Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.
BECKERT'S

Garden Annual

BECKERT'S SEED STORE, INC.

101 Federal Street

PITTSBURGH 12, PA.
**New! The Greatest Flower News in More Than a Decade**

**FIRE CHIEF PETUNIA**—This beautiful deep red petunia is the first flower to win the top Gold Medal award in eleven years! Plan to be one of the first to use this important new variety. Will add a glowing new freshness to your 1950 flower garden.

**LARKSPUR**—Regal, Tremendously long thick spikes. Superb performer that suits critical florist standards.

**SWEET PEA**—The Margaret O'Brien. Distinctly different color. Radiant salmon-coral suffused with luminous orange sheen.

**DOUBLE SNAPDRAGON**—Lemonade. Clear primrose-yellow with extra petals in the mouth of each floret.

**MORNING GLORY**—Blue Star. Beautiful. Dark blue star on delicate sky-blue trumpet.

**ASTER**—Princess. Deep quilled "cushion" centers. 3' to 3½" blooms. Makes fine wilt-resistant cut flowers in new colors.

**POPpy**—Garford—Pastel mixture. Long stemmed. Very rich. A most unusual giant flowering strain.

**CALENDULA**—Orange Quills. Bright mid-orange flower. Unique form. Petals curl downward and meet underneath forming a quill.

**LIMITED WARRANTY CLAUSE**—Our Company warrants to the extent of the purchase price that seeds or bulbs sold are as described on the container within recognized tolerances. Seller gives no other or further Warranty, express or implied.

Copyright 1956, Garden Publications
Do you know exactly how much lettuce seed to plant for the number of feet of row you want?

...or what kind of soil you need for cucumbers? And how to get it?

...or what are the reasons behind inter-cropping, catch-cropping, and succession cropping?

...or the special fertilizer needs of dahlias?

In this "Garden Annual" you'll find the answers to hundreds of questions like these! Unlike most seed catalogs, this book devotes nearly half its space to the "How-when-where-why" of gardening.

You see, we want your garden to be a rousing success! We want you to get the most results with the least effort. We want your gardening to be fun.

So, in this book as in our store, we do everything possible to help the gardeners we serve.

Our job as seedsmen, we believe, is to provide know-how, as well as merchandise. We provide it through our Spring Garden Annuals. We keep on providing it in our store, throughout the year.

Just between us home folks—

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 garden. You can get the very best, right here in your own neighborhood!

Another very important point—as you know, there are many flower and vegetable seed varieties which do well in some areas, but are uncertain in other parts of the country. So we always make sure the seed we offer is truly suitable for use hereabouts. Often we rule out very attractive varieties, because we want your garden to be successful, from start to finish!

Isn't it just good sense, then, to do your garden shopping here—where your needs are understood! Certainly it's easier—and safer!

PRICES: All prices in this catalog are subject to change without notice.

MAIL ORDERS: On mail orders, all packet seeds are sent postpaid. On all other items, add parcel post charges to your remittance.

BECKERT'S SEED STORE, Inc.
North Side's only Seed Store
101 FEDERAL STREET      PITTSBURGH 12, PA.
Phones Fairfax 1-4210—1-4211—1-4212
How to Grow and Maintain a Beautiful, Rich, Green Lawn!

STARTING A NEW LAWN

SOIL PREPARATION. Spade or plow the area to a 6 or 8 inch depth. Pulverize the soil thoroughly. A heavy clay soil can be lightened by mixing with sand and humus. A light soil can be improved by adding a top dressing of heavier soil. For best results soil should be slightly heavy. If the soil is acid, scatter crushed limestone.

Peat moss or Terralite are invaluable additions to both light and heavy soils because they help retain soil moisture without allowing the water to be dissipated down below the root lines. Too, they keep soil particles loose and friable. Spade them into the soil or apply as a top dressing at least half an inch deep. In a heavy clay soil use one inch or more. A newly planted lawn needs a rich well balanced soil, because grass roots are heavy feeders. By feeding the soil the vital elements contained in plant food, such as nitrogen, phosphorous, potash, etc., you are headed toward a successful planting. We can recommend the best plant food for your local soil condition.

