank, lavender and Tommy, mid-blue. Pkt. 15c.

GINGER—A gorgeous flushed rose changing to rich salmon rose under artificial light. Colossal flowers 2½ inches across. Ginger is an attractive combination of rose changing to white. Pkt. 25c.

LITTLE SWEETHEART—Bred especially for the home gardener to use for borders, bedding or pot plant culture. Forms a perfect mound of flowers 8" high and wide. Flowers are of the Ruffled Spencer type in a full color range. Pkt. 35c.

EARLY SPENCER—Earliest of the many strains. Large colorful, fragrant blossoms. By variety or mixed. Pkt. 15c.

LATE SPENCER—Large fine flowers that flower in early summer. The standard ones for outdoor use. Colors mixed. 15c.

RUFFLED SPENCER—Wavy and ruffled petals give fine effect. Pkt. 15c.

Sweet Sultan

(a) Culture II or IV, 2½'

MIXED—Lovely colorful thistle shaped flowers. Easily grown. 15c.

Tithonia (Golden Flower of the Incas)

(a) Culture I, 4'

TORCH—Blossoms from July until frost with quantities of long stemmed single flowers 3 to 4 inches across resembling single dahlias of intense fiery red. 15c.

Verbena

(a) Culture I, 8"

BLUE SHADES—Medium and dark blues in mammoth type. Pkt. 15c.

GRANDIFLORA MIXED—Huge flower clusters, all colors. Ideal for beds. 15c.

LAVENDER GLORY—Lavender with white eye. Large clusters. Fragrant. 15c.

SCARLET—Flaming scarlet heads. Brilliant in beds. Pkt. 15c.

Vinca (Periwinkle)

(a) Culture III, 15"

MIXED—Colorful starry flowers on glossy-leaved, bushy plants. Does well in shade and under most conditions. 15c.

Wild Flower Mixture

(a) Culture II or III, ½-3'

Old fashioned flowers in a fine mixture for all season flowering. Sow thinly and enjoy continuous flowers and delightful surprises. These are not wild flowers of the fields but a selection of garden flowers which will give a "wild" garden look.

Zinnia

(a) Culture I or II

Small Types, 18-2"

RED RIDING HOOD—Deep scarlet flowers 1" across. Free flowering. Fine border plant of Lilliput type. Pkt. 15c.

PERSIAN CARPET—Bi-colored. Rich deep tones of red and gold along with sunset shades. Medium-sized blooms on good cutting stems. Pkt. 15c.

LILLIPUT PASTELS—Lovely soft colors in the miniature strain. Fine for borders or small bouquets. Pkt. 15c.

PUMILA SUNSHINE TINTS—Dwarf plants with medium flowers in a wide range of delicate, soft colors. Pkt. 15c.

TOM THUMB MIXED—Lilliput type flowers on a very dwarf plant. For low borders and miniature displays. Pkt. 15c.

Large Types, 2-2½'

BLAZE—Giant hybrid, fiery red and orange. True to color and flowers are bigger than the dahlia flower zinnias. Pkt. 25c.

DAHLIA FLOWERED MIXED—Huge flowers in a bewildering range of bright and pastel colors. Pkt. 15c.

FLORADALE SCARLET—Very uniform and true to type and color. Deep scarlet, slightly smaller than dahlia-flowered, 15c.

GIANTS OF CALIFORNIA, MIXED—Mammoth flowers in many striking colors. Largest zinnias of all. Pkt. 15c.

GIANT CACTUS FLOWERED—Many shades in the shaggy cactus flowered varieties. Tall, sturdy plants.

ICE CREAM—Attractive, creamy variety. Giant Formal cactus. Well suited for cutting. Pkt. 25c.

ORTHO POLKA—A giant bloom of the Peppermint stick coloring. Colors in this bright mixture include combinations of pink and white, red and white, lavender and white, purple and white, scarlet and yellow, etc. Pkt. 25c.

PEPPERMINT STICK—Bi-colored. Basic red flowers, white or yellow stripes. 15c.

TREASURE ISLAND—An eye-stopping mixture of bold, bright and colorful shades of scarlet, crimson and red—shades of orange and pure yellow. Cactus flowered, the flowers are exceptionally large, up to 6 and 7 in. in diameter.



Water Well or Not At All

Never give water in dribbles. Water enough to insure a thorough soaking all the way through. The frequency of watering depends upon the kind of plant, its condition and the air moisture.

Water should be applied to the lawn and garden areas as evenly as possible. Use a sprinkler which spreads it slowly so that there is no run off. Vegetables and flowers should be watered without wetting their leaves, if practical. Avoid allowing plant leaves to be wet at night as this will spread disease. A canvas hose, which leaks all along its length is an excellent device for irrigating row crops or borders, serving as a portable irrigation ditch.

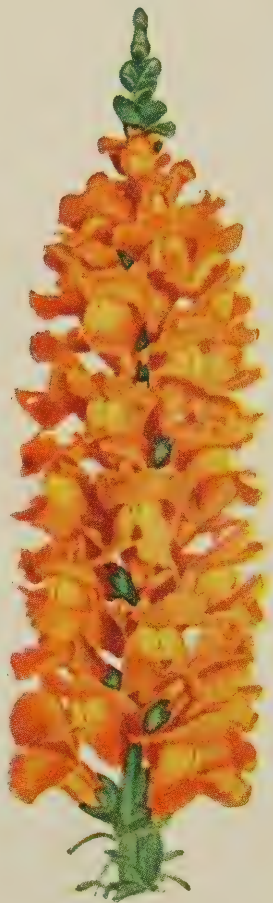


CELOSIA, Golden Fleece



TITHONIA,
Torch

ASTER, Powderpuff



ANTIRRHINUM Tetra





MARIGOLD, Crackerjack



MARIGOLD, Red Head

MARIGOLD, Glitters



To make annual plants branch and grow more flowers, most of the plants should have the top of the stem pinched off when they are a few inches high. Remove only the end bud, about $\frac{1}{4}$ ".

A good border needs a well prepared sub-soil. Dig deep and condition the sub-soil just once and you needn't bother about it again for many years. To do this, break up heavy sub-soil with sand, peat moss, humus, or lime. Top this off with fine loam. The double dug bed will be higher than before, but it will soon settle.

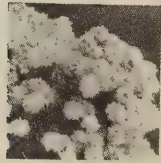
To have plenty of cut flowers without disturbing your flower borders, plant a few rows of flowers along the edge of your vegetable garden. Or set them out between the rows of early lettuce or radishes, where they can bloom after the vegetables have been used.

The Sunshine Flower! That's a marigold, gay dancing yellows, bright oranges, tinged reddish golds and browns, ranging from chrysanthemum flowered, compact butterballs, to dainty dwarfs, single and double

flowered. Marigolds deserve a place in every garden. An easy to grow annual which provides cut flowers by the armfuls, they will grow nearly anywhere in almost any kind of soil. May be started from seed in the garden.



The perfect background for all gardens



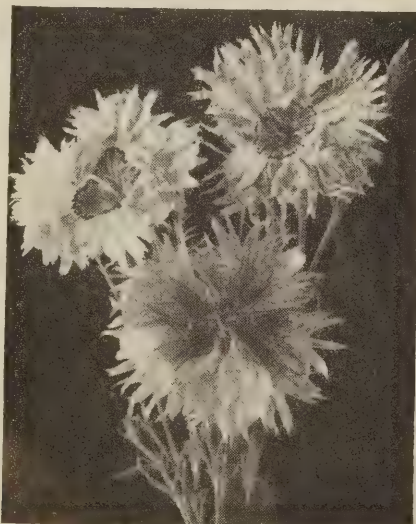
The encouragement of the beginner

The stay of the experienced gardener

Perennials



SHASTA DAISY (single)



DIANTHUS (Pinks)

Achillea

(hp) Culture IV, 1-1½'

PTARMICA (The Pearl)—Clusters of pure white flowers bloom abundantly all summer. Fine for cutting. 12-18 inches.

Alyssum

(hp) Culture VI, 1'

SAXATILE (Gold Dust)—Hardy, compact growth. Produces golden yellow flowers.

Anemone

(hp) Culture II, 1'

CORONIA, ST. BRIGID—An improved strain bearing more brilliant and larger flowers. Remains in bloom longer. Pkt. 25c.

Aquilegia (Columbine)

(hp) Culture VI, 2½'

McKANA'S GIANTAS—Larger flowers and longer spurs, as well as richer and more beautiful colors than other columbines. The strong, bushy plants reach three feet in height and the striking terminal flowers are well supported on wiry stems. 50c.

MRS. SCOTT ELLIOTT'S LONG SPUR RED—Large colorful blooms. Pkt. 15c.

Arabis (Rock Cress)

(hp) Culture VI, 6"

Creeping plants with small flowers in early spring. Fine for edging. Pkt. 15c.

Armeria (Thrift)

(hp) Culture VI, 3"

Dwarf rock plants with grassy foliage and has dense globular flowerheads. 25c.

CULTURE

The Culture Number shown for each variety refers to the "How to Grow" information which will be found on page 38.

START THEM FROM SEED

Starting perennials from seed is not only money-saving but a satisfying experience. With just a little care a packet of seed will give you many plants for border and garden and even to give away.

Aubrietia (Purple Rock Cress)

(hp) Culture VI, 6"

A creeper with large colorful flowers in spring. Ideal with bulbs. Purple shade.

Daisy, English (Bellis Perennis)

(hp) Culture VI, 8"

Low plants with colorful double daisies in early spring. Ideal flower for beds.

Campanula (Canterbury Bells)

(b) Culture VIII, 2'

CUP AND SAUCER—Bell-shaped. Saucer of petals at base. Mixed colors. June.

DOUBLE—Fine double flowers in blue, pink and white. All mixed. Good in beds.

SINGLE—Large bell-shaped flowers in many colors. Graceful plants. All mixed.

Candytuft (Iberis)

(hp) Culture VI, 1'

PERENNIAL GIBALTARICA—Lilac-pink blooms. Needs protection in the winter. Prefers hot, dry location. 10".

SEMPERVIRENS—The perennial white Candytuft. Most desirable perennial for borders, rock gardens. Is evergreen. 25c.

Carnation

(hp) Culture or VI, 18"

CHABAUD'S GIANTS—Large double flowers with sweet fragrance. All colors. Flower in six months. Profuse bloomers.



Coreopsis

(hp) Culture VI, 2'

SUNBURST—Large, double flowers of rich golden color. Fine for cutting. Sturdy, good grower and dependable, 2'. Pkt. 15c.

Dahlia

(hp) Culture I or II, 14"

UNWIN'S IDEAL BEDDING—Semi-double flowers on low bushes. Fine for beds or borders. Comes in many colors.

Delphinium (Perennial Larkspur)

(hp) Culture VI, 5'

GIANT PACIFIC HYBRIDS—World famous strain of immense double flowers on tall stems. Colorful. Blooms June. 25c.

Dianthus (Pinks)

(p) Culture I, 1'

DOUBLE AND SINGLE MIXED—Fine mixture of colorful, scented pinks.

Foxglove (Digitalis)

(b) Culture VII, 3'

Tall spikes of lovely thimble-shaped flowers of pink, rose, and purple. Beautiful blooms second year. 3' high. Pkt. 15c.

PERENNIAL MONARCH MIXED (hp)—Superb daisy type flowers in shades of red and yellow. 1½ to 2 feet high.

Geum

(hp) Culture VI, 1½'

MRS. BRADSHAW—Glowing scarlet flowers. Bright green foliage. Double 20c.

Gypsophila (Baby's Breath)

PERENNIAL WHITE (hp)—Large loose clusters of small flowers give misty effect. Excellent for cutting. 1½-3' tall. Pkt. 15c.

Heuchera

SANGUINEA HYBRID—A fine, hardy perennial bearing rich colored flowers in graceful spikes. Good cutting flower. 25c.

Hibiscus (Rose Mallow)

(hp) Culture VI, 4'

GIANT MIXED—Huge bell-shaped flowers in white, pink, red. Tall plants. 15c.

Hollyhock

(hp) Culture VI or VIII, 5'

DOUBLE, MIXED—Large double flowers on tall spikes. Bloom in midsummer. 15c.

Lavender

VERA—Hardy perennial grown largely for its fragrance. Lavender flowers. 15c.

Linaria (Baby Snapdragon)

(hp) Culture I, II, IV or VI

NORTHERN LIGHTS—About 15" high. Brilliant colors. Excellent quick-growing, cutting flower. 15c.

Linum (Flowering Flax)

(hp) Culture VI, 6"-8"

PERENNIAL BLUE—Low bushy plant blooming from spring to midsummer. Small, clear blue flowers. Pkt. 15c.

Lupine

(hp) Culture III or VII, 3'

RUSSELL'S MIXED—Finest of all the lupines. Brilliant colors in long, strong spikes symmetrical closely packed. 15c.

Phlox

(hp) Culture VI, 8-12"

Lovely clusters of showy flowers on low plants from early spring on. Easily grown.

BEAUTY MIXED—The finest large flowered Dwarf Phlox. The shades are clear and soft. Blue, Pink and White. Pkt. 15c.

GIGANTEA ART SHADES—A strain with flowers 1½" in diameter, in a remarkable variety of soft color tones. Pkt. 15c.

Poppy

(hp) Culture VI, 1½-2"

ICELAND MIXED—Excellent perennial for borders, rock gardens. Large colorful, ferny foliage. Neat compact tufts. 20c.

ORIENTAL SCARLET—Huge red blooms in early summer from perennial root. Useful for bold color. Flower profusely. 20c.

Primula (Primrose)

(hp) Culture VI, 6-10"

ENGLISH PRIMROSE (Vulgaris)—Creamy yellow. 6-10" high. Pkt. 25c.

POLYANTHUS, GIANT MIXED—Handsome clusters, wide range of colors. 25c.

Shasta Daisy

(hp) Culture VI, 2'

ALASKA—Largest of the Shasta strains. Big, white flowers yellow centers. 2'.

DOUBLE—Easily grown popular variety with large double heads. Pkt. 25c.

Sweet William (Dianthus Barbatus)

(hp) Culture VI, 1½-2'

DOUBLE—Double flowers crowd the heavy heads of many colors. 1½-2'. 15c.

SINGLE—Lovely single pinks in large flat clusters. Fine for cutting. 1½-2'. 15c.

Tritoma (Red Hot Poker)

(p) Culture VI, 3-4'

CHOICE HYBRIDS—Narrow tubular flower on tall spikes, orange red. Graceful greasy foliage. Not perennial under some conditions. For border. 25c.

Viola (Tufted Pansies)

(hp) Culture VI, 6"

MIXED—Miniature pansies from neat plants. Flower all season. Many showy colors mixed. Good in low borders. 6".



PETUNIA, Carnival. A beautiful mixture of all Petunia colors and shades. Large flowered, some ruffled, some fringed and of compact, even height and hybrid vigor.

Color Galore

Annuals—easily grown from seed provide color galore from early summer to fall, but there must be a reason for each spot of color in the garden.

Garden planning is not hard, it is thoughtful consideration of existing boundaries, focal point, color and growth habit. In gardening you can rarely work with a plant in flower, but must create in advance on paper.

An interesting and effective way of planning your garden is by the use of bits of colored paper cut out to scale and representing the color, size and growth habit of the individual flower, shrub or tree.



VERBENA, *Grandiflora Mixed*

There should always be a climatic point in the garden and near it should be the best color combinations to build up its importance and to heighten the effect.

Colors must be blended, graded, focused and varied according to light and shade so as to supplement and strengthen the design of your garden—not only for a short period, but through the season.

Color accent groups along a border produce movement, sequence and rhythm. They carry the eye along to the climactic point. When these groups are repeated on both sides of the central point, they create balanced rhythm. Relieve large masses of color with smaller groups of plants of complementary color, or by sparing use of creamy white.

Color schemes are up to the individual. Some depend upon a dominant color—a single hue, tint or shade used throughout the garden. Masses of it are present at every season of the flowering year.

The effect is that of a single color, but other colors are introduced in smaller groups as contrasts for the dominant masses. There's no end to the various color combinations and there's no pleasure that can equal the painting of your own garden picture.

We are often asked to recommend annuals for growing without much care, particularly around summer cottages used only on week ends, or where the soil is poor. We suggest *Calliopsis*, *Gaillardia*, *Marigold*, *Petunia*, *annual Phlox*, *Scabiosa*, *Verbena* and *Zinnia*. These usually bloom profusely without care or extra watering, though some water applied when seed is sown will often insure germination. Annuals are sun-loving.