Mix the lawn food with a top dressing or rake and work it well into the soil. Because fresh manure usually contains weed seeds its use is not advisable for a new lawn.

SEEDING. The generally accepted rule for the amount of seed required is five pounds per thousand square feet. Skimping on seed in quality or quantity is costly in time and labor. A well sown lawn checks the immediate introduction and development of weeds. Too much seed retards growth. Choose a calm windless day for sowing. A more uniform distribution of seed is possible with a spreader. Whether sown by hand or spreader, however, sow in two directions, one at right angles to the other. This insures against leaving bare grassless areas.

Rake the seed into the soil lightly or brush it in by dragging some light flexible object over it such as a sack. The seed should be covered by an eighth of an inch of fine soil or new top dressing.

ROLLING. May be properly employed to press the soil firmly around the new seed. Use a light water ballast roller, empty to one third full. Remember the soil becomes compacted if rolled too heavily too often or when wet and sticky. For leveling your lawn whether new or old use top dressing, never a roller.

WATER with a fine spray so the seed bed will not be disturbed. If the normal moisture is enough to keep the lawn just slightly damp try not to water it again until the seed has germinated, but do not let it get dry at any time.

SPRING LAWN CARE

Fine lawns start with very early spring care. Here are some suggestions:

1. REMOVE all the winter accumulations of leaves and debris by raking.
2. APPLY PLANT FOOD as directed by the manufacturer. If grass has started apply when grass is dry, then soak the lawn to wash the plant food off the blades and into the soil.
3. RE-SEED thin and bare spots using about a pound to each 200 square feet. Pulverize the soil in bare spots, then cover the seed lightly.
4. ROLL the lawn with a lightweight roller when soil is dry enough to prevent compaction.

Fall planting offers many advantages in lawn starting. If you plant in the spring, seed early—long before you begin work on your flower garden, for seedlings need a chance to grow sturdy before weeds germinate. Planting delayed until mid-summer can be successful if diligently followed by ample watering and weeding.

SUMMER LAWN CARE

1. MOW frequently enough to keep grass from exceeding a 2½ inch height. Set the mower to cut about 1½ inches high. Very close cutting scalps the rough spots and unless done extra-frequently injures the grass by sudden exposure to the sun after it has been shaded by dense growth. Short mower clippings left on the lawn are beneficial. They are harmful however if the quantity is so great the grass is smothered and new growth retarded.
2. WEED CONTROL with the many selective and selective types now available assures weed elimination with the least effort and time. Get those weeds early before they seed or spread and your summer lawn care is considerably easier. Refer to our weed killer selection in the back of our Garden Annual.
3. WATERING is a point that depends much on your good judgment. If the turf is dry it is far wiser to soak limited areas to a six to eight inch depth on successive evenings than to sprinkle the whole lawn with a limited supply of moisture that will attract the dry grass roots up to the surface. Water sloping areas more liberally at the top to compensate for drainage losses.

FALL LAWN CARE

FEEDING the lawn with a balanced plant food and seeding the bare and thin spots will amply reward your effort the following spring with a sparkling, healthy new growth.

Fall Is A Good Time To Make a New Lawn. During the moderate fall weather, grass seed germinates quickly and makes vigorous growth. Also, few weeds germinate in the fall, thus permitting the lawn to flourish without interference.
**LAWN SEED**

**BECKERT’S LAWN MIXTURES**

We offer lawn mixtures that are the result of years of trial, perfect blends best adapted to our local soil and climatic conditions. Experienced help in our store are always willing to help solve your particular lawn problems.

**EVE RGREEN LAWN SEED**

Because of its quality it should not be confused with mixtures that are being offered to the public under the same or similar name. It contains only the finest domestic grasses selected and analyzed as to Purity and Germination and will produce a turf smooth of texture, hardy and enduring. Prices: Lb. $1.00, 5 Lbs. $4.50, 10 Lbs. $8.50, 25 Lbs. $21.00.

**STURDY LAWN MIX**

Composed of recleaned grasses that will quickly form a rich green turf. Prices: Lb. $5.00, 5 Lbs. $4.00, 10 Lbs. $7.50, 25 Lbs. $18.50.

**SHADY NOOK LAWN MIX**

Particularly adapted for growing in shady places where ordinary grass seed mixtures will not thrive. Prices: Lb. $1.10, 5 Lbs. $5.00, 10 Lbs. $9.50, 25 Lbs. $23.00.

One pound will cover approximately 250 sq. ft.

---

**LAWN WEED CONTROL AT YOUR COMMAND**

Just a few short years ago, weed-free lawns were a rarity. Now, almost overnight, weed control has become easy, almost automatic. Out of the laboritories have come new chemicals with the miraculous power to kill the common lawn weeds while leaving the turf itself unharmed. Today, weeds in the home lawn are completely unnecessary and out-of-date... in fact, they may well be classified as just “bad housekeeping.” Please be sure, than to look up the weed killers described later on in this book. And if you have any questions about them, be sure to consult us. We can tell you exactly which controls to use—and when. And we have them in stock.

---

**BECKERT’S SPECIAL PURPOSE GRASSES**

**KENTUCKY BLUE GRASS**

Considered by many as our most valuable native grass. It forms a close, thick turf of rich dark green color. Being rather slow in germinating, it is usually used in combination with other grasses. Prices: 1 lb. $1.25, 2 lbs. $2.40, 5 lbs. $6.00, 10 lbs. $11.50.

**RED TOP GRASS**

Quick growing, Thrives on a wide range of soil conditions. In the lawn, it is used mostly as a nurse grass in combination with other lawn grasses. Prices: 1 lb. $1.25, 2 lbs. $2.40, 5 lbs. $6.00, 10 lbs. $11.50.

**RYE GRASS, DOMESTIC**

A fast growing, short lived grass used in mixtures as a nurse for the slower germinating perennial grasses. Prices: Lb. 35c, 10 Lbs. $3.00, 25 Lbs. $6.50.

**RYE GRASS, PERENNIAL**

Considered a better, more lasting nurse grass than the Domestic variety which it resembles. Prices: Lb. 45c, 10 Lbs. $4.00, 25 Lbs. $9.50.

**WHITE DUTCH CLOVER**

Easily grown on most any soil which is not too acid. Its low compact growth makes it valuable for crowding out weeds. It is best sown in soil for the slower germinating perennial grasses. Prices: Lb. 35c, 10 Lbs. $3.00, 25 Lbs. $6.50.

**CREEPING RED FESCUE**

Valuable for lawns. A turf forming creeping grass. Prices: Lb. $1.10, 5 Lbs. $5.25, 10 Lbs. $10.00.

**NEW ZEALAND CHEWINGS FESCUE**

A vigorous fine-bladed grass especially valuable for terraces and shady places. Prices: Lb. $1.10, 5 Lbs. $5.25, 10 Lbs. $10.00.

**ALTA FESCUE**

A deep rooted perennial grass. Thrives under dry conditions. Sow 10 to 12 lbs. to the acre. Prices: Lb. $1.10, 10 Lbs. $10.00.

**COLONIAL BENT GRASS**

An attractive dark green fine-bladed Bent Grass for the lawns and putting greens. Tests have shown this strain to be best adapted of any of the bents for home lawns. Prices: Lb. $1.75, 5 Lbs. $8.00.

**TIMOTHY**

Prices: Lb. 60c, 5 Lbs. $2.50, 10 Lbs. $4.50.