SNAPDRAGON, *Mardi Gras*

AQUILEGIA, *McKana's Giant*



JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
2 ☾ .11:25a	1 ☾ .6:20a	3 ♀ .0:30a	1 ☽ .5:08p	1 ♀ .7:46a	1 ♀ .10:44p
5 ☽ .0:04a	3 ♀ .6:40p	5 ☽ .11:19a	4 ♀ .1:28a	3 ☽ .1:06p	4 ♀ .1:03a
7 ♀ .0:20p	6 ☽ .5:37a	7 ♀ .7:59p	6 ☽ .6:26a	5 ♀ .4:51p	6 ☽ .3:45a
9 ☽ .10:14p	8 ♀ .1:30p	10 ☽ .1:41a	8 ♀ .11:21a	7 ♀ .7:36p	8 ♀ .7:41a
12 ♀ .4:42a	10 ☽ .5:32p	12 ☽ .4:11a	10 ♀ .1:12p	9 ☽ .9:58p	10 ♀ .1:11p
14 ☽ .7:04a	12 ♀ .6:15p	14 ♀ .4:20a	12 ☽ .2:09p	12 ♀ .0:49a	12 ♀ .8:39p
16 ♀ .6:50a	14 ♀ .5:19p	16 ☽ .3:59a	14 ♀ .3:49p	14 ♀ .5:14a	15 ☽ .6:24a
18 ♀ .6:03a	16 ☽ .4:54p	18 ♀ .5:15a	16 ♀ .7:48p	16 ♀ .0:17p	17 ☽ .6:18p
20 ☽ .6:56a	18 ♀ .7:12p	20 ♀ .9:56a	19 ♀ .1:55p	18 ☽ .10:14p	20 ♀ .6:46a
22 ♀ .11:05a	21 ♀ .1:26a	22 ♀ .6:38p	21 ☽ .1:55p	21 ☽ .10:20a	22 ☽ .5:33p
24 ♀ .6:56p	23 ♀ .11:28a	25 ☽ .6:16a	24 ☽ .2:22a	23 ♀ .10:31p	25 ♀ .1:03a
27 ♀ .5:33a	25 ☽ .11:42p	28 ☽ .6:59a	26 ♀ .2:19p	26 ☽ .8:41a	27 ☽ .5:00a
29 ☽ .5:42p	28 ☽ .0:25p	30 ♀ .6:54a	29 ☽ .0:15a	28 ♀ .3:43p	29 ♀ .7:17a
				30 ☽ .8:03p	
Changes	Changes	Changes	Changes	Changes	Changes
☾ 9 .0:46a	☾ 7 .5:18p	☾ 1.10:12a	☾ 7 .2:28a	☾ 6 .8:27p	☾ 5 .1:09a
☽ 16 .0:20a	☽ 14.10:38a	☾ 9 .5:50a	☽ 14 .6:00a	☽ 13 .4:34p	☽ 12 .4:02a
☾ 22 .3:53p	☾ 21 .6:19a	☽ 15 .8:22p	☾ 21 .5:03p	☾ 21.11:03a	☾ 20 .4:21a
☾ 30 .3:24p	☾ NONE	☾ 22.11:09p	☾ 29 .5:54p	☾ 29 .5:39a	☾ 27 .2:53p
		☾ 31 .3:19a			
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1 ♀ .7:24a	1 ♀ .7:05p	2 ♀ .3:08p	2 ☽ .8:05a	1 ☽ .3:19a	3 ☽ .11:44a
3 ☽ .9:18a	4 ♀ .0:50a	5 ☽ .1:57a	4 ☽ .8:18p	3 ♀ .3:58p	5 ♀ .8:57p
5 ♀ .1:13p	6 ♀ .9:20a	7 ☽ .2:05p	7 ♀ .8:57a	6 ☽ .3:36a	8 ☽ .3:14a
7 ♀ .7:23p	8 ☽ .8:03p	10 ♀ .2:44a	9 ☽ .8:46p	8 ♀ .1:06p	10 ♀ .7:22a
10 ♀ .3:36a	11 ☽ .8:01a	12 ☽ .2:56p	12 ♀ .7:00a	10 ☽ .8:21p	12 ♀ .8:46a
12 ☽ .1:45p	13 ♀ .8:45p	15 ♀ .1:24a	14 ☽ .2:51p	12 ♀ .8:03a	14 ☽ .1:23p
15 ☽ .2:33a	16 ☽ .9:01a	17 ☽ .8:47a	16 ♀ .7:55p	14 ♀ .0:05p	16 ♀ .4:37p
17 ♀ .2:13p	18 ♀ .6:45p	19 ♀ .0:27p	18 ♀ .10:20p	17 ☽ .7:25a	18 ♀ .8:32p
20 ☽ .1:55a	21 ☽ .0:44a	21 ♀ .1:10p	20 ☽ .11:03p	19 ♀ .9:17a	21 ♀ .1:48a
22 ♀ .9:29a	23 ♀ .2:49a	23 ☽ .0:34p	22 ♀ .11:33p	21 ♀ .11:54a	23 ☽ .9:21a
24 ☽ .2:59p	25 ♀ .3:09a	25 ♀ .0:44p	25 ♀ .1:37a	23 ♀ .4:33p	25 ☽ .7:43p
26 ♀ .4:13p	27 ☽ .1:43a	27 ♀ .3:33p	27 ♀ .6:41a	26 ☽ .0:19a	28 ♀ .8:12a
28 ♀ .4:00p	29 ♀ .3:17a	29 ♀ .10:04p	29 ☽ .3:35p	28 ☽ .11:16a	30 ☽ .8:34p
30 ☽ .4:24p	31 ♀ .7:08a			30 ♀ .11:55p	
Changes	Changes	Changes	Changes	Changes	Changes
☾ 4 .6:09a	☾ 2 .0:59p	☽ 8 10:55p	☽ 8 .3:42p	☽ 7 .8:32a	☽ 7 .0:16a
☽ 11 .4:50p	☽ 10 .7:08a	☾ 16 .9:58p	☾ 16 .7:42a	☾ 14 .3:56p	☾ 13.11:45p
☽ 19 .8:13p	☽ 18.10:12a	☽ 23 .1:18p	☽ 22.10:53p	☽ 21.10:19a	☽ 21 .0:12a
☽ 26.10:28p	☽ 25 .5:32a	☾ 30.11:52a	☾ 30 .4:48a	☾ 29 .0:58a	☾ 28.10:50p

Signs of the Zodiac

♈ **ARIES**: Tends to dryness, barrenness. Fairly good for cultivating.

♉ **TAURUS**: Fairly productive. A good sign for planting root crops particularly potatoes and bulbs.

♊ **GEMINI**: Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

♋ **CANCER**: Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

♌ **LEO**: Most dry and barren sign. Use only to kill weeds, destroy roots.

♍ **VIRGO**: Moist but barren. Not recommended for planting or transplanting; good for cultivating.

♎ **LIBRA**: Fairly fruitful. Seed for hay, corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

♏ **SCORPIO**: Next to Cancer in productivity. Irrigate but do not dig potatoes.

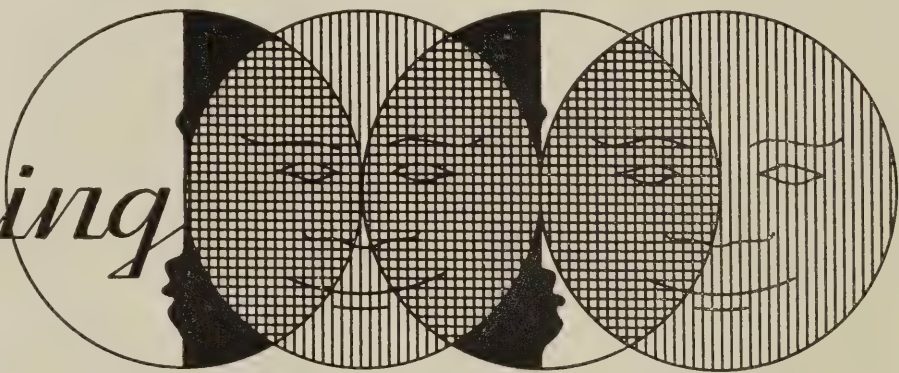
♐ **SAGITTARIUS**: Generally considered barren but used by many for onions, seeding for hay, destroying weeds, etc.

♑ **CAPRICORN**: Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

♒ **AQUARIUS**: Somewhat barren. Good only for cultivation and extermination of pests.

♓ **PISCES**: Similar to Cancer so use for same purposes. Very productive.

MOON Planting GUIDE



WHEN TO PLANT

The table shows when the moon enters each sign of the Zodiac. It also shows the moon's changes.

Under each month, we show first the time at which the moon enters each SIGN (day of the month and hour of the day, Central Standard Time).

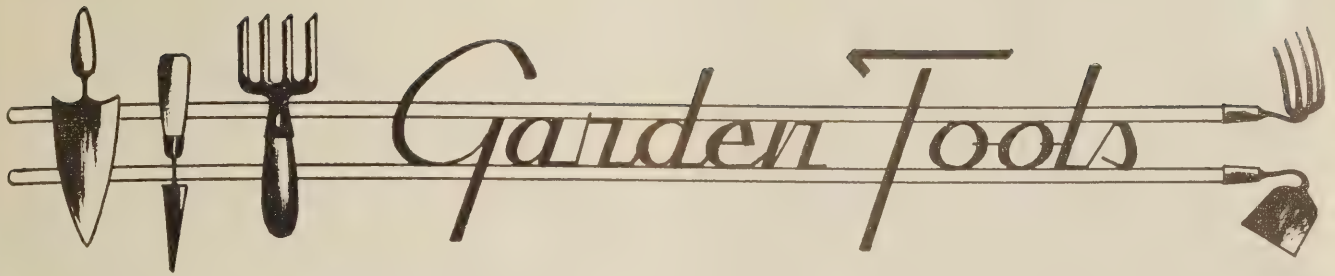
● **1st QUARTER, MOON IN-CREASING**—During 1st Quarter of Moon plant the following: Aspara-

gus, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leeks, Lettuce, Spinach, Barley, Oats, Rye.

● **2nd QUARTER, MOON IN-CREASING**—During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, Tomatoes.

☾ **3rd QUARTER, MOON DECREASING**—During 3rd Quarter of Moon plant the following: Beets, Carrots, Chicory, Parsnips, Potatoes, Radishes, Rutabagas, Onions, etc.

☾ **4th QUARTER, MOON DECREASING**—In the 4th or Last Quarter of the Moon turn sod, pull weeds, and destroy noxious growths.

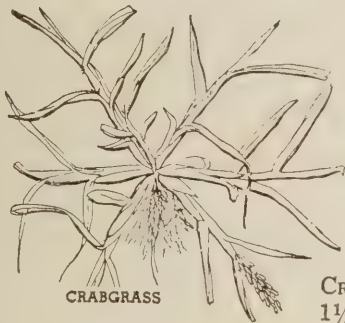


Garden Tools

A well kept tool makes any job easier and gives better results. Dirty, rusty spades and hoes don't slide into the soil or make clean cuts. It is also important to keep these and similar tools with a sharp cutting edge

throughout the season. Any tool which comes in contact with the soil should be cleaned after each job, since soil will adhere to a dull and rusty tool. An oily rag may be run over the blades and handles and the

metal parts rubbed dry with a rag. Hang tools up, each in its place when not in use. Handles are roughened and edges dulled if tools are not placed in special racks. Brooms and brushes soon become crooked if allowed to rest on the bristles.



CRABGRASS



COMMON CHICKWEED

YARROW



BROAD LEAVED PLANTAIN

COMMON LAWN WEEDS

CRABGRASS—Annual. Spread by seeds. Mow often at 1½ inches. Hand pick young seedlings. Feed lawn heavily in the fall.

BROAD LEAVED PLANTAIN—Perennial. Use hormone-type weed killer in late summer or drop acid or gasoline in centers of rosettes.

YELLOW FOXTAIL—Annual. Must be cultivated frequently. Use chemical weed killer.

DANDELION—Annual. Spread by seeds and from the crown. Cut below crowns any time of the year. Drop gasoline in crowns. Spray with hormone-type weed killer.

LAWN PENNYWORTH—Perennial. Seeds are distributed by lawnmower and rake. Must be dug out and ground reseeded or sodded.

QUACK GRASS—Perennial. Spreads by creeping, jointed rootstalks. Smother with mulch or remove all visible shoots three times a week as long as they show.

GROUND IVY—Perennial. Dig out or spray with a sodium chlorate solution.

HEAL-ALL—Perennial, especially bad in shady lawns. Roots at nodes and spreads by seeds. Cut out by hand or spray with hormone-type weed killer after bluegrass is dormant.

YARROW—Perennial. Cut back repeatedly or dig out. Spray lawn with sulphate of iron.

NARROW LEAVED PLANTAIN—Perennial. Prolific seeder. Cut off tops, pierce a hole in the crown of the root and apply a few drops of carbolic acid or sodium chlorate.



YELLOW FOXTAIL



QUACKGRASS



LAWN PENNYWORT



HEAL ALL



GROUND IVY



DANDELION



NARROW LEAVED PLANTAIN



© All America Gladiolus Caribbean

GLADIOLUS

- APPLE BLOSSOM**—A beautiful white with lushly suffused rich pink petal margins and a prolific propagator.
- COL. W. C. ATKINSON**—80 to 85 days. Excellent lavender of a deeper shade than any other lavender varieties.
- ELMER'S ROSE**—85 days. Deep rose, heavily ruffled, opens 7 to 8 well placed blooms on a 20 bud spike.
- GOLD**—80 days. Rich deep golden yellow. Opens five to seven blooms on a very sturdy spike.
- BURMA**—Deep reddish rose. Heavily ruffled blooms on a fine straight spike.
- ELIZABETH THE QUEEN**—Large mauve-ruffled flowers with dark lines in the throat. The best beautiful lavender.

- FLORENCE NIGHTINGALE**—Crystal clear white shading into a light cream throat. Opens up to 8 beautifully ruffled florets on a well balanced flowerhead.
- KING DAVID**—80 to 85 days. Deep purple with a garnet flush on the lower petals to add a touch of color, with nice ruffling. Spikes are tall, well balanced and the six to eight florets open at one time.
- LEIF ERICSSON**—85 days. Outstanding lovely deep cream that opens 8 to 11 lightly ruffled florets on 5½ foot spikes.
- PACTOLUS**—85 to 90 days. Spectacular, deep apricot-cream with brilliant orange red blotches. Opens 8 to 10 well-attached blooms in perfect placement.

Dahlias

Any reasonably careful gardener can grow dahlias easily and successfully. *Soil needs* of dahlias are no different than those of a good vegetable garden. Drainage and porosity are important.

Fertilizing calls for nothing more than a good balanced commercial fertilizer. Planting is simple. Set stout stakes first. Plant the tuber in a hole 6 inches deep, with eye up, and neck near stake. Cover with just enough soil to hide the tuber. As the eye grows, keep filling in soil.

Culture. Cultivate frequently for about the first 10 weeks. Do not cultivate when in bud or bloom. Allow only one main stalk to grow. When stalk is about 10 inches high, pinch out the center just above the 2nd pair of leaves. When buds appear, pinch out all except the central one. Also pinch out all new lateral shoots except the two nearest the main stalk. This helps produce large blooms on low, bushy plants with long stems.

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POMPON DAHLIAS

- SANS SOUCI**—85 days. Tall, strong clear scarlet with a narrow white line on the lower petal. Seven to eight 5 in. blooms open at once.
- VALERIA**—85 to 90 days. Bright light red of a distinctive shade. Opens 5 to 7 large nicely ruffled blooms at a time.
- ROSA VAN LIMA**—Light rose pink with lavender markings. Excellent grower. Tall.
- ROYAL STEWART**—A strong brilliant red, blooms in 80 days. A dependable grower, producing tall formal spikes. Especially fine in hot weather.
- SPOTLIGHT**—75 to 80 days. Clear medium deep yellow with small scarlet blotch in throat. Opens up to 7 florets on a long slender stem. Best deep yellow.
- SPIC and SPAN**—Tall ruffled deep pink. Salmon shading. Quite tall. Strong.

DAHLIAS

(I.D.: Informal Decorative)

(F.D.: Formal Decorative)

A. D. LIVONI—(Show Type) Beautiful shade of deep pink, flowering variety.

AVALON—(F. D.) A fine garden variety. Rich large lemon-yellow blooms.

COMMANDO—(F. D.) Clear shade of deep lavender. One of the finest colors.

SON OF SATAN—(F. D.) Brilliant red.

JANE COWL—(I. D.) Lovely buff and old gold shading to a salmon center. Massive.

D. DAY—(F. D.) Glorious clear pink. One of the finest flowers.

ROYAL PENNANT—(I. D.) Royal purple, extra large. Stems are long and stiff.

MRS. I. DE VER WARNER—(F. D.) A beautiful orchid pink. Lovely flowers.

REAL GLORY—(Semi-Cactus) Prolific blooming cutflower. Pure white.

MINIATURE DAHLIAS—Lovely 3 to 4 inch blossoms just like the largest ones.

POMPON DAHLIAS—Charming "button" dahlias that require little care.

LILIES

Few flowers provide such regal beauty as lilies, and few are as hardy. Let us suggest the varieties that will thrive best.



JONQUIL

CANNAS

CITY OF PORTLAND—Large, beautiful pink flower.

RED KING HUMBERT—Large light red flower. Tall.

RICHARD WALLACE—Large solid yellow. Dwarf.

THE PRESIDENT—Large bright red. Dwarf.

WYOMING—Large, dark orange; orchid flowering.

CALADIUM

FANCY-LEAVED—Rich ornamental leaves marked, veined white, pink and red. Nice pots or shady places.

ELEPHANTS EAR—Huge green leaves.