---

**WHATEVER THE NEED!**

**BRIGHT SUN**

Some sunny lawns require one type of seed; some need another. No single variety or mixture of varieties can take care of all situations. But whatever the need, we can supply the seed that is best suited.

**DEEP SHADE**

Wherever cool shade makes it difficult to obtain a good lawn, our special shade mixture is heartily recommended. We have chosen excellent quality, shade enduring grasses and clovers that will give you good results.

**SPECIAL USES**

We have just the right grass seed for every purpose. We can give you special deep-rooted grasses for the sloping lawn, the ideal grasses for planting on golf courses, parks, estates, cemeteries... or for just any other special use. Just tell us what you want.
VEGETABLE SEEDS

From among all the thousands of available varieties, we have selected those which will produce the best quality and the greatest yields in the gardens of our territory. So we offer you this compact selection as a safe, sound base for your plans.

VEGETABLES FOR FREEZING

The Symbols (fr) following the variety names indicates vegetables suitable for home freezing.

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 ½" 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 in 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 after setting.

Mary Washington (fr)—Thick, tall green spears with purple tops. Highly rust resistant. Rapid growing, Tender.

BEANS

Green Potted, Dwarf or Bush

Don't plant until the weather is warm and settled. Sow beans in bottom of furrow, 3" to 4" deep and from 2½ to 3½ feet between rows, but do not fill in with more than 1½" of soil over seeds. Press soil firmly over seeds, but do not pack hard. Thin to stand 4" to 6" apart in row. Bean seedlings are likely to be slowed up pushing through heavy soil. In such soils, cover seeds with mixture of half sand and half soil, or sand and peat or any other loose, light material, that will allow seedlings to break through easily.

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. Keep vines picked to insure a larger bearing period.) Make plantings every two weeks for supplies throughout the season.

—Two scientific facts about beans will help produce better crops. First, being legumes, they should be inoculated with special legume culture listed in supply section. This enables plants to manufacture their own nitrogen from the air. Second, bud drop of the tiny flowers (even before they can be easily seen) cut the early set of pods. By spraying with a fruit setting spray these buds are held on and the early crop increased by as much as 100 per cent.

Black Valentine Stringless (fr)—Hardy, early maturing, very productive, Pods, dark green, 6-6½ in. long, brittle, smooth, stringless. Seeds black. 49 days.

Bountiful (fr)—An early, heavy-yielding variety, The leading flat potted bean for market and home use. Flat, light-green, stringless, but slightly fibrous pods of finest quality. 47 days.

Stringless Green Pod (fr)—Large, sturdy plants. Meaty round pods, brittle and strictly stringless. Medium green pods, oval, yellowish-brown seeds. 54 days.

Giant Stringless Green Pod—5½" pods almost round. Meaty, stringless and brittle. Medium Green. 55 days.

Plentiful—Productive, early, Flat, medium green pods, 6 to 7-in. long, strictly stringless. Choicest quality. All-America Medal. 51 days.

Tendergreen (fr)—Large, erect plants. Abundant, round, dark-green pods, strictly stringless and fleshy. 54 days.

Wax Potted, Dwarf or Bush

Improved Golden Wax (fr)—Small, erect plants, moderately productive. Straight, thick, flat pods, creamy yellow and stringless. 51 days.

Pencil Pod Black Wax (fr)—Stocky, large, strongly productive plants. Pods, golden yellow, tender, stringless. 55 days.

Sure Crop Stringless—Handsome, rich yellow pods. Sturdy, brittle, 6-6½ in. long. Strictly stringless. 53 days.

Beans, Pole

In warm ground, set poles 4' to 8' long planting a bit to the north in rows 4' apart. (Extending north and south the poles will be 3' apart in the row.)

Anchor well as heavy bean vines blow over easily. Plant 5 to 6 beans about 1' deep, around each pole, When growth is sufficient thin to four plants. Sometimes three poles set to form a tepee are used and several seeds planted around each tepee.

Caution: To avoid spreading plant diseases, do not cultivate or pick when plants are wet.

London Horticultural or Cranberry—Hardy, good climber, 5" pods flat-oval, dark green when young, splashed with red. Slightly curved, stringless, little fibre and very fleshy, 70 days.

Kentucky Wonder (fr)—Strong climber, hardy, long-bearing. Curved, almost round pods, Slightly stringy, but brittle and fibreless. Meaty. 65 days.

Kentucky Wonder Wax (fr)—Vigorous, good climbing plants waxy-yellow pods, flat and nearly stringless. Somewhat fibrous but meaty. 68 days.

It's good business to buy your seed from a seedsman. He knows your local soils and growing conditions.
BEANS, Continued
Lima, Dwarf or Bush
Plant in dry, warm ground. Make rows 2" apart and drop beans 6" apart in row. Plant Lima Beans with the eye down to assist quick germination. Cover with 1" of soil. Can also be planted in hills, 3" apart one way and 2" apart the other way. Use 4 to 6 beans per hill.

Burpee's Improved Bush (fr)—Best of flat seeded bush limas. Pods contain four or five large beans of excellent quality. 75 days. Pkt. 15c.

Fordhook Bush (fr)—Straight pods with plump, large beans, excellent quality. Widely planted.

Lima, Pole
Follow same plan as for other pole beans but plant seed two weeks later.

King of the Garden (fr)—Flat, smooth pods with four or five white, large, flat beans. 88 days.

BEANS, SHELL
Navy—Small seed, almost round and white. Hardy, prolific. Most popular for baking. 95 days.

Red Kidney—Pods 6-7 in. long. Flat large beans, pinkish red to mahogany in color. Rich flavor. 95 days.

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)—Widely grown for early beets. Flattened globe shaped roots with small tap root. Excellent quality, tender and sweet. 60 days.

Detroit Red Dark (fr)—Standard of excellence in table beets. Smooth, oblong roots of deep ox-blood red—sweet and tender. 65 days.

Early Wonder—Early variety. Semi-globular, tender, blood-red. 58 days.

BEETS, STOCK (Mangel Wurzel)
Sow seeds in early fall and spring in rows. Plant 2½" to 4" apart. Later thin to 1½" apart.

Mammoth Long Red—Very popular, 30 to 50 tons per acre. Roots grow half above the ground. Light red, flesh white with rose tinge. 110 days.

BROCCOLI
Plant and cultivate like cabbage and cauliflower.

Italian Green Sprouting (fr)—Plant bears a succession of sprouting heads about 5-in. long, which, if kept cut, will be replaced by others for 8 to 10 weeks. 55 to 65 days.

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—Compact, uniform dwarf size plants. Cabbage-like sprouts 1½" to 1¾" in diameter. One of the most dependable varieties. 90 days.

SWISS CHARD
Requires about the same treatment as beets. Cultivate frequently. Leaves may be gathered during summer and fall. New ones will grow quickly.

Lucullus—Most popular Chard. Upright in growth, with yellowish-green curled, crumpled leaves. Thick, broad and light green stems. 50 to 60 days.

Rhubarb Chard—Heavily crumpled leaves, dark green with a translucent crimson stalk. Easily grown, everywhere. A different, tasty, delicious flavor—cook stalks and leaves together for a new taste thrill. 60 days.