TUBEROUS BEGONIA

CAMELLIA-FLOWERED—Scarlet, pink, yellow, salmon, and white. Top size and top quality. Plant in semi-shade.

TUBEROSE

One of the most fragrant of all flowers. Tall white spikes.

All America Gladiolus Maytime



©Selected Glads, Inc.

BUGS and INSECTS

To know HOW to fight insect pests you first have to recognize them. The pictures below will help you in identifying the various sucking and chewing insects which will attack your garden.

Insects are spread over the season and in different stages of life from the egg, larva to the bug itself. Their methods of attack vary in two ways—either chewers or suckers. The wide variety of harmful insects in their varied stages of life require in some cases some vastly different chemicals to meet the immediate requirements. We have the right insecticide to eliminate these pests.



Proper dusting to control the Mexican bean beetle. Care is taken to hit the underneath of the leaves.

A PORTRAIT GALLERY OF GARDEN ENEMIES

SUCKING INSECTS



GLADIOLUS THRIP, 1/16"



BEEF LEAF HOPPER, 1/8"



CHINCH BUG, 3/16"



MELON APHID, 3/32"



TARNISHED PLANT BUG, 1/4"



CABBAGE APHID, 1/32"



RED SPIDER MITE, 1/60"



SQUASH BUG, 5/8"

CHEWING INSECTS



ASPARAGUS BEETLE, 7/32"



ROOT MAGGOT, 1/3"



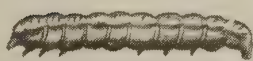
CABBAGE WORM, 1"



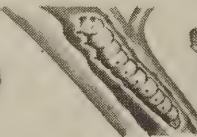
STRIPED CUCUMBER BEETLE, 1/4"



SPOTTED CUCUMBER BEETLE, 1/4"



CUT WORM, 3/4" - 1"



SQUASH VINE BORER, 1/2"



TOMATO HORN WORM, 3" - 4"



POTATO BEETLE, 3/8"



FLEA BEETLE, 1/16"



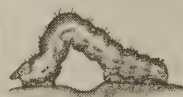
MEXICAN BEAN BEETLE, 5/16"



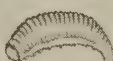
CORN BORER, 1"



CODLING MOTH, 1/2" - 3/4"



CABBAGE LOOPER, 1 1/2"



CARROT WEEVIL, 1/4"



CORN EAR WORM, 1/4" - 1 1/2"

What They Do

APHID—Sucks. Colors and sizes varied. Found on under side of leaf and on stems. Soft-bodied, wingless—also with long, narrow transparent wings 3 times as long as its body. Causes discoloring or curling of leaves.

ASPARAGUS BEETLE—Gnaws shoots and feeds on foliage.

MEXICAN BEAN BEETLE—Chews. 8 black spots on each wing. Spiny larvae skeletonizes leaves.

CABBAGE WORM—Velvety green with yellow stripes. Chews holes in leaves.

CABBAGE LOOPER—Pale green with white stripes along sides. Chews.

COLORADO POTATO BEETLE—Lays yellowish orange eggs in groups of 20-30 on underside of leaves. 5 yellow and 5 black stripes on each wing. Chews.

CUCUMBER BEETLE—Yellow with 3 black stripes on back. Chews.

CUTWORM—Cuts off plants at soil level. Found within 8"-10" radius of plant, about an inch below ground surface. Dull colored, variably striped. Curled up. Chews.

CARROT WEEVIL—Chews. Legless, brown headed grub. Tunnels into crown of plant, filled with a sawdust like material or sealed up with black exudate to hide eggs.

CODLING MOTH—Pigkish white, brown-headed worms eat holes from side or blossom end of apple to core.

CORN BORER—Chews. Found on under side of leaves. Flat masses of pearly white eggs, overlapping like scales and pinkish worm 1" long with dark heads.

CORN EAR WORM—Chews. Green to brownish, with white stripes along side. Found in silk end of ear.

FLEA BEETLE—Chews. Shiny, black, round beetle. Chews sieve-like holes.

LEAF-HOPPER—Sucks. Found on under side of leaves. Pale green. Slender winged, wedge shaped. Gives leaf tips scorched appearance, puckering.

TOMATO HORN WORM—Chews. Large green worm with yellow markings and prominent horn-like projection at rear.

THRIPS—Sucks. Tiny yellow or brownish slender bodied, pointed at both ends. Narrow plume-like wings. Nymphs wingless, same size and shape, but watery white with bright red eyes.

RED SPIDER MITE—Sucks. Found at apple blossom time on under side of leaves. 8 legged, very tiny, reddish, whitish, greenish mite. Causes yellow or brown blotches on leaves with powdery appearance on under side.

SQUASH OR STINK BUG—Sucks. Egg clusters of 25-50 reddish brown eggs found on under side of leaves. Bug flat, brownish and stinking.

Special Instructions For Beginners

Starting Seed Indoors

For starting seed indoors, use a shallow box. Place pieces of broken clay pots over drainage cracks to prevent clogging, then spread some soil lumps over the bottom before you fill the box with a mixture of equal parts of sand, soil and peat moss. Pile high in the box. Press down firmly on the sides with your hands. Scrape off surplus soil with a board or tamper. Firm loose soil until its is spread evenly about $\frac{3}{4}$ inch below the top of the seed box. Then, mark off straight rows about 2 inches apart. Sow seeds uniformly thick, just so they don't touch. Use an old kitchen sieve to screen soil over the top after the seed are sown. Do not cover with more than $\frac{1}{4}$ inch of soil. Use the tamper to firm the soil over the seeds. Water soil after firming. Place a strip of burlap over the box and pour water over it. Never pour water on the bare soil. Another effective way of watering is to place the box in a pan of water. Cover the box with newspaper or a piece of glass to prevent fast drying. Keep moist.

When seedlings appear, remove the newspaper. If you are using glass, leave it on a little longer, but slide it over a bit to give air. As soon as the seedling makes its second leaf, it must have attention or it will become weak and spindly. Use a pointed stick to transfer the young plants to flats. This is known as "pricking out."

Flats should be made about 3 in. deep, 14 in. wide and 24 in. long. This is a good size to handle and will accommodate 42 plants spaced 2 x 3 inches. The soil for flats should be reasonably fine and sifted only to remove stones and large lumps and be only a little lighter than the plants will ultimately need.

Prepare the Border

A good border needs a well prepared sub-soil. Dig deep and condition the sub-soil once and you needn't bother about it again for many years. To do this, break up heavy sub-soil with sand, peat moss, humus, or lime. Top this off with fine loam.

A Seed Bed for Transplants

If you don't have a cold frame, you can prepare a special bed for starting seedlings and transplants. This bed will serve some of the important uses of the frame and can be quickly made, involving little or no expense.

The three essentials are good drainage, soil rich in humus and protection from heavy rains.

Select a site, preferably in the full sun, that is sheltered from the north and northwest winds by a building, a hedge or shrubbery.

Avoid a low spot, where water is likely to stand after heavy rains. However, if you don't have such a spot, drainage can be provided by raising the bed six inches, with sloping sides.

If the soil is naturally heavy and wet, dig it out to a depth of 8 inches and fill in about 3 inches of cinders or coarse gravel. Use the soil removed to fill the bed.

If your seed bed soil is not fine and full of humus, mix it with about one-third its bulk in peatmoss and add enough sand to give it a granular texture. Mix these by shoveling them through a screen of one-half to one inch mesh. A convenient width is 4 feet, so that seeding, thinning and transplanting can be done from the sides. Narrow boards, held by stakes along the sides afford extra protection and can be used as supports for crosspieces over which murlap bags or similar shading material can be stretched while seeds are germinating or small transplanted seedling get established. This seed bed is good also for starting biennials and perennials to be sown in the late summer. Properly shaded it is also a good place to root cuttings.

Fragrance in the Garden

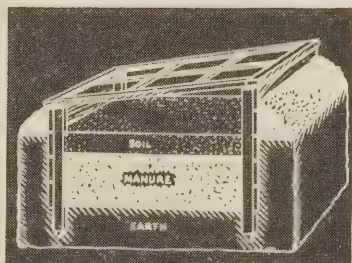
During recent years the use of fragrant plants in the garden has been overlooked. Fragrant flowers are especially useful near seats, porches, terraces and other spots where they will add an aroma to the air. Of course, they are excellent to perfume bouquets.

One of the best known of the fragrant flowers is the *Nicotiana* or *Flowering Tobacco*. They are used to perfume gardens and are especially fragrant at night. *Mignonette* is grown exclusively for the sweet scent as the flowers are not showy. It is superb. *Stocks* and *Wallflowers* are exceedingly sweet scented, and *Sweet Peas*, of course, get their name from the odor. All of these are fine in the garden or in bouquets.

Many other flowers are sweet scented and when grown in beds or masses will perfume quite an area. *Nasturtiums*, *Petunias*, *Candytuft*, *Scabiosa*, and *Sweet Alyssum* are among these. *Carnations* are fragrant but their use as specimens does not cause the odor to be noticed except in flower arrangements. *Pinks* are strongly spice scented and a mass of them produces a pleasing aroma for some distance. For the intimate spots in your garden, where you sit down to just enjoy it, plan to plant some of these fragrant flowers to increase your pleasure.

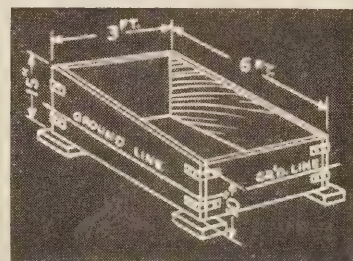
More Cut Flowers

To have plenty of cut flowers without disturbing your flower borders, plant a few rows of flowers along the edge of your vegetable garden. Or set them out between the rows of early lettuce or radishes, where they can bloom after the vegetables have been used.



**HOT
BEDS**

The hotbed should be located on the south side of a hedge, fence or building to break the wind, and must have at least six hours of direct sunshine during the day. Pit should be 24" deep. Fill to top with fresh straw horse manure and press down six inches. Set frame over manure and all around outside and inside to level of ground. Add three inches of sifted soil inside frame. Heap leaves or straw around outside to conserve heat. As soon as frame is in place, water well, insert thermometer in soil and cover with sash, airing daily until thermometer drops below 85 degrees.



**COLD
FRAMES**

A cold frame is the same as a hot bed without manure or other source of artificial heat. It depends upon the sun for heat and must be covered with hot bed mats to conserve this heat at night and in coldest weather. Most important spring use for the frame is the hardening off of seedlings started indoors.

The bed in your cold frame should consist of a 2" layer of gravel for drainage, 1" sand, and 4"-5" of good garden loam. Sand under the soil makes transplanting easier. Always water in the early morning.

Vegetable Gardening

KEY POINTS

Divide your garden into three sections if possible.

Root vegetables, leaf vegetables, fruit vegetables.

On level ground you can run rows either east and west or north and south. If east-west layout is used, be sure to plant taller vegetables to the north. On sloping ground, the rows must run across the slope, not up and down. Otherwise all of your plant food will go down the hill when it rains.

Plan to use your garden full time. To do this, you'll need catch crops, intercrops (companion crops) and succession crops.

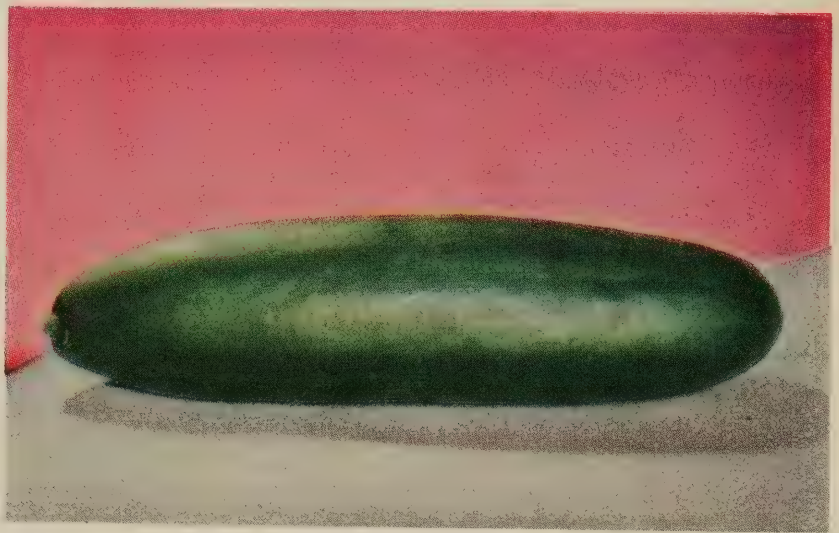
For the world's greatest bargain, grow your own vegetables. You get dollars for pennies, with a lot of healthy fun thrown in free when you grow your own vegetables. Where else can you get so much for so little? This year plan to grow your own.



F
Finest

WARRANTY

Our seeds are especially selected from fresh stocks for high germination qualities, true-to-name varieties, and maximum yield tests, and we warrant them to the full extent of the purchase price paid. Your money will be cheerfully refunded if our seeds do not meet these standards. Since much depends upon climate, soil and cultivation we must limit our liability to the amount of the purchase price only.



CUCUMBER, Smoothie

There's no end to the science of vegetable gardening—nor to the books that have been written about this fascinating subject. But if you don't have time to read books, these few hints will help you to bigger, better yields.

And besides, no vegetables you buy at the store ever taste so good—or **are** so good for you, because vegetables begin to undergo a change, almost as soon as they are picked. Inevitable natural processes quickly alter their flavor, texture and vitamin content.

GEO. KELLER & SONS CO.

909 Maine St.

Quincy, Ill.



SQUASH, Black Beauty



- 1 For health, taste and savings, there's no substitute for garden vegetables
- 2 So-called "fresh" vegetables from the store can't compare with home grown
- 3 You can't imagine the sweeter taste of sweet corn straight from the garden
- 4 Packed with vitamins home grown vegetables are much better for your family

Vegetables



Asparagus

A hardy perennial; will bear over 20-year period if properly cared for. We recommend purchase of ASPARAGUS ROOTS rather than seeds, as roots produce crop 2 years earlier. If seed is used, sow thinly in drills in early Spring. Cover to 1/2" depth. Soak seed 24 hrs. before planting. Sow in loose, rich, moist soil after weather warms up. Thin to stand 6" apart. When a year old and in early spring transplant to well enriched beds in permanent position, 24" apart, in rows 20" apart. Set in hole so that crown is 8" below surface, but only cover tips with 3" of soil. As plants grow, fill in until level. Don't cut first year.

MARY WASHINGTON (fr)—Highly rust resistant. Heavy yielder, producing early large shoots of rich, dark green color with tightly closed tips.

Beans

Sow in rows 2 1/2' to 3 1/2' apart. Plant seed 1 1/2" to 2" deep and 3" to 4" apart. Do not plant until weather is warm and settled. Press soil around seeds. Thin young plants to about 6" apart. Keep cultivated until plants blossom. DO NOT CULTIVATE when blossoms are at prime or when plants are wet with dew. Make plantings every two weeks for supplies throughout season.

Green Podded, Dwarf or Bush

BOUNTIFUL (fr)—48 days. The earliest flat pod variety used extensively by home and market gardeners. Pods are flat, clear light green, stringless, brittle and tender.

PLENTIFUL—53 days. Stringless, tender, good flavor. Does best in heavy soil.

GREENCROP—All America 1957 winner. Grows stringless, upright about 24 inches high and puts on a heavy, early concentrated set of very long, large, flat, straight wide dark green pods with white seed.

SEMINOLE—New, disease-resistant, deep apple green, round-podded bush snap-bean. An all-purpose bean for home, market, canning and freezing. It is stringless and has a good "beany" flavor.

TENDERGREEN (fr)—52 days. Good sized bush with long round pods of medium green color. Pods are straight and stringless. The leading all purpose round pod bean. Heavy producer.

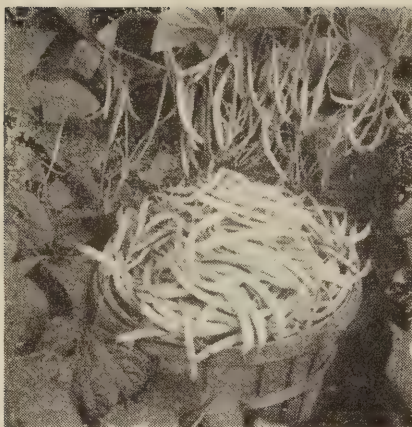
TOPCROP—50 days. Very hardy and dependable cropper. Mosaic resistant. 5 1/2 to 6 inches long. Round, medium light green pods, completely stringless.

WADE—53 days. Excellent quality and heavy yielder. Judged to be the finest all purpose green pod bush bean yet produced. Stringless, smooth and of a distinctive dark green color. Resistant to common mosaic and powdery mildew.

Wax Podded, Dwarf or Bush

CHEROKEE—50 days. Vigorous, prolific, uniform with long, straight and meaty golden yellow oval pods of good quality.

PENCIL POD WAX (fr)—54 days. Popular wax pod in home and market gardens. Highly dependable and productive.



BEANS, Plentiful

Beans (Pole)

In warm ground, set poles 4' to 8' long slanting a bit to the north in rows 4' apart. (Extending north and south the poles will be 3' apart in the row.) Plant 5 to 8 beans about 1" deep around each pole. When growth is sufficient thin to four plants.

KENTUCKY WONDER (fr)—65 days. The leading pole bean, the best known and most widely used. Prized for its flavor, both in snap and green shelled stage. Kept picked, they will bear all season.

KENTUCKY WONDER WAX (fr)—68 days. Unsurpassed among the wax-podded pole varieties. Heavy producer, waxy-yellow pods, flat and nearly stringless.

SCARLET RUNNER—65 days. A short podded strain which is highly productive. Large beautiful scarlet blossoms make it an outstanding bean for ornamental purpose. Also used as green shell beans.

Lima (Dwarf or Bush)

CANGREEN (fr)—65 days. Productive green seeded bush Lima. Plant growth is similar to Henderson but beans retain fresh green color long after Henderson has turned white. Excellent flavor.

FORDHOOK BUSH 242 (fr)—73 days. Plant large, heavy producer. Seeds are large, white, very thick and plump.

HENDERSON'S BUSH (fr)—65 days. Most widely used of the baby lima beans for home and market gardens. Productive, high quality, disease resistant.

Lima (Pole)

KING OF THE GARDEN (fr)—88 days. Outstanding pole lima for heavy production and climbing ability. Numerous large pods filled with 5 to 6 large beans of excellent quality.

Beans, (Shell)

RED KIDNEY—95 days. Flat large beans, pinkish red to mahogany in color. Rich flavor.

WHITE NAVY—95 days. Small seed, almost round and white. Hardy, prolific. Most popular for baking.

Beets

Deep, rich sandy loam produces finest beets. As soon as ground can be worked sow in drills 18" apart and press soil firmly over seed. Each "seed" is a fruit with several true seeds. No matter how thinly beets are sown, they will need thinning. Make three sowings, one early, one three weeks later and one 60 days before fall. When tops are 3" to 6" tall pull them and use for cooked greens. Continue this until roots stand 6" apart.

CROSBY'S EGYPTIAN (fr)—55 days. Widely grown for early beets. Flattened globe shaped roots with small tap root. Excellent quality, tender and sweet.

DETROIT PERFECTED (fr)—60 days. Standard of excellence in table beets. Smooth, globular roots of deep oxblood red. Sweet and tender.

EARLY WONDER—54 days. Outstanding early variety. Tops medium size, uniform medium green tinged with red. Roots flattened globe, uniform, small tap roots. Dark red with purplish red flesh. Fine quality and flavor.

Beets, Stock (Mangel Wurzel)

MAMMOTH LONG RED—110 days. Very popular, 30 to 50 tons per acre. Roots grow half above the ground. Light red flesh with rose tinge.

Broccoli

Plant and cultivate like cabbage and cauliflower.

ITALIAN GREEN SPROUTING (fr)—70 days. Plant bears a succession of sprouting heads about 5-in. long, which, if kept cut, will be replaced by others.

DE CICCO (fr)—70 days. An early market and freezing variety of recent introduction. The plant is tall, erect, with a fairly loose central head of yellowish green, foliowered by a good crop of side sprouts.

Brussels Sprouts

Easy to grow wherever conditions are favorable for late cabbage, and requires same culture. As sprouts begin to form remove lower leaves so that all nourishment sent to lower stem will be forced into the sprouts. Do not use until after heads have matured.

LONG ISLAND IMPROVED—90 days. Plant dwarf and compact, 20" tall, producing solid, round, cabbage-like balls of 1½" which mature in succession.

Cabbage

Sow seed in drills 6" apart across the bed, dropping the seed 5 to 6 to the inch. Firm soil after covering, then water thoroughly. Keep beds moist but not soaking wet. Seed germinates 3 to 8 days depending on temperature. Transplant to open ground when plants have made fourth pair of leaves. Space 12" x 24". Use plenty of good commercial fertilizer. Cultivate frequently, every 5 or 6 days until cabbages are large.

Yellows Resistant Varieties

MARION MARKET—78 days. Large, firm, round heads, used for early kraut. A development from Copenhagen Market. 7-in., 4-lb. heads.

WISCONSIN HOLLANDER—105 days. Late, excellent for winter storage and kraut. Similar to Hollander and Danish Ballhead. 7 to 9-in., 8 to 9-lb. heads.

Standard Early Varieties

COPENHAGEN MARKET—68 days. Excellent, early short season type. Short stems, 6½ in., 3½ to 4-lb. heads.

GOLDEN ACRE—65 days. Extra early variety producing uniform well-balanced head. Weighs about 3 lbs.

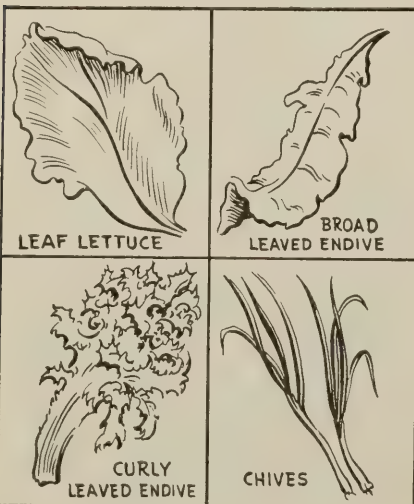
Late or Winter Varieties

CHIEFTAN SAVOY—88 days. Flattened globe-shaped. Crumpled leaves.

PENN STATE BALLHEAD—105 days. Special strain of Danish Ballhead. Heads almost globular. Excellent winter keeper and high yielder. Good for kraut.

Red Variety

MAMMOTH RED ROCK—Best of the red cabbages. Hard, round. Purplish-red heads. Good keeper, 7 to 8 lb. heads.



Salad Greens All Summer

An all-summer program of green salad leaves can be planned to follow the spring lettuce crop. After the early lettuce harvest has ended, endive and escarole are available. They should be sown early as they take 90 days to mature. Two or three sowings should be made to give succession crops until winter. Frost improves the flavor of the leaves and they retain good quality until a hard freeze. Water cress is easily grown wherever it is possible to furnish a constant supply of water. This can be done by sowing the seed in flats which are kept moist by wicks which draw from water in pans below. Corn salad and Chinese cabbage leaf crops which are hardy and can be harvested late in the fall.

Chinese Cabbage

Must never be grown as a spring crop since it will only go to seed. Plant after June 15, as days are getting shorter, then it will head. An excellent succession crop to follow early peas.

CHIHILI—70 days. One of the most popular sorts of Chinese Cabbage. Early in season and dependable. A distinct, long, straight, pointed type head. At the edible stage it is very firm, well balanced, crisp, tender, and of sweet flavor.

WONG BOK—75 days. A short, blocky, solid, sure-heading variety, good for market or home use. The light green outer leaves are tightly folded, blanching the inner part into a solid, crisp, tender, white head of fine quality.

Carrots

Use sandy loam enriched by manure the previous year, if possible; but any good land if deeply and well worked will produce a good crop. Sow seed as early as ground can be worked. Sow seed $\frac{1}{2}$ " to 1" deep in drills 16" to 18" apart. Press soil firmly above seed. When plants appear use cultivator or wheel hoe and thin from 2" to 6" apart, according to type. Keep cultivated.

CHANTENAY, RED CORED (fr)—70 days. Root has thick shoulder and tapers to slight stump root, 5-in. long.

DANVERS HALF LONG—75 days. Sweet, tender roots, 6 to 7-in. long tapering to a blunt point. Fine for storing.

GOLD PAK—1956 All America Bronze Medal. Short, erect. Roots long, slender smooth, slightly tapered and pointed. Small indistinct cores and deep orange skin with rich orange colored flesh. Roots range from $8\frac{1}{2}$ to $9\frac{3}{4}$ inches in length. Matures about two weeks earlier than Emperor Long Type.

IMPERIDA—77 days. A brand new carrot with a long, slender root, and a short strong top. The roots are a deep orange and from 7" to 8" long.

IMPROVED IMPERATOR (fr)—77 days. Fine-grained, tender. Rich orange, indistinct core. Roots taper to semi-blunt.

NANTES IMPROVED CORELESS (fr)—70 days. Excellent for forcing. Tops small, roots bright orange, blunt ended. Flesh reddish orange, practically coreless.

OXHEART OR GUERANDE—72 days. Excellent for shallow soil, easy to harvest. Chunky, tender and sweet.

Cauliflower

Needs rich soil and abundant watering. Cultivate same as cabbage but protect heads from sunlight to insure the prized white curd. This is done by gathering leaves together loosely as soon as heads begin forming, and tying well at top.

EARLY SNOWBALL (fr)—55 days. Best and most widely used early variety. Medium, firm compact heads of fine flavor. 6-7 inches in diameter.

Celeriac

LARGE SMOOTH PRAGUE—120 days. (Turnip rooted celery). Smooth spherical roots. 2 to 3-in. thick.

Celery

Start in shaded hotbed 60 days before needed. Cover seeds $\frac{1}{4}$ ". Transplant when 6" high. In setting outdoors, don't get soil in or over crown. Set 7" to 12" apart. Soil must be rich, moist and loose. As soon as plants have grown to 14" to 15" tall, set 12" boards on both sides of row and hold in place with earth. Or 4" drain tile can be used to blanch individual stalks. Celery must have warm, settled weather. If chilled, plants are likely to go to seed. Keep soil well fertilized and moist. Crop matures in cool autumn.

GIANT PASCAL—140 days. Late variety for winter use. Large plant, dark green leaves. Big solid stalks that blanch to yellow white.

EARLIEST MARKET KING—66 days. 7-8 inches long, mostly 12 row $1\frac{3}{4}$ inches diameter, dark green husk cover with long flag leaves. Its large high quality ear makes it an outstanding hybrid.

GOLDEN SELF BLANCHING, DWARF—115 days. Compact plants, yellowish green foliage. Broad solid stalks, nutty flavor. Blanches readily.

GOLDEN PLUME—112 days. Early, medium plant with compact, full heart. Blanches early to golden yellow.

Collards

Sow seed heavily and transplant when 4" high, or sow in rows in permanent beds and thin to 16" to 18" apart when plants are well started.

SOUTHERN OR GEORGIA—75 days. An excellent cooked green. Long stemmed plant, with clustered leaves. Withstands heat and bad soil.

Sweet Corn

Rows should be 3' to 4' apart. Seed 12" to 18" apart in rows or hills, covering with fine soil 1" to 2" deep firmly pressed down. In hills, plant 4 to 6 grains per hill. Later thin to 2 to 3 stalks to a hill. Make several plantings at intervals of 14 days for continuous crop.

Hybrids

We offer Hybrid Sweet Corn varieties known as the best for your garden—the finest that can be produced anywhere. We list here only a few of these choice kinds. Whatever your needs or your preference, be sure we can supply you with the kind of corn you want.

GOLDEN BEAUTY—73 days. An especially valuable early variety because of its good quality, yield, disease resistance, attractive appearance and color. 12 to 14 rows of golden yellow kernals.

IOANA (fr)—83 days. Ears $7\frac{1}{2}$ " to 8", well filled with 12 or 14 rows of deep, medium narrow, light yellow kernals. Highly resistant to drought and bacteria wilt.

IOCHIEF—83 days. A yellow hybrid sweet corn with sensational qualities. Sugar sweet and tender—stays prime longer.

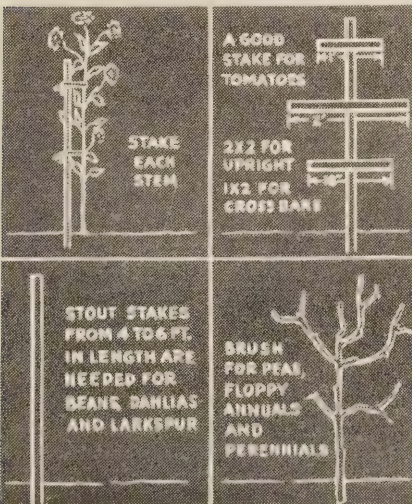
GOLDEN CROSS BANTAM (fr)—80 days. Extremely uniform. Ears 10 to 14 rows, slightly lighter yellow than Golden Bantam. Resistant to Stewarts disease. 25c.

MARCCROSS (fr)—64 days. An early, wilt-resistant hybrid, producing deep golden yellow kernals 7 days earlier than Golden Bantam. Ears 6" to 7" long, with 12 to 14 rows of large sweet kernals.

Open (Pollinated)

BANTAM EVERGREEN—(Yellow) variety maturing about 10 days after the Golden Bantam and a week earlier than the Stowell's Evergreen white. It has an ear 3 times the size of Golden Bantam and runs 12, 14 and 16 rows to the ear. The stalk is about 6 feet tall and is perhaps 1 foot shorter than Stowell's Evergreen and 2 feet taller than Golden Bantam. The Bantam Evergreen has the tender and sweet qualities of the Golden Bantam and combines the quality of the Golden Bantam with the productiveness of Stowell's Evergreen. As a table variety it is unexcelled. Pkt. 25c.

BLACK MEXICAN—83 days. Pure white corn with purplish-black seed. Ears are 7" to 8" long, 8 straight rows. Pkt. 25c.



Staking Vines Pays

Air rights are a valuable asset to every vegetable garden if used properly. Some of our finest vegetables can be grown much better if trained to a stake or a fence of trellis than if allowed to spread out on the ground.

Tomatoes, cucumbers, melons, squash and both snap and lima beans of the so-called pole varieties, grow better and are easier to grow if they are allowed to climb.

Properly staked plants insure an orderly garden. Lack of proper staking means that you are reasonably sure to have some wrecked and messy beds later in the season. Use green painted stakes.



SQUASH, Early Prolific Straightneck



CABBAGE
Danish Ballhead
and Golden Acre



TURNIP
Purple Top
White Globe

CUBIT—68 days. Midseason. 9 to 10-in. long, tapered ends, good color. Pkt. 15c.

LONG GREEN IMPROVED—70 days. Black spined, good pickling. 10-12".

MARKETER—68 days. Fine new variety, very prolific. Attractive rich, dark green color, carried right down to blossom end. Crisp, icy white flesh 7¾-in. long.

NATIONAL PICKLING—55 days. Rich dark green. Straight and rather blunt at ends but not chunky. Best pickler.

SMOOTHIE—All America 1957. A novelty for home and market garden use, to be grown on the ground or to climb on fence or trellis. Dark green, white spined slicing cuke. Produces yields of No. 1 fruits per acre equal to standard varieties.

STRAIGHT EIGHT—68 days. Unsurpassed as slicing cucumber. 2½-lb. fruits, rounded at ends, medium green.

SURE CROP HYBRID—A true hybrid Cucumber of great vigor and amazing yield. Fruits are slender and intensely dark green throughout. 8 inches. Pkt. 25c.

Dandelion

Sow early in the spring in rich soil in drills 15 to 18 inchse apart, cover lightly and firm soil.

IMPROVED THICK-LEAVED—A distinct variety unsurpassed in thickness of leaf and deep green color. It grows compactly forming a regular tuft.

Eggplant

Requires continuous warm weather for best results. Seed should be started in a hotbed, as it is slow to germinate. Set plants in open ground when 2" tall and protect from hot sun when young. Be sure to keep young plants developing rapidly. Cultivate freely. To produce large fruits, remove lateral branches so as to reduce number of fruits per plant. Spray to protect from potato bugs.

BLACK BEAUTY (fr)—83 days. Large, egg-shaped, smooth, very dark purple fruits. Keeps well. Early maturing.

NEW HAMPSHIRE HYBRID—78 days. Developed for short season areas. Round to olive shape fruits, growing low.

Endive

Strictly a cool-weather crop: gets bitter at temperatures much above 80 degrees. Even moderately warm weather causes the plants to produce seed stalks. Plant very early. For late fall, sow early in middle autumn. Use last planting as late fall salad crop, and store surplus in cold frame or cellar by digging each plant with ball of soil. Plant in shallow drills with rows spaced 18" apart. When 4 inches tall, thin out to sand 6 inches to a foot apart. To blanch gather the outer leaves together and tie with soft twine. Do this when plant is nearly grown. Strings should be untied after a rain to permit leaves to dry.

FULL HEART OR BATAVIAN—90 days. A strongly bunched mass of thick, slightly crumpled leaves, well blanched heart.

GREEN CURLED RUFFEC—90 days. Plants 16 to 18-in. in diameter. Fine fall variety. White, tender, fleshy.

Herbs

(Aromatic, Medicinal and Kitchen)

ANISE—75 days. An annual—used for garnishing, seasoning and for cordials. Seeds have an aromatic-flavor.

BASIL—SWEET—85 days. Annual; Ht. 12" to 18". Leaves, green or dried, are chiefly used as a seasoning for soups, stews, etc. 85 days to maturity.

BORAGE—80 days. Annual; Ht. 12-18". Young tender leaves are used as salad and also used to flavor lemonade.

CARAWAY—70 days. Biennial; Ht. 18-24". Seeds used for flavoring. Young leaves shoots used for flavoring salads.

CORIANDER—75 days. Annual; Ht. 24-30". Seeds used for flavoring in candy and to mask taste of medicine.