BECKERT'S VEGETABLE SEED PRICES

<table>
<thead>
<tr>
<th>BEANS—Green-podded bush</th>
<th>Asgrow Valentine, Tendersgreen, Burpee's Stringless, Giant Stringless</th>
<th>.60</th>
<th>1.00</th>
<th>2.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bountiful, Plentiful</td>
<td>.65</td>
<td>1.20</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Wax-podded bush</td>
<td>Sure-Crop Stringless</td>
<td>.60</td>
<td>1.10</td>
<td>2.00</td>
</tr>
<tr>
<td>Pencil-Pod Black</td>
<td>.65</td>
<td>1.20</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Round Pod Brittle</td>
<td>.70</td>
<td>1.30</td>
<td>2.40</td>
<td></td>
</tr>
<tr>
<td>Green-podded pole</td>
<td>Kentucky Wonder, Horticultural Pole</td>
<td>.65</td>
<td>1.20</td>
<td>2.25</td>
</tr>
<tr>
<td>Wax-podded pole</td>
<td>Kentucky Wonder Wax, Golden Cluster Wax</td>
<td>.60</td>
<td>1.10</td>
<td>2.00</td>
</tr>
<tr>
<td>Lima Beans, Bush</td>
<td>Fordhook, Giant Improved, Wood's Prolific</td>
<td>.75</td>
<td>1.40</td>
<td>2.50</td>
</tr>
<tr>
<td>Pole Lima</td>
<td>King of the Garden</td>
<td>.75</td>
<td>1.40</td>
<td>2.50</td>
</tr>
<tr>
<td>Dry Shell Beans</td>
<td>Horticultural Dwarf, White Marrowlet, Red Kidney</td>
<td>.65</td>
<td>1.20</td>
<td>2.25</td>
</tr>
</tbody>
</table>

All beans are 10c a packet.
CABBAGE
Sow seed in drills 6” apart across the bed, dropping the seed 3 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
Yellows Resistant Marion Market—Large, firm round heads, used for early kraut. A development from Copenhagen Market. 7-in., 4-lb. heads. 75 to 80 days.

Yellows Resistant Wisconsin Hollander—Late, excellent for winter storage and kraut. Similar to Hollander and Danish Ball Head. 7 to 8-in., 7 to 9-lb. heads. 100 to 110 days.

Standard Early Varieties
Copenhagen Market—Excellent, early short season type. Short stems, 6½-in., 3½ to 4-lb. heads. 65 to 70 days.

Early Jersey Wakefield—Pointed heads, small and firm. Earliest pointed variety. Plants compact. 62 days.

Golden Acre—Extra early variety producing uniform well-balanced head. Weighs about 3 lbs. Excellent quality. 65 days.

Late or Winter Varieties
Danish Ball Head or Hollander—A widely used late type. Deep, round, hard, compact heads, 7 to 8-in., 6 to 7-lb. Tender, crisp, fine for kraut. 100 to 105 days.

Premium Late Flat Dutch—The best late variety. Large, round, flat solid heads of perfect shape. Less inclined to burst than many varieties. Tender; fine quality.

Red Variety
Mammoth Red Rock—Best of the red cabbages. Hard, round. Purplish-red heads. Good keeper, 6 to 8-in., 7 to 8-lb. heads, 100 days.

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.

Chihilih or Improved Pekin—Dependable, early. Solid, tapered heads, 3 to 4-in. thick, 18 to 20-in. long. 75 days.

CARROTS
Use sandy loam enriched by manure the previous year, if possible; but any good soil if deeply and well worked will produce a good crop. Sow seed as early as ground can be worked. Sow seed ½” to 1” deep in drills 16” to 18” apart. Press soil firmly above seed. When plants appear use cultivator or hoe and thin from 2” to 6” apart, according to type. Keep cultivated.

Chantenay, Red Cored (fr)—Root has thick shoulder and tapers to slight stump root, 5-in. long. Red cored. 70 days.

Danvers Half Long—Sweet, tender roots, 6 to 7-in. long tapering to a blunt point. Fine for storing. 75 days.

Improved Emperor (fr)—Fine-grained, tender. Rich orange, indistinct core. Roots smooth, tapered to semi-soft. 77 days.

Nantes Improved Coreless (fr)—Excellent for forcing. Tops small, roots bright orange, blunt ended. Flesh reddish orange and practically coreless. 70 days.

Oxheart or Guerande—Excellent for shallow soil, easy to harvest. Chunky, tender and sweet. Bright orange. Keeps well, 72 to 75 days.

CAULIFLOWER
Packet, 25c 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 them at the top.