CHIVES—80 days. Perennial; Ht. 6". Tops, finely chopped for adding mild onion flavor to soups, stews, salads, etc.

DILL—70 days. Annual; 2' to 3'. Seeds and leaves used for flavoring—especially for dill pickles.

FENNEL, SWEET—60 days. Biennial; Ht. 2' to 4'. Leaves are used for garnishing, fresh stems tender, eaten raw like celery or in salads. Seeds used for flavoring.

MARJORAM, SWEET—70 days. Annual; Ht. 1' to 2'. Used for seasoning either fresh or dried.

COUNTRY GENTLEMAN or SHOE PEG (fr)—92 days. Prolific late variety favored by canners. Irregular kernels, deep. 25c.

GOLDEN BANTAM (fr)—79 days. The best and most favorably known of all the yellow varieties. Stalks often have 2 ears. Ears 8 rowed, kernels broad, with tender hull. Pkt. 25c.

STOWELL'S EVERGREEN—93 days. White, large ears about 8" long. Very sweet. Good late variety. Pkt. 25c.

Cucumber

Select soil fully exposed to sun and enrich thoroughly with fertilizer. Sandy soils with plenty of compost are best. Roots have difficulty on heavy soils. Plant 8 to 10 seeds in a "hill." Plant each hill about 36" apart. Cucumber vines like to stretch out, so plant rows about 4 feet apart. The old tale that melons or squash will cross pollinize with cucumbers and affect their taste if planted nearby is untrue. When vine is 6" long, thin to three strongest plants. Keep fruits picked to promote continuous fruiting. Use plenty of moisture; cucumbers are 90% water.

A AND C—A long dark green cucumber which merits a trial. Uniform, nearly cylindrical, rounded at ends.

ROSEMARY—Perennial used as annual; 2' to 4'. Fragrant odor and warm, pungent taste, acceptable seasoning.

SAGE—Perennial; Ht. 14" to 16". Used for seasoning either fresh or dried.

THYME—85 days. Perennial; Ht. 8" to 12". Aromatic foliage used as seasoning.

Kale or Borecole

Early fall or spring sowing. Either in rows or broadcast. To produce large plants have rows 2' apart and thin to 2' in rows. Leaves are best after coming of cool weather in fall.

DWARF BLUE CURLED SCOTCH—55 days. Wide spreading, fine curled blue-green plant plume-like leaves. Used as a vegetable and for ornament.

Kohlrabi

Sow seed in early spring or fall and when well established thin to 6" apart in the row. Even better to start it in beds and transplant same as cabbage. Planting at intervals of 10 days gives tender bulbs until hot weather. Must be used when young. Woody when old.

WHITE VIENNA EARLY (fr)—55 days. 8 to 10-in. leaves on slender stems. Bulbs 2 to 3-in., globular light green. Crisp, tender, clear white flesh.

Lettuce

Keep lettuce growing rapidly for best results. A light, rich soil needed for this. Earliest varieties must be started from seed in cold-frame. As soon as open ground can be worked, transplant. For later use, sow seed in open ground as soon as weather is favorable. Thin plants in rows 4" to 8" depending on variety.

Remember that lettuce is a fast-growing, rich feeding crop. Give it plenty of water. And use your compost or well-rooted manure liberally on the lettuce row. A light sprinkling of nitrate of soda will pay, too, because lettuce thrives on lots of nitrogen.

Heading or Cabbage

BIBB—54 days. Early, small headed lettuce of excellent quality and flavor. Perfect for home gardens. Very smooth, dark green leaves, bleaching to yellow.

BIG BOSTON or MAMMOTH BOSTON—75 days. Popular for cold frames forcing and outside culture. Medium, compact, heads with creamy yellow heart. Smooth, glossy leaves, edges wavy, and slightly tinged with reddish brown.

BEETS
Detroit Dark Red



GREAT LAKES—83 days. An outstanding Iceberg or Crisp-head type. A summer lettuce that stands heat well and is very resistant to tip burn. Heads solid.

IMPERIAL NO. 847 (FLORIDA ICEBERG)—83 days. Heads are of good size and solid. Does well in hot weather, and resistant to tip burn. Hardy.

NEW YORK NO. 12—85 days. The standard crisp-head lettuce. Large globular shaped head, dark green with blanched, silvery white heart. Successfully grown outdoors spring, summer and fall.

WHITE PARIS COS or TRIANON—66 days. Medium large self-folding dark green leaf shaped heads. Greenish-white, well blanched interior.

Loose Leaf Varieties

BLACK SEEDED SIMPSON—46 days. Light green, frilled and crumpled.

GRAND RAPIDS—43 days. Erect, compact plants. Light green, broad heavily fringed. For forcing or early planting.

OAK LEAF—43 days. A popular leaf lettuce for home gardens. Rich, dark green leaves, tender and delicious. Fine resistance to hot weather.

SALAD BOWL—44 days. Delicious bowlful of rich green leaf lettuce.

Melons

Muskmelon and Cantaloupe

Easily injured by cool weather. Before planting, spade liberal forkful of well rotted manure into each hill. Plant 8 to 10 seeds to a hill. Thin plants to four per hill after third leaf develops, and train vines in different directions. On moist ground, use shingles to hold melons off ground to prevent rotting. If grown in cool weather or where nights are cold, will not bear well and melons will have poor flavor.

ONIONS, Green Bunching



Watermelon

Requires about same culture as muskmelons, except the vines need more room. Fertilize each hill liberally and cultivate thoroughly.

CONGO—90 days. Oblong, blocky dark green fruits faintly striped lighter. Resistant to Anthracnose.

DIXIE QUEEN—85 days. Very prolific. Bright-red, crisp, splendid quality.

ONIONS
Sweet Spanish
Yellow Globe



SWEET CORN, Golden Beauty





RADISH, French Breakfast

tender, hot weather plant. Pick before woody fibres develop.

CLEMSON SPINELESS—55 days. Pods are rich green, straight, uniform ridged and of best quality.

DWARF LONG POD—65 days. Early, prolific dwarf growing sort. Dark green fluted, 5 to 7-in. pointed pods. Most desirable, compact growing okra.

PERKIN'S MAMMOTH—68 days. Early and prolific. Very tender, long pods. Deep green and slightly corrugated.

Onions

Plant as soon as soil can be prepared. For best yield, plant on very fertile land—fall plowed, and thoroughly fertilized. When the plants are a few inches tall, thin to prevent crowding—using the plants removed as green onions. Leave 4" apart for globe-types and 6" for the big Spanish types to mature for dry onions. Latter can also be started indoors for larger bulbs and can be set out 6" apart after frost danger has passed. All onions need liberal feeding and watering. Those left to become fully ripe can be stored for winter. Cultivate and hand weed every two weeks in summer.

Yellow Varieties

YELLOW SWEET SPANISH—112 days. Large, globe-shaped, exceptionally mild and sweet—excellent for eating raw or boiled. Light yellow skin and pure white, firm, crisp, and tasty flesh.

YELLOW GLOBE EARLY—95 days. An oval shaped straw-colored onion. White flesh, crisp and mild. Splendid keeper.

White Varieties

SOUTHPORT WHITE GLOBE—115 days. Best of the whites. Medium-sized, round, solid white bulbs, fine thin skin. Waxy white flesh, mild and fine grained.

WHITE BUNCHING—95 days. A good Spring appetizer. Crisp and mild. Fine for cooking when grown larger.

WHITE PORTUGAL or SILVERSKIN—100 days. Excellent flat variety. Dependable cropper, excellent for sets, for green bunching, or as a pickler.

Red Varieties

SOUTHPORT RED GLOBE—110 days. Finest of all red onions. Perfectly round, good sized bulbs with thick, small necks. Skin is deep purplish-red. Strong flavored flesh, white tinged with pink. Good keeper, productive.

Onion Sets

Onion sets used instead of seeds will produce earlier crops of green onions or large bulbs. Plant set right side up and cover with garden rake; then firm the soil well over the sets.

Parsley

Does best in rich, mellow loam. Seed is slow to germinate, and is helped by soaking in warm water overnight before planting. Sow early and not too deeply. Space plants 6" apart. When curled varieties are about 3" tall, cut off leaves. The new growth will be brighter.

MOSS CURLED or DOUBLE CURLED—70 days. Compact, dark green leaves, curled and fine cut.

PARAMOUNT—70 days. The best looking, finest and most uniformly curled. Dark green leaves, tall strong stems.

Parsnips

Needs rich, mellow soil for best growth. Must be planted as early as ground can be worked. Soil must be loose to a depth of 12" and cannot be heavy. Rows should be 15" to 18" apart. Cover seed 1/2" and press down soil. Thin out to 4" when plants have made a good start. Cold weather turns starches into sugar and improves flavor. Roots are hardy: leave in ground over winter if desired.

HOLLOW CROWN—125 days. The most generally grown kind. Roots 2 1/2 to 3-in. thick at shoulder. 12 to 14-in. long, uniformly tapered, hollow crowned.

Peas

Early peas need a light, warm soil; but general crop thrives best in moderately heavy soil. (Avoid fresh manure and very rich or wet, mucky soil as this produces large growth of vine at the cost of quality of the peas.) Plant seed in rows at 2" depth. Keep rows 21" to 28" apart for dwarf varieties and 28" to 42" for the taller types. Gather crop as fast as it is fit to use or new pods will cease to form and those partly advanced will cease growth.

Plant variety Alaska as soon as ground can be dug. Plant wrinkled varieties (which have better flavor) when narcissus buds show color or when crocuses are in bloom. Peas are not satisfactory when weather turns hot. Tall varieties must be staked. Most home gardeners prefer dwarf varieties like Little Marvel. Peas want well-limed soil. Don't forget, inoculation improves production.

Early and Second Variety

ALASKA—57 days. Wilt resistant. Used for canning and early home garden. Blunt, straight light-green. 3-in. pods. Pkt. 25c.

FREEZONIAN (fr)—60 days. Luscious, melting peas that retain their garden fresh sweet flavor after freezing. 3 1/2 inch pods with 8 or 9 medium sized peas. Pkt. 25c.

KIECKLEY'S SWEET or WONDER-MELON—85 days. Large, cylindrical, dark bluish-green, with thin, tender rind. Bright red, juicy, sweet flesh, creamy-white seeds with traces of brown.

NEW HAMPSHIRE MIDGET—78 days. Icebox size, very good flavored strawberry red flesh. The best midget so far produced and recommended for short season areas.

STONE MOUNTAIN—85 days. Also called Dixie Belle. High quality shipping variety. Fruits very large, oval-round, blunt ends. Dark green, tough rind. Flesh rich, scarlet, fine grained, sweet.

TOM WATSON—92 days. Red heart strain. Large fruit, uniform cylindrical.

Mustard

Sow as early as possible in the spring. Keep rows 6" to 12" apart and cover with soil 1/2" deep. You may also sow seed in autumn to raise greens.

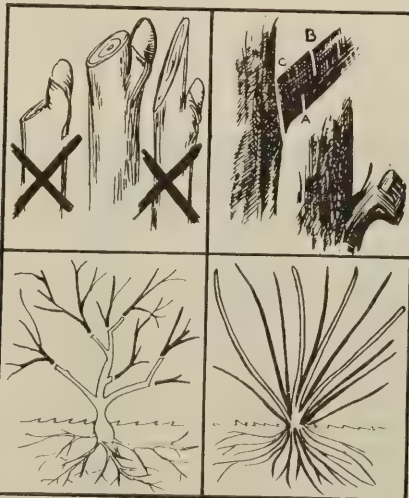
FORDHOOK FANCY—50 days. Upright growing, mild variety. Bright green leaves, plume-like and fringed.

SOUTHERN GIANT CURLED—40 days. Large, frilled and crumpled.

TENDERGREEN—35 days. Wholesome, quick growing green, combining mustard and spinach flavors.

Okra or Gumbo

seeds with about 1" of fine soil firmly pressed down. Thin plants 18" to 24" apart when they reach 3" growth. Do not plant until ground is warm, as this is a



Prudent Rose Pruning

Proper pruning is necessary to insure the plant starting vigorous growth quickly, to shape and train its development, to insure big crops of fruits and flowers. Proper pruning of both top and roots often determines the success or failure.

When planting roses, for instance, prune off the tops about 4" to 5" above the ground. For best results, mound the soil until the top branches (after pruning) are entirely covered Tea (Everbloom-blossoms come on new fresh growth. Hardy Climbers and Hybrid Perpetual Roses should NOT be pruned after the first year.

LAXTON'S PROGRESS (fr)—62 days. Medium dark green vine, 16 to 18-in. Single pods almost an inch wide and 4½ to 5-in. long, with 7 to 9 large peas. 25c.

LITTLE MARVEL (fr)—62 days. Outstanding, dwarf. Fine quality, large yield. Single and double, dark green, 3-in. pods—blunt, plump, well filled with 7 to 8 medium, light green tender peas. 25c.

THOMAS LAXTON (fr)—60 days. Medium height. Strong vine bears numerous dark green, blunt ended pods, 4 to 4½-in. Retains flavor and sweetness. Pkt. 25c.

Later Varieties

ALDERMAN or DARK-PODDED TELEPHONE (fr)—74 days. Large podded variety of the Telephone family. Excellent for home gardens, truckers, shipping to distant markets and for freezing; resistant to Fusarium wilt. Vine dark green, coarse. Pods single, very broad, plump, straight, dark green, pointed; contains 8 to 10 peas. Seed large, wrinkled, light green. 25c.

HUNDREDFOLD or LAXTONIAN—62 days. Exceptionally choice and prolific. Dark green. Rather coarse vines. Straight pointed, well-filled 2½" pods. Pkt. 25c.

Edible Podded or Sugar

MAMMOTH MELTING SUGAR—72 days. Wilt resistant. Coarse light-green vine, 54-in. Single 4½-in. pods, broad, indented light, blunt, stringless, without fiber, fleshy. Contains 7 peas. Pkt. 25c.

Peppers

Need long growing season: start indoors 8 weeks before plants are wanted. Set plants 15" x 24" and feed liberally for bigger fruits.

Warm, mellow soil in sheltered location is best. Cultivate regularly, drawing soil up around stems. When plants are 7" to 8" tall, hoe in light dressing of commercial fertilizer. Do no plant hot peppers near sweet; they are apt to cross.

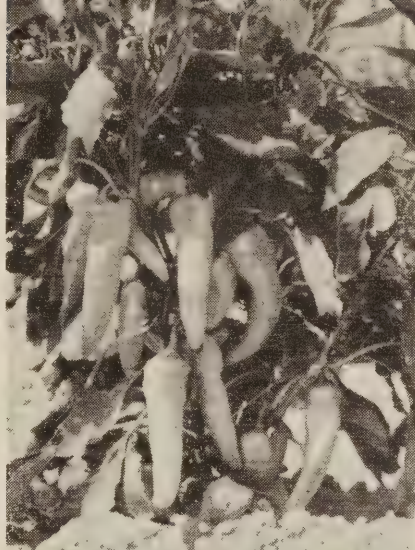
Sweet

CALIFORNIA WONDER IMPROVED—74 days. Number one quality peppers, about 4-in. long and 3½-in. diameter, very smooth, 3 and 4 lobed, glossy green, turning bright crimson when ripe. Remarkable thick walls, tender, sweet.

PIMENTO or PERFECTION—79 days. Best of the medium sized sweet peppers. Excellent for stuffing. Smooth, heart-shaped, about 3-in. long.

RUBY KING—70 days. Bred for size and uniformity. Dark green turning to bright deep red fruit. Thick flesh sweet.

SWEET BANANA—58 days. The pointed fruits measure 6½ to 7 in. long by 1½ in.



PEPPER, Sweet Banana

thick, with a banana yellow color turning to a brilliant red at maturity. The flavor is sweet and appealing, and the flesh is thick for a pepper of this type.

WORLD BEATER—70 days. One of the best large peppers. Glossy-green, changes to bright red. Mild, thick flesh.

Hot

HUNGARIAN WAX—65 days. Slender, waxy yellow fruit about 6-in. long turns red when ripe. Very hot.

LONG SLIM CAYENNE—70 days. The hot favorite. For canning, pickling, drying. Pungent flavored fruit, tapering.

Pumpkin

Plant in middle of spring among corn; or in hills 8' apart each way. Drop 4 seeds to a hill. If planted in hills, cultivate the same as melons and cucumbers. For winter use gather before frost (leave stem 3" to 4" long) store in warm, dry place.

CONNECTICUT FIELD—120 days. Large fruit with flat ends, 15 to 25-lbs. and up to 15-in. Surface, slightly ribbed, deep orange. Thick flesh, orange-yellow, sweet.

KING OF THE MAMMOTH—120 days. Largest of all pumpkins. Valuable for stock feeding and exhibition. Globular, slightly ribbed, flattened, weight 60 to 90-lb. Flesh solid, yellow-orange, coarse.

SMALL SUGAR or NEW ENGLAND PIE—115 days. Desirable for pie or general use. Round, flat end fruit, deep orange. Thick, yellow-orange flesh.

Radish

CHAMPION—King sized edition of the popular and useful Cherry Belle. May be started early and its longstanding advantage makes it an all-purpose, beautiful crisp radish. All America 1957.

CHERRY BELLE—22 days. A popular short-topped type for both forcing and outdoor garden use. Round, smooth and red, with crisp firm white flesh.

COMET—25 days. Round, bright scarlet skin and tender white flesh which remains crisp for a long time. Ideal for home and market gardens.

CRIMSON GIANT—28 days. Large round, 1 to 1½-in. Deep crimson roots. Very crisp and tender for its size.

EARLY SCARLET TURNIP, WHITE TIPPED—26 days. Carmine red with white tip. Flesh white, crisp and mild.

FRENCH BREAKFAST—25 days. Roots thicker toward bottom. 1½-in. long by ½ to ¾-in. Dull scarlet, white-tipped.

ICICLE—27 days. Tapering roots 5 to 5½-in. White, mild flesh.

Fall and Winter Varieties

CHINESE ROSE WINTER—50 days. White flesh, rather mild in flavor. Roots large, 8" long and 2½ to 3 inches in diameter, cylindrical with heavy shoulder.

ROUND BLACK SPANISH—56 days. Top-shaped. 3" to 4". Flesh white, crisp and of strong flavor.

Rutabaga or Swede Turnip

AMERICAN PURPLETOP—90 days. Hardy and productive. Tender firm, light yellow, sweet flesh.

Salsify

Light, rich soil best and it must be stirred to a considerable depth. Sow in rows 18" apart. Cover seeds firmly with 2" to 3" apart in the row. Cultivate the same as carrots.

MAMMOTH SANDWICH ISLAND—150 days. A palatable and nutritious vegetable when cooked. Flavor similar to oysters.

Spinach

Plant seed in very rich soil in rows spaced 14" to 18" apart. Keep plants thinned out from 3" to 6" apart in the row. (Seed may also be sown broadcast.) Sown in fall for winter use and spring for early use.



Steps in Thinning Plants

For best results, thinning should be done gradually. In case of a crop which grows best when the plants stand four inches apart, do not thin to one plant at first.

Don't discard any excess plants prematurely when accidents, insects or disease may destroy many which are left. If thinning is done by stages as the plants grow, they will finally stand at the optimum distance from each other and there will be small chance of vacant spaces in the row. Lettuce plants, thinned to stand an inch apart, will soon reach a size when alternate plants can be removed to make a salad. Continue until spacing is correct.



The All Americas

In the past few years there have been few vegetables to be awarded All America medals. Last year there was only one, CARROT Gold Pak, shown at left.

This year there were four winners, all splendid home garden and local market varieties. Some are shipping and processing varieties. All are important and are widely adapted and easily grown.

1957 All-America vegetables, all bronze medal winners include Champion Radish, shown in full color on the front cover; Green-crop bush snapbean, pictured in beautiful color on page 4; Black Beauty summer squash, page 29 and Smoothie cucumber, page 28, both in full natural color.

AMERICA—45 days. The best long-standing, heat-resistant, heavy-yielding, savory-leaved spinach. 6 to 8 inches high and spreads 10 to 12 inches.

BLOOMSDALE SAVOY, LONG STAND-IND (fr)—44 days. A few days later than regular Bloomsdale Savoy. Holds from 12 to 14 days longer.

GIANT NOBEL—43 days. Large, vigorous, spreading plant, slow to form seed stalks. Heavy yielder. Large, thick smooth, deep green leaves.

NEW ZEALAND—65 days. Thrives in dry hot weather. Can be picked repeatedly all season. Not a true spinach, but similar when cooked.

Squash

Follow same planting and culture as for melons and cucumbers. Plant summer varieties 6 or 8 seeds in hill 3' to 4' apart each way and winter squash 8' apart.

Plants bear longer if squash is picked off as soon as it is ready for use.

Summer Varieties

BLACK BEAUTY—1957 All America. Earliest, most prolific bush Zucchini. Grows 2 to 3 feet high in open bush form with a single semi-erect stem. Desirable for both early market and home garden use.

CRYSTAL BELL—52 days. Fruits deep bell-shaped. 7 in. across and 5 to 6 in. deep when matured. Deep scallop.

EARLY PROLIFIC STRAIGHTNECK (fr)—50 days. Earlier, smaller, and more productive than Giant Summer Straightneck, and more uniform. Brilliant yellow. Fine for home or market.

EARLY WHITE BUSH SCALLOP—52 days. Pale green fruits changing to creamy white. Miik-white delicious flesh.

GIANT SUMMER CROOKNECK—56 days. Prolific bush type plant, curved neck fruits around 4 to 5-lb., 20 to 24-in. long. 4 to 5-in. diameter.

MAMMOTH WHITE BUSH SCALLOP—56 days. 3½" long, 9" in diameter. Retain their white color at later stages.

ZUCCHINI—60 days. Straight, cylindrical fruits, 3 to 4-lb., 3 to 5-in. through 10 to 14-in. long. Mottled and striped green-creamy-grey. Delicate flavored flesh.

Fall and Winter Varieties

BANANA—115 days. Cylindrical and pointed at blossom end. Thin, gray rind. Thick flesh, fine grained, yellowish orange and of sweet flavor.

BUTTERNUT—80 days. Dry sweet yellow flesh of superb texture and excellent flavor. Has only a small seed cavity. Is tasty baked or boiled. Easy grown.

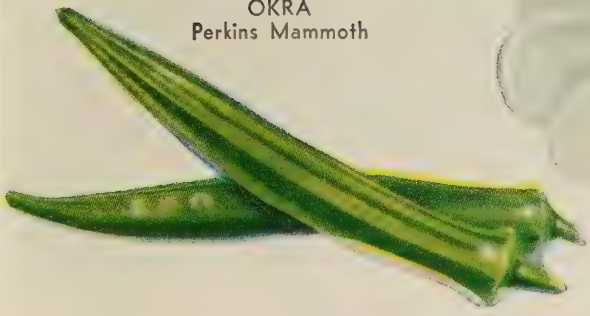


SQUASH, Uconn

BEANS, Topcrop

TOMATOES, Rutgers

OKRA
Perkins Mammoth



SQUASH
White Bush Scallop

RADISH
Early Scarlet Globe



BLUE HUBBARD—112 days. Blue-gray, slightly ridged fruits. Shell is rough and very hard. Keeping quality excellent. Flesh bright yellow-orange, fine grained, dry and sweet. Desirable for freezing.

GOLDEN HUBBARD—102 days. An early, small variety. Fruits pointed at each end moderately warted. Deep orange.

TABLE QUEEN or **DES MOINES** or **ACORN (fr)**—Acorn-shaped, green, deeply furrowed flesh rich yellow, dry, mealy, delicious. Convenient size for baking.

UCONN—70 days. A highly productive squash of the "Table Queen" or "Des Moines" type. Bushy plants that do not have the rambling characteristics of most squashes. An excellent keeper. Dark green shell with golden flesh.

Tomatoes

Do best in sandy, well pulverized loam. Sow seed in hotbed or indoors. When plants are about 2" high, set out 3" apart, in boxes or pots—later transplant into the garden. Or keep in flats until weather is warm and settled, and then set plants out directly into the garden. Water around the roots of the plants when setting them out if ground is dry. Cultivate frequently until plants shade the ground. Remove all but the two or three strongest branches. Study methods of staking and training vines and adopt the one best suited to your situation.

BEEFSTEAK—96 days. Rich scarlet-red, extra large fruits, more or less ribbed. Juicy, solid, with rich sub-acid flavor. One of the best for home use.

BONNY BEST—70 days. One of the most popular second-early tomatoes. Fruits smooth, solid, bright scarlet red, borne in cluster of 3 to 5 medium size.

EARLIANA—64 days. Open, spreading, medium small vines. Red fruits run to medium size. Thick; smooth fruit.

FIRESTEEL—68 days. Scarlet red. Medium size, almost globular, smooth small core. Fleshy and firm.

JUBILEE—80 days. Orange colored fruit. Juicy with few seeds. Weighs about 6 oz. Bears over a long season.

MARGLOBE—75 days. Moderately productive, with heavy foliage. Vigorous and resistant to wilt and rust. Fruits medium large, nearly round, smooth.

OXHEART—90 days. One of the largest pink tomatoes, often weigh 1 lb. Interior is solid with thick, firm walls and small cavities with few seeds.

PRITCHARD'S SCARLET TOPPER—75 days. Medium to large round, with thick, firm flesh and small seed cavities. Brilliant red throughout, coloring right to top, without hard green spots. Free from acidity. A good home canner.

RUTGERS—80 days. Second early variety. Large thick stems, vigorous foliage. Fruits similar to Marglobe but flatter at stem end. Bright red, white thick walls. Red, firm flesh, low acidity.

STOKESDALE—70 days. An extremely important development. Smooth 7-oz. fruit, brilliant color, exceedingly solid flesh and small seed cavities. Matures in the second-early group, a full week earlier than Marglobe.

STONE IMPROVED—86 days. Medium late. Ripens evenly and is uniform. Fruits large, flattened but deep. Smooth, attractive, scarlet-red, of fine flavor.

VALIANT—70 days. Large-fruited early tomato, vigorous, medium size plant.

Small Fruited

Red and yellow varieties, shaped like miniature pears, plums, and cherries; very attractive for preserves.

Turnip

GOLDEN BALL or **ORANGE JELLY**—60 days. Medium size, deep yellow with bronze-green top. Creamy yellow flesh.

PURPLE TOP WHITE GLOBE—55 days. Large, sweet tops. Smooth, globe-shaped roots, purple-red above, white below. Sweet tender, crisp, white flesh.

BEANS
Fordhook Bush Lima



PURPLE-TOP STRAP LEAF—45 days. Home and market garden variety. Deep purplish-red on top, white below. Flesh white and never stringy.

FOLIAGE TURNIP—Seven top. Winter greens of excellent quality.



EGGPLANT
Black Beauty

PEPPER
Pimento



Reference to

FLOWER CULTURE



The numbers I to VIII, found with flower listing refer to the following cultural notes which give directions for growing all of the flowers we list.

Culture I

These flowers need a long season and must be started indoors if a full blooming period is to be had. If early bloom is not important, they will bloom later in the summer when sown directly in the garden. Some gardeners sow both ways to obtain a succession of flowers.

Culture II

These are the quicker-growing annuals that can be sown directly in the garden and will bloom in time to make a good display for most of the summer. If wanted especially early, they should be started as directed indoors in seed beds or flats.

Some flower seedlings are rather delicate. Extra care in preparing the seed bed will pay dividends in better plants. Prepare soil with a liberal amount of mixed fertilizer and organic matter and dig it in. Rake the surface until it is smooth and pulverized. Sow the seed at a depth equal to three times the diameter of the seed. Fine seed can be spread on the surface and pressed in uncovered. Keep soil moist by light spraying until the seedlings have formed the first true leaves. When they are large enough to handle, they may be transplanted to the garden.

Culture III

These flowers do not transplant well. They should be planted where they are to bloom. Sow as soon as the weather begins to warm in the spring. *Otherwise the culture is the same as II.* Sow seed thinly or remove the smaller plants after they are up. These can be handled as pot-grown plants as in *Culture VIII.*

Start the seeds in a seed box



Culture IV

These flowers are unusually hardy annuals that can withstand very cool weather. They are often sown late in fall so they can start growing the first warm days of spring. If not sown in the fall, they should be planted as early in the spring as possible. Fall sowing gets the seeding job out of the way before the spring rush.

Culture V

These flowers, while garden subjects, are also useful for winter-flowering house plants. *For garden use, handle as in Culture II.* For winter flowering indoors, plant fairly late in the season and transplant into small pots as soon as they are large enough. Keep moving them to larger pots as roots fill the soil until they are finally in six-inch pots. Annuals in pots should have at least six hours of direct sunlight daily if they are to flower.

Culture VI

Perennials can be seeded at almost any time of the year. Best periods are early in the spring or in early summer when the rush of spring work is over. A cold frame or sheltered bed which can be shaded from the direct sun is best. Prepare soil thoroughly with plenty of organic matter. A loose, friable soil will produce a thick mat of roots so that the seedlings will transplant more easily. Perennial seedlings are rather weak growers needing extra care. In covering the drills in which the seeds are sown, use either pure, clean sand or a mixture of half sand and half peat moss. This prevents packing of the soil over the seeds. Always water with a fine spray.

Cultivating gives beautiful flowers



As soon as the second leaves form, seedlings may be transplanted into their permanent position. Or, if more convenient, they may be left in the seed bed until the following spring. Under this culture, only a few species will bloom the first year and they will not produce normal flowers until the following year. Planting earlier does increase the chances for flowers the first year. But, if it is more convenient, *Culture I* may be used. Delphinium seed is often started in August to take advantage of the cooler nights for the seed will not grow when the soil temperature is above 77 degrees.

Culture VII

These varieties need a longer growing season than can be given them outdoors. And because they do not transplant well, they must be started in pots and set out without disturbing the roots. *Otherwise Culture is the same as I.* The use of plant bands allows you to set the seedlings out without disturbing the roots. The bands soon rot away and the seedlings will grow as though started in the garden.

If clay pots are used, the excessive drying can be avoided by placing the pots in a flat and filling the space between them with damp peat moss or vermiculite. Be sure to keep this material moist or it will *draw* moisture from the pots.

Culture VIII

These flowers are biennials. They make a leafy growth the first year but do not flower. The leafy growth of the first year forms food for blooming the following year. The flowers appear the second year, then die.

This means that a continuing show from biennials must be provided by starting new plants every year to replace ones flowering. Biennials are handled in the same way as perennials except that they are started early in the spring to allow the plant to store food for the next year's bloom.

Pansies are tender perennials that are treated as annuals or biennials. When grown as annuals, they should be started indoors about six weeks before time for planting out in early spring. When grown as biennials, the seed is started in late summer and the plants carried over winter in protected spots where extreme temperature and moisture are avoided. Mulching or the use of frames may be necessary in your particular garden. Pansies do best under conditions of constant, moderate moisture, partial shade and a humus-rich soil. Pinching off old flowers will prolong the flowering season.

GARDEN INVESTMENTS

There are few flowers which give as generously of their bloom and beauty as do the bulbs since they demand little in the way of care and cultivation.

The majority of bulbs will thrive under widely varying conditions of soil and climate, and many of them when they have once become well established will increase in beauty from year to year.

Growing flowers from bulbs and roots is also one of the most rewarding of hobbies. Because bulbs multiply each year and return additional bulbs and bulblets to the grower, it is like a bank account returning interest on your deposit. That's true of dahlia roots, too.

Lilies

Even the swamp lilies will not tolerate wet feet; all must have perfect drainage. Yet they like a moist, cool soil. This means that liberal quantities of old well-decayed compost is essential.

Cannas

While cannas will tolerate cold soil, they usually do not start growing until hot weather comes. If planted in round beds, (18 plants on the outside, 12 in the second row, six for the third row and one in the center). A 7 foot bed will use 119 plants, with 12 plants on the outside row, six for the middle row and one to be planted in the center.

Fancy Leaved Caladiums

These spectacular foliage plants are particularly valuable because they do well in shade. Start them in a mixture of half sand and half leaf mold at a temperature of over 70 degrees. When the roots are well-developed and the shoot is beginning to show, pot up in rich soil. Set out when weather has become warm and settled.

Gladiolus

Gladiolus are among the easiest of all flowers to grow. But while they stand neglect better than most plants, they also respond beautifully to proper treatment. So it is well to note these brief points:

Soil should be well drained, sandy loam, preferably where no glads have been grown for the past 3 years. Cultivation to a depth of about 18 inches is highly desirable.

Full sun is best, although they do fairly well in partial shade. Glads may be set out as soon as frost is out of the ground, but extra-early planting gains little. A succession of plantings about ten days apart gives a long blooming season.

Depth of planting should be no more than 4" in heavy soil and 5 to 6" in light, sandy soil. Planting Glad bulbs too shallow in light soil will cause them to topple over or grow at bad angles. Space bulbs 3" apart in rows 18 to 30" apart. Be sure to eliminate air pockets under the bulbs.

Place bulbs in a well worked trench in staggered or zig-zag row—and cover at first with about two inches of loam. When shoots begin to appear, work balance of loam into the trench.

Watering is important. Glads need an abundance of moisture, especially after the plant is well developed. Cut the spike when first bud fully opens. The other buds will open nicely and give you a longer period of bloom. When cutting gladioli, it is very important to leave two or three of the broadest leaves at the base of the stalk.

Insect Control—It is wise not to delay your weekly dusting or spraying program after the sixth leaf has appeared. D.D.T. dust or spray is almost universally used today. A 5% dust is quite effective. Spray should be applied in a fine mist under heavy pressure. Ask us about our new insecticides.

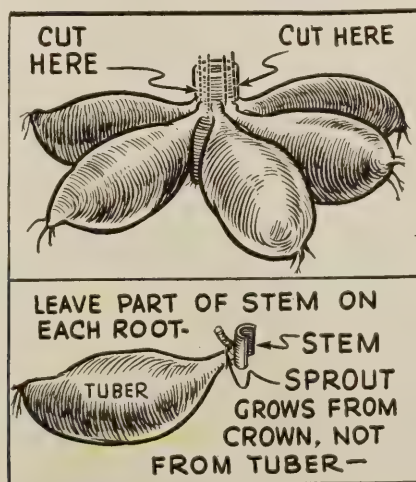
Bulb Enemies

Gladiolus thrips, mice, moles and rabbits are all enemies of your bulbs.

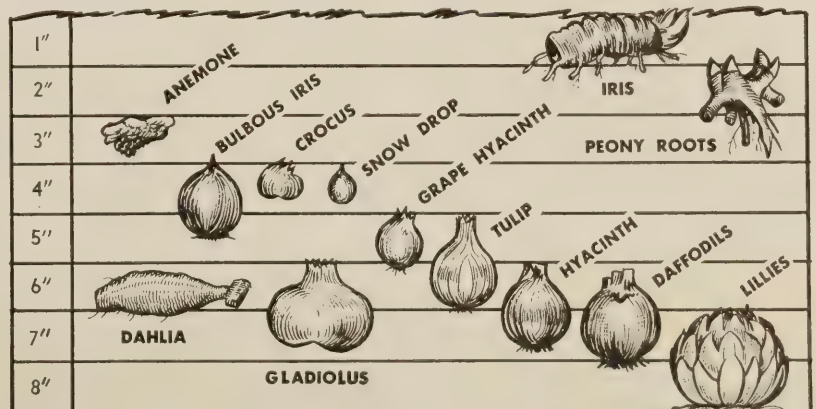
Leafhoppers carry disease and injure the plant by sucking the juice from leaves and stems.

Thrips can destroy your bulbs, even when stored. Ask us about our many good preparations to control these pests.

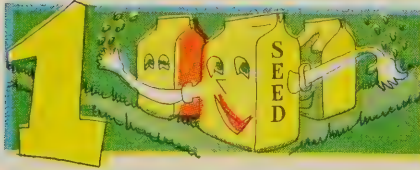
To Divide Dahlia Roots



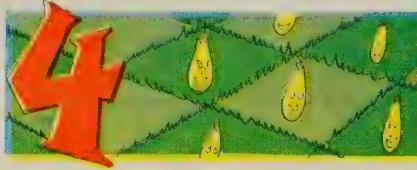
Proper Planting Depth



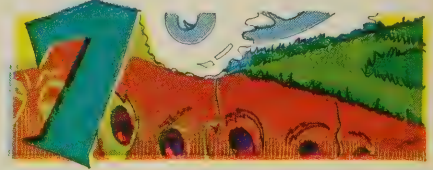
HOW TO MAKE A YARD INTO A LAWN



The most important step in building a beautiful lawn is the selection of the proper seed to suit special conditions. We have seed selected to grow in sunny spots, shady lots or for special needs, such as playground areas which receive hard usage. Cheap lawn seed is no bargain. It's the kind of seed and the proportions of mixture that count in determining a dependable lawn seed value for you.



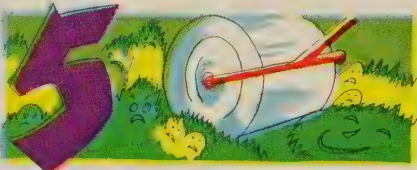
If the soil has been rolled or is packed hard by rains, go over it again with the steel rake before sowing. The easiest way to sow seed on small lawns is to broadcast it, preferably in the morning of a still day. Sow plenty of seed, at least 3 pounds to each 1000 square feet, but don't sow too thickly. Sow half the seed lengthwise and half crosswise. This insures proper distribution of the lawn seed.



Mowing the new lawn should be carefully done. Put your mower to about 2 inches high and in shady areas, raise this 2½ to 3 inches. Established lawns do best when mower is kept to 1½ inches especially in hot, dry weather. Cut frequently enough so that the clippings are not too long to remain on the turf. Re-seed the thin places in the turf caused by summer or winter damage.



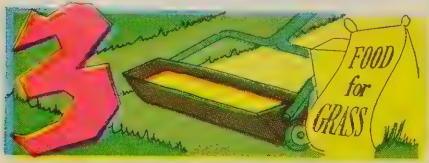
If you are building a new lawn, it requires exacting preparation and subsequent care. Spade in or plow the area to an 8 or 10 inch depth. Pulverize the soil thoroughly. Have the soil tested to see if addition of lime is necessary and how much. Prepare the seedbed several weeks in advance so that it will have time to settle. Smooth down the surface to finished levels with a steel rake.



Roll the lawn to imbed seed and insure perfect contact between seed and soil. This is a very important step in establishing a good lawn. A tamper or wide board can be used on small areas when a roller is not available. This is a very important feature of lawn care and should not be neglected. Clay soils require less rolling and should be rolled with a lighter weight roller than for others.



At the first sign of weeds spray with one of our selected weed killers. Get them before they get big since young weeds are easiest to kill and the weeds take up life giving nutrients from young grass and crowd it out. When given an opportunity for vigorous growth, turf grasses offer very severe competition to weeds for the space, moisture and nutrients. Weed controls start in very early spring.



Apply a complete plant food and any necessary lime and mix them with the top six inches of soil by digging in at least a week before sowing. Be sure to apply evenly in order to avoid any spottiness when the grass comes up. To avoid weeds, work in peat moss, about a bale to each 1000 square feet. Spread top soil, rake well and remove all stones and heavy clods of earth. The seed bed should be smooth. Take care to spread all fertilizers uniformly over the seedbed surface.



Water thoroughly with a fine spray. Continue to water daily until seed germination is complete. Three to four weeks, then water as needed, but always water thoroughly. Light sprinkling encourages shallow roots. During a drought lawns are very often injured from the lack of moisture in the soil. Proper artificial watering is essential at this time. Soak well to a depth of 4 to 6 inches. Early morning or early evening are better than watering in late evening.



Japanese beetle grubs attack lawns in the spring cutting roots. Spray or dust your lawn with chlordane or DDT. Either kills the beetles and grubs it hits. A vigorous turf with strong root systems is a vital part of the program of fighting insects. Earthworms injury consist primarily in the casts which worms leave at the lawn surface, thereby making the surface bumpy. Use arsenate of lead for the most satisfactory control and use as directed for white grubs.

Note!

Like the carpet on the floor, a home is unfurnished and unfinished unless your landscaping is built on a fine lawn. There's only one kind of good lawn—the kind that grows rich and green in every spot you want it. Cheap lawn seed is no bargain. It's the kind of seed and the proportions of the mixture that count in determining a dependable lawn seed value. In most cases, properly blended grass mixtures are best for year round growth. Lawn mixtures contain some expensive and inexpensive seed.

Unhulled Bermuda Grass

Best for sunny exposure and summer lawns, Makes vigorous and persistent growths, lasts for years, stands long, hot summers well and grows well in any soil not too wet. Ideal for lawns, golf courses and athletic fields. Makes a tough, even turf without clumps and recovers quickly after cutting.

Hulled Bermuda

Highest grade Bermuda. Removal of the hard, almost water-tight hull speeds germination. With proper moisture conditions, seed germinates in one to two weeks and develops rapidly into a beautiful green lawn.

Kentucky Blue Grass

Deep, vivid green. Very narrow leaf blades. Plants are slightly creeping. A fine lawn grass under proper conditions.

Chewing Fescue

A superb grass to grow in rather shaded areas and even on fairly acid soil and under other unfavorable conditions. Plants grow low, make a dense turf. Often used for putting greens and fairways. It produces a stiff, upright leaf. One pound plants 100 square feet.

Red Top

Good for low, wet spots. Stands wet weather, and even overflowing, better than other grasses. Does well on any good, rich soil. Often thrives where Blue Grass fails.

White Dutch Clover

Although not a grass, White Clover is used extensively to supplement lawn grasses in mixtures. Succeeds best on moist ground or in a wet season.

GEO. KELLER & SONS CO.

909 Maine St.

Quincy, Ill.

Tested Lawn Seed

The least expensive item in any lawn is the seed. Time, labor, fertilizer and care can all be wasted if the right seed is not used.

In addition to the best in grass seed your lawn will need intelligent care in applying the right fertilizer at the proper time, in using the best weed controls to keep out undesirable growth, and in getting the best tools for cutting, raking, edging, watering and all other operations in maintaining your lawn. Make our store your headquarters for all of the tools and supplies needed to make and maintain a beautiful green lawn. Come in and see us soon.

Merion Blue Grass

This new wonder grass is low growing, needs less frequent mowing and thrives under close mowing. It forms a dense, well-knit, hardy, deep green turf, highly resistant to crabgrass and of very fine texture. It resists disease and tolerates heat and drought.

Other Grasses

In addition to the lawn grasses listed here, we can supply just about any other variety you need. We carry a complete line of all grass varieties that can be grown successfully in this part of the country.

Our Finest Lawn Mixture

Our Selected lawn mixture is a combination of the finest quality seeds—which we have developed after years of experience. All the grasses in it are fine-bladed and deep-rooting. There just isn't any better combination than this for our lawns.

Our Special Shade Mixture

Our Shade lawn mixture is a scientifically developed blend of top quality shade enduring grasses and clovers. We believe it will produce results anywhere that grass can be made to grow.



A — SEAL-TIGHT cover seals from within. Galv. or stainless tank, carrying strap, rotatable valve, all-brass "Revolver" nozzle. 4 and 3½ gal. sizes.

Models No. 274 & 276



B — EASY - TO - FILL sprayers with safe screw or cam-type lock. Adjustable strap, brass pump, rotatable valve, all-brass "Acorn" nozzle. 3½-3-1½ gal. sizes.



Models No. 191B, 120B, 105

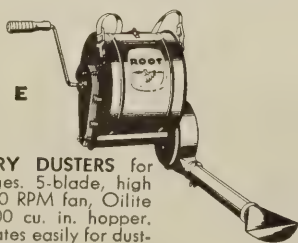


Model No. 256

C — GARD-N-GRO is small, light, easy to fill and use. Women gardeners love it. 5' plastic hose, 18" curved extension tube, all-brass "Any Spray" nozzle, 1¾ x 10" brass pump, 2 gal. size.



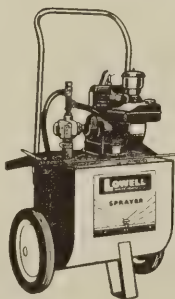
D — ROOT DUSTERS for farm and home. Jumbo size holds 1 lb. dust, Junior size, ½ lb. 3-way adjustable nozzles eliminate stooping, squatting. Model Nos. P1 and P2.



E — ROTARY DUSTERS for small acreages. 5-blade, high velocity 2400 RPM fan, Oilite bearings, 600 cu. in. hopper. Fan case rotates easily for dusting to the rear.



F — HAND SPRAYERS in glass, stainless steel or tin. Duo-Spray nozzles on many give choice of fine mist or wet spray. All sizes.



G — "ROLL-N-SPRAY" 10 gallon portable power sprayer, with Any-Spray* nozzle, 1½ gallon per minute pump capacity. New gearless pump eliminates complicated piston pulleys and belts. Perfect for large home gardens, small estates, special farm uses

WATCH something beautiful happen



when you use *Energized* Vertagreen®



Wake up your lawn! Give it extra life and vitality! Build a deep root system! You can do all of these things and much more when you use Energized Vertagreen! An all-purpose, complete plant food, Vertagreen provides your lawn (and your trees, shrubs, flowers and vegetables) with the essential food elements for healthy growth . . . and wonderland beauty!

Vertagreen is extensively used on famous golf courses and by landscape gardeners and nurserymen! Let the experience of professional growers help you build a lovelier lawn and garden!

a product of ARMOUR

PLANT FOODS

Aluminum Sulphate—Use in creating acid soils need for successful culture of Azaleas, Rhododendrons, etc.

Hyponex, Plant Food—Can be used in dry or liquid form; teaspoonful makes 1 gallon. Contains Vitamin B1.

Lime (Hydrated)—Sweetens sour soil for lawns and clover. Is used as a reducer and in combination of many insecticides; for whitewash and deodorizing.

Peat Moss—Fine winter protection for lawns; also used as a mulch on strawberry,

perennial beds, roses, evergreens, etc. When incorporated in the soil, it promotes growth and supplies humus.

Plantabbs—Clean, white odorless plant food tablets for indoor or outdoor use.

Plant Marvel—A scientific balanced plant food which you dissolve in water for liquid feeding.

Rose Food—A balanced combination of organic ingredients, selected for the particular "make up" and sequence availability that roses need. Improves the color and size of your roses.

Cultivation is one task that seems to be always present in the garden. Much of the "hard work" can be taken out of it if we observe a few simple facts.

1. Have a reason for cultivating! Cultivating in the garden should accomplish a definite purpose. Killing weeds is the main object. Breaking up a soil crust so that moisture can penetrate is another. Working in plant food may occasionally be needed. Occasionally cultivating is used to remove excess plants.

2. Use the best method for your garden. There are many ways of working the soil. Weed control can be done by hand pulling, hoeing, or, in a few cases, by selective sprays. Scuff hoes, wheel hoes, rotary cultivators all will do a good job.

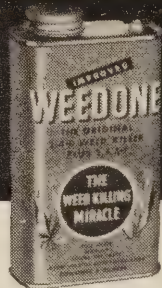
Soil crusts will almost always be broken if any method of weeding by pulled or pushed tools is used. Plant food can be worked in by pronged cultivators or wheel hoes. Thinning is usually done with a hoe when other cultivating is done, but many persons prefer to thin plants by hand to avoid accidentally killing too many.

Generally the best tools are those that take the least effort. The easier the work the oftener and better it will be done.

3. Use care in cultivating. Deep cultivating is injurious. Plant roots spread out in to the surrounding soil. If you cultivate deeply these important feeding roots will be cut off and the plants will suffer. Tests at experiment stations show that lack of cultivation is less injurious than very deep.

4. Do a thorough job! Light, frequent cultivation that kills all of the weeds is much better than a slipshod one that leaves small weeds here and there to grow and become a nuisance in a short time.

5. Use labor saving methods! Deep soil preparation, and the addition of humus and compost will help prevent soils from crusting. Good sanitation in the garden will reduce weed seeds to a large extent. Mulches will take the place of cultivating in a great many cases. Additional feeding for a growing crop can often be applied in the water when the plants are irrigated.



WEEDONE

PRODUCTS AND OTHER CHEMICAL AIDS FOR
EASIER, MORE RESULTFUL GARDENING

KILL WEEDS with Improved WEEDONE, the miracle weed-killer. Contains 2,4-D and 2,4,5-T. Kills over 100 weeds and woody plants.

8-oz. can \$1; 1-qt. can \$2.75;
1-gal. can \$6.75.



PLASTIC WEEDONE APPLICATOR.....59c
Cap fits all screw-top gallon jugs.

SPOT KILL WEEDS with WEEDUST—2,4-D in handy powder form for use where lawns are not heavily infested with weeds. 12-oz. shaker canister \$1.



END CRAB GRASS with WEEDONE Crab Grass Killer SODAR.

A really superior crab grass killer. 4-oz. can \$1.25; 1-lb. can \$3.50; 2-lb. can \$6.59; 6-lb. can \$18.00.



REDUCE WILT and loss — when transplanting — with **TRANSPANTONE**,® the hormone-vitamin starter. By reducing water loss, helps plants recover faster. Trial packet 25c; 3-oz. canister \$1.



HAVE FUN! Multiply your plants. Take slips and cuttings and speed their growth miraculously with **ROOTONE**®—with-fungicide. Works indoors or out; the fungicide controls damping off. Trial packet 25c; 2-oz. jar \$1.



MORE AND BIGGER TOMATOES and an earlier crop result from use of **FRUITONE**.® Use on limas and string beans, too. Spray buds at blossom time. Trial packet 25c; 2-oz. canister \$1.

PLANTS

flowers and vegetables thrive on Plantabbs

Clean, odorless tablets provide all rich food. So easy to use.

39c up

PLANTABBS
Plant Food Table

Plantabbs,
Balto. 1, Md.



All of these methods will reduce the need for cultivation, so that the remaining areas can be given more attention.

6. Keep your tools in top condition! Clean, well-sharpened tools are necessary in your garden. They save time, effort, and do a better job. Clean the tools after use and protect them from rust. Sharpen the edges of all cutting tools—hoes, wheel hoes, prong weeders, spades, and shovels. Store your tools where they are handy and ready for use.

NIBONEX

No-Nib'l Rabbit Repellent

Protects vegetables, flowers, shrubs against rabbit damage. Can be applied as dust from its sifter-top can, or mixed with water and sprayed on vegetables and ornamental plants to repel rabbits. Effective by taste and not by odor.



6 oz. can \$1.00. Treats
300 ft. of row crop.

FOR A MIRACLE— A FEW CENTS

Can you think of anything money can buy that's quite such a bargain as Seed? Wholesome food for meal after meal . . . fresh, crisp healthful fare that no market can match—and flowers with beauty unlimited that bring long hours and days of delight—all for a few cents! What else gives you so much for so little as a packet of seed?

Seed isn't mere merchandise. It is a miracle in a small packet! It is without question the greatest bargain any merchant could offer you.



Dependable Grasses and Grains Selected for Use In Our Area

Farm Seed

ALFALFA—The No. 1 soil builder and restorer. We carry a full range of varieties adapted to this territory.

MILLET—An excellent food for stock and poultry. Also a good green fodder and hay plant. Chokes out weeds.

RAPE, DWARF ESSEX—Highly recommended for pasture for sheep, cattle and hogs. Makes splendid green feed for poultry. Plant early spring in moist soil.

SORGHUM—An excellent soiling crop furnishing succulent feed for milch cows. A large yielding fodder crop. A good range of varieties.

SOY BEANS—The crop of many purposes. Excellent for hay, ensilage, grain, and soil improvement. Ground soy beans are as good or better than Oil Meal for mixing with grains for dairy ration.

VETCH—A great producer for hay, pasturage or silage. Good cover crop and soil builder. Needs only moderate moisture, grows in almost any soil.

Ask for our latest
COMPLETE LIST
of varieties and prices
including many not
listed here.

Clovers

ALSIKE—Very hardy. Does better on moist land than other varieties of Clover. Suitable for hay or pasture. Good bee plant.

MEDIUM RED or JUNE—The most valuable of the clover family. Makes two crops the second year. Does not exhaust the soil but enriches it.

MAMMOTH RED—Also called "Pea Vine" Clover. Grows large and coarse, often used for plowing under to enrich soil.

WHITE DUTCH—A very hardy creeping clover, adapts itself to great variety of soils and climates. Good pasture for sheep or cattle; fine for bees.

WHITE SWEET (Biennial)—Excellent for pasture, hay and a soil improver. Drought-resistant.

Grasses

KY. FESCUE—New all purpose, all-location grass. Highest yielding grass for pasture-hay silage. Grows on wet or dry, acid or alkali soil. Takes a year to establish but lasts 20 years or more.

BROME GRASS—Drought defying, resistant to frost and extreme heat alike. Very early, and stays green late in fall. Produces abundant pasturage and enormous crops of high grade hay.

KENTUCKY BLUE GRASS—Excellent for pasture for all kinds of stock. Very hardy. Roots form tough sod. Requires two years to get well started, so often sown in mixtures with other grasses.

ORCHARD GRASS—Hardy, quick-growing. Gives large yield of excellent hay. May be cut several times during season. Will grow in shady places.

REED CANARY GRASS—Especially suited to swampy, over-flowed lands; but thrives on uplands where moisture is abundant. Makes splendid pasture, very early; lasts to late fall.

RED TOP—Valuable for most soils. A good permanent grass. It should be grazed close. Grows successfully on alkali lands where other grasses fail.

RYE GRASS, DOMESTIC—Fast growing one-year grass. Yields abundantly and matures all in one season. Helpful as a nurse crop to other grasses.

RYE GRASS, PERENNIAL—A good pasture grass. Grows quickly and withstands drought reasonably well.

SUDAN GRASS—The ideal emergency hay and pasture crop for late planting. Never plant until ground is warm.

TIMOTHY—Unsurpassed as a crop for hay. Relished by all kinds of stock, especially horses. Not suitable for permanent pasture. Should not be cut too early or pastured too late in fall.

Seed Corn

Our selection of seed corn is built on an intimate knowledge of the kinds that do best in this locality. We have the best kinds for our particular soil and climate.

More and more, the problem of seed corn is becoming localized as new hybrids are released. It is important to have those hybrids best fitted to your growing conditions.

We have the right hybrids for you! Ask about our selection . . . especially adapted to this region.

Field and Grass Seed per Acre Hard Bushel Weight

	Lbs. per	
	Bu.	Lbs. per Acre
Alfalfa	.60	15 to 20
Barley	.48	96
Brome Grass	.14	15 to 20
Buckwheat	.50	50
Clover, Alsike	.60	8 to 10
Clover, Medium Red	.60	10 to 12
Clover, Mammoth Red	.60	8 to 12
Clover, Sweet	.60	12 to 15
Clover, White	.60	5 to 8
Cow Peas, broadcast	.60	60 to 90
Flax, broadcast	.56	25 to 30
Grass, Kentucky Blue	.14	20 to 30
Grass, Orchard	.14	22
Kaffir Corn, broadcast	.56	40 to 50
Millet, for hay	.50	50
Millet, for seed	.50	30
Oats	.32	64 to 96
Rape, broadcast	.50	6 to 8
Reed's Canary Grass	.32	4 to 6
Rye, broadcast	.56	56 to 84
Sorghum, for fodder	.50	50 to 60
Soy Beans, broadcast	.60	30 to 45
Soy Beans, in drills	.60	60 to 90
Sudan Grass, broadcast	.40	20 to 25
Sudan Grass, in drills	.40	8 to 10
Timothy	.45	10 to 12
Vetches, broadcast	.60	50 to 60
Wheat	.60	90

Seed Treatment

More and more the coating of seed with stimulating bacteria is gaining favor with production-wise farmers. We highly recommend seed treatment for higher yields, faster germination and growth. Be sure to ask us about it the next time you stop in.

Seed Potatoes

Our certified stocks are the most economical you can plant. They reduce your hazards to a minimum and give you bigger production with fewer culls.



have fun!

... and here's the way
to make 'em grow their best!

- This year, when you buy choice seeds pick up a supply of Vigoro—America's No. 1 plant food! Then, even before you turn a spade, you'll be well on your way to the finest garden you ever had!

VIGORO — complete, balanced plant food. Provides every nutrient flowers and vegetables must get from soil for best development. Makes any garden soil rich like finest greenhouse soils. *Before planting seeds*, mix Vigoro well into soil—4 lbs. per 100 sq. ft. (For lawns, use long-lasting *Golden Vigoro Lawn Food*. Won't Burn Grass.)

Instant VIGORO — complete, water-soluble plant food. Just mix with water and apply as a liquid, feeding your plants as you water them. Provides quick, complete nourishment. Feeds thru leaves, feeds thru roots. Also ideal when transplanting seedlings.

Vigoro is a registered trademark of Swift & Company. Copr. 1956 by Swift & Company.



TRI-CON LAWN FERTILIZING UNIT

\$5.75

**Cheaper
Faster**



**The NEW and EASY way
To FERTILIZE
LAWNS—GARDENS**

- Fertilize while you sprinkle
- assured ratio of soluble fertilizer
- no adjustment required
- no possible failure
- long service and dependability
- a three type spray with sprinkler base
- 3 units in one—Fertilizer Applier—No. 100 Nozzle—Sprinkler

TRI-CON ALL PURPOSE NOZZLE

**4-WAY
WATER
RELEASE
\$2.50**



**Complete with nozzle and
sprinkler base**

The only nozzle with the high-velocity reversible cap

Strong stream—full flow

Trigger control (it's in the cap!!!)

• **Does over 100 jobs BETTER**

NO-SEE GRASS BARRIER

**GUARANTEED 15 YEARS
AGAINST RUST FAILURE**



**STOPS GRASS
HERE!**

Gives you a permanent, neat, clean edge around flower beds, trees and shrubs; along driveways, fences and hedges. Eliminates grass trimming and edging. Corrugated, galvanized steel sections 2 feet long by 4 inches deep key together to make any length. Easy to install; just drive down to soil level.

40 feet \$4.98

Garden Supplies and Tools

Many of your garden chores can be made much easier—if you use the new, improved garden tools.

Modern designers have discovered numerous ways to improve the old tools—to make the work easier and to improve results. We have these newer tools for you, together with a good assortment of the standard designs. Next time you're in our store, be sure to look them over!

Garden Gloves

Garden Gloves — Protect your hands—wear gloves in your garden! Canvas or leather, in sizes for men and women.

Garden Hose

Visit Our Store for our newest offerings. Garden hose is now available in good quality and quantity.

Labels

Pot or Garden Labels (Wooden)—Used for marking plants in pots or seed flats, 4 inch, 12 inch.

Wood Tree Labels, Wired. Painted wooden labels equipped with wires for marking trees or shrubs; also used extensively for labeling dahlia tubers.

Plant Bands

Square bands hold almost twice the number of plants as round pots of the same size.

2 in. size; packet of 30, 25c. (Ask for prices on larger sizes and quantities.)

Plant Supports

Bamboo Stakes—Green, pencil-thickness. 2 ft., 3 ft., 4 ft.

Dahlia or Garden Stakes — Wooden — Painted green. Strong and durable. Almost rot-proof. Will last several seasons. For supporting dahlias, young trees, etc. 4 ft., 5 ft., 6 ft.

Pots and Saucers

Standard Earthen Flower Pots. Many sizes, from 2½ in. to 12 in. diameter.

Earthen Flower Pot Saucers. 3 in. to 12 in.

Red Paper Pots. Excellent for growing seedlings or for packing plants for shipment. 2¼ in. to 6 in. diameter.

Bird Houses and Feeders

Window Bird Feeders—Provides an opportunity to study your bird companions from your window. Ideal for shut-ins and a real companionship for any bird lover.

Bird Houses—A great deal of pleasure can be derived from the birds that will be attracted to your yard by putting out a bird house or two. We carry many types and styles for bird lovers to choose from.

Wild Bird Seed Mixture

Feed your feathered friends the year round with this tempting mixture. All types of wild birds relish this seed. Don't forget to give them plenty in the winter months.

Tools

The next time you get into your tool shed or garage, or wherever you keep your garden tools, look them over! Try to remember how long it has been since you first brought them home. Then — if you want a real thrill—come into our store and see what the modern tool designers have done for you!

Here is a very brief outline of tools now available. But, better yet, come in and see for yourself.

Cultivators, Speedy—4 sharp curved tines, 4⅓ ft. handle.

Norcross—Adjustable steel teeth.

Hand Cultivator Weeders—3 or 5 prong.



Forks, Spading—4 tines, D handle, light and heavy weight.

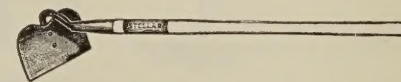
Hay Fork—Bent handle, 3 or 4 tines.

Hooks, Grass (Sickles)—Various styles, well balanced designs. Wood handles.

Potato Hooks—4 broad tines, tumbled.

Shears, Grass—Pinch-proof handles.

Hedge Shears—8 or 9 inch blades.



Hoes, Field or Garden—Various styles.

Onion Hoe—Square top pattern.

SYFONeX®

BRASS SIPHON MIXER

Applies soluble fertilizers, weed and pest control chemicals accurately mixed and automatically as you sprinkle. Attaches to faucet, between hose lengths or behind nozzle, draws chemical concentrate from container in proportion of about 1 part concentrate to 16 parts water.

Gives Quick, Easy Care of Lawns, Gardens . . .

SYFONeX assures safe, easy feeding and care of lawns, gardens, shrubbery without danger of burn-outs.

—Retailers: \$2.50 ea.



**PICK A
PORTER
PRUNER**
for best results

They make pruning so easy—work so well—cost so little—and last so long.

8A DURACUT PRUNER

This anvil type pruner with rugged sharp blade, makes pruning easy and fast. Blade won't slip by anvil. Plastic Comfort Grips and positive thumb lock. Length 8", weight 12 oz.

\$295

135 IN-B-TWEEN PRUNER

Two-hand power to do 90% of all round-the-house pruning. Easy to use! Light in weight! Two sharp blades. Cushion grip handles. Length 13", weight 15 oz. Cuts up to 3/4" green wood.

\$495

285 LOPPING SHEAR

New in design, perfectly balanced. Stout hickory handle can be cut to any desired length. No slots to weaken handle. Narrow alloy steel cutting head. Length 28", weight only 2 lbs. Cuts up to 1 1/16" green wood.

FOR HEAVY PRUNING OF BRUSH AND TREES . . . let us show you the PORTER HEAVY DUTY BRUSH CUTTER. Designed for all-around cutting and pruning. Two sizes—2FO cuts 1 1/2" green wood; 3FO cuts 2" green wood. The rugged QP Pole Pruner with SHORT ARM AND PULLEY cuts up to 1" green wood. See the complete line of Porter Pruners or write for Catalog.

\$645

H.K.P. H. K. PORTER, INC.
Somerville, Mass.

Identify Your Insects

Biting or Chewing insects such as beetles, caterpillars, grasshoppers, and the like, can be best controlled by the application of poisons to the plants upon which they feed.

Sucking insects, such as aphids, weevils, leaf hoppers, etc., insert their beaks into the leaves, stems, or fruits, and suck the plant juices. Hence, "stomach" poisons applied to the surface of the plant will not kill them. They must be killed by use of contact poisons.

Scale insects that develop protective coverings are most easily killed by strong corrosive solutions, such as a concentrated lime-sulphur mixture, applied during late fall or winter when foliage is off the plants—and by other materials.

Which Insecticide—When?

When you're in doubt about your choice of insecticides, ASK US! We generally know the right answer—and if we don't we'll try our best to get it for you.

**IT'S EASY
to Prevent Weeds
before they grow**

with
CRAG
Trade-Mark
HERBICIDE-1



Scuffle Hoe—8 inch blade; straight handle.

Warren Hoe—Pointed steel head.

Knives, Asparagus — 10" with V-shaped point.

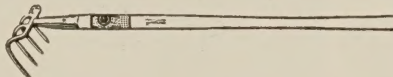
Budding, Propagating and Pruning Knives. See our selection.

Edging Knife—Half-moon blade.

Scythes, Grass, Weed and Bush — Best crucible steel. Visit our display!

Shovels, Square Point—Long and D handles.

Round Point Shovel—Long D handle.



Rakes, Steel, Curved Tooth — Straight handles; teeth on head 1/4" thick.

Steel, Straight Tooth Rakes—Level head.

Wood Rakes—Rigid and strong.

Bamboo Rakes — Fan shaped, strongly made.

Steel - Broom - Rake — Flat, spring-steel teeth.

Pruners, Tree—8 ft., 10 ft., 12 ft.

HUDSON
SPRAYERS and DUSTERS



SIMPLEX Safest compression sprayer. Cover seals from inside 3 1/2 or 4 gal. sizes.

SAF-T-LOK Sprayer. Easy to seal, safe to open. Powerful pump. 1 1/2, 3 and 3 1/2 gal.

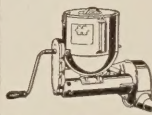


FAVORITE Lightest 2 Gal. sprayer. Has Saf-T-Lok* sealing, Roto-Spray nozzle, 5 ft. hose.

SUBURBAN New 10-gal. power sprayer. Easy to operate with any solution. Adjustable nozzle.



ECLIPSE Stainless steel hand sprayer. Lifetime dependability. 2-Spray* nozzle: mist or residual.



DUSQUIK bellows-action duster. Emits puff or continuous cloud. 2-lb. capacity. Many features.

ROTO-POWER Large, all aluminum duster. More air volume and speed than any other! 14 lb. capacity.

ADMIRAL Duster. Applies 1 qt. powder pesticide easily, uniformly. Swivel nozzle!



* TRADEMARK
SIGN OF THE BEST BUY

HYPONEX

Grows Better Plants Faster
in SOIL, SAND or WATER

Simply dissolve and water all your houseplants, garden flowers, vegetables, shrubs or lawn. Produces stronger plants, more and larger flowers and fruit. Excellent for starting seedlings, cuttings, transplants. Clean, odorless. Won't burn foliage or roots if used as directed. Contains all nutritional elements complete and balanced—plus vitamin B1—instantly available. Results sure.



1 oz. pkt.	10c	7 oz. can.	50c
3 oz. can.	25c	1 lb. can.	\$1.00
10 lb. drum, makes 1000 gals.			8.00
25 lb. drum, makes 2500 gals.			15.00
50 lb. drum, makes 5000 gals.			25.00
100 lb. drum, makes 10,000 gals.			40.00

Pruning Shears—Again available in several styles.

Flower Gathering Shears—They cut the stem and hold the flower for you.

**All Prices
In This Catalog
Are Subject to Change
Without Notice**

KELLER'S

A Good Name to Remember **MORE THAN JUST A STORE**

Keller's is more than an ordinary store. Year after year we work hand in hand with the growers of this area—the home gardener, the market gardener and the farmer. All that we have learned from this experience is always available to our customers. So, you see, we don't just sell seed and related merchandise. We furnish local know-how that comes from all this combined experience.

So, whether it's a question of seeds, or insect control, or soil feeding, or equipment—or any of the many divisions of this business—you can always find dependable merchandise here.

KELLER'S PURE LAWN SEEDS: High germinating and best quality, chosen especially for use in our area. **Shady Lawn** best for shady spots. **Best Mixture** for the permanent lawn.

PET SUPPLIES: A complete line of everything you'll need for your pets. **Dog foods, Remedies, Sweaters, Beds, Supplies, and Toys.**

VIGORO for beautiful lawns and gardens, and **ENDO-WEED** to get rid of weeds.

SUPPLIES: Garden tools, wheelbarrows. **Eazy Wear** garden gloves. Everything you need for the farm or garden.

GEO. KELLER AND SONS CO. **909 Maine Street** **QUINCY, ILLINOIS**

T H E 1 9 5 7 A L L A M E R I C A R O S E S

GOLDEN SHOWERS—A.A.R.S. 1957 (left). The first pillar or climbing rose to ever win an All America Award. Produces a profusion of canary colored flowers. **WHITE BOUQUET**—A.A.R.S. 1957 (right). Gleaming white fragrant floribunda with season-long succession of beautiful, sparkling flower clusters.