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

CELERIAC
Large Smooth Prague—(Rooted celerely). Smooth spherical roots, 2 to 3-in. thick. 120 days.

BECKERT’S VEGETABLE SEED PRICES

<table>
<thead>
<tr>
<th>Seed Name</th>
<th>Pkt</th>
<th>1/4 Oz.</th>
<th>Oz.</th>
<th>1/2 Lb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEETS—Crosby’s Improved Egyptian, Extra-Early Egyptian</td>
<td>.10</td>
<td>.25</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Early Wonder, Detroit Blood Red</td>
<td>.15</td>
<td>.35</td>
<td>.65</td>
<td>1.75</td>
</tr>
<tr>
<td>BROCCOLI—Italian Sprouting</td>
<td>.15</td>
<td>.60</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>BRUSSELS SPROUTS—Miniature Cabbage</td>
<td>.15</td>
<td>.60</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>CARROTS—Improved Chantenay, Danvers Half Long, Nantes Half Long, Improved Long Orange, Oxheart</td>
<td>.10</td>
<td>.15</td>
<td>.25</td>
<td>.75</td>
</tr>
<tr>
<td>CABBAGE—Golden Acre, Imp. Copenhagen Market, Enkhuizen Glory, Penn State Ballhead, Shortstem Danish Ballhead, Large Late Flat Dutch, Marion Market, Mammoth Red, Chihili, Wisconsin Yellows Resistant</td>
<td>.15</td>
<td>.30</td>
<td>.50</td>
<td>1.50</td>
</tr>
<tr>
<td>CAULIFLOWER—Super Snowball, Select Snowball</td>
<td>.15</td>
<td>2.00</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>CELTUCE</td>
<td>.15</td>
<td>.60</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>CELERY—Golden Plume, Easy Blanching, Golden Self-Blanching, Giant Pascal, Winter Queen</td>
<td>.10</td>
<td>.75</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Summer Pascal</td>
<td>.15</td>
<td>.75</td>
<td>2.25</td>
<td></td>
</tr>
</tbody>
</table>
CELERY
Start in shaded horbed 60 days before needed. Cover seeds 1/2". 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 weather of autumn.

GIANT PASCAL—Late variety for winter use. Large plant, dark green leaves. Big solid stalks that blanch to yellow white, 135 days.

GOLDEN SELF BLANCHING, DWARF—Compact plants, yellowish green foliage. Blanches readily, 120 days.

WONDERFUL OR GOLDEN PLUME—Early, medium plant with compact, full heart. Blanches easily to golden yellow, 112 to 115 days.

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

SOUTHERN OR GEORGIA—An excellent cooked green. Long stemmed plant with clustered leaves. Withstands heat and bad soil. 24 to 36 days.

SWEET CORN
For the home gardener, the simplest way to plant sweet corn is in rows or drills, not in hills. Plant on north side of garden or so late summer shade from your corn does not retard growth of other nearby vegetables. Space the rows 36" apart, and plant a seed about every 3". Thin stalks to stand 9" to 12" apart in row. The drill should be 3" to 4" deep, but don't cover seed with more than 1" of soil. The drill or furrow can be filled in as the plants grow to anchor them against the wind. In hills, plant 4 to 6 grains per hill. Later thin to 2 or 3 stalks to a hill. Space several plantings at intervals of 14 days for continuous crop. Removing suckers has been standard practice with practically all growers. Now, experiments prove that removing suckers merely takes away extra food-producing leaves and so hurts rather than helps growth. Also, suckering often disturbs roots enough to injure plant. Always plant corn in several short rows side by side rather than one long row. Corn is pollinated by wind and rows side-by-side mean that all the stalks can be reached by the pollen. Many home gardeners, on reading newspaper accounts of corn de-tasseling, assume that this is necessary to set ears. On the contrary, removing tassels may cut the crop seriously. Detasseling is only done where hybrid corn is raised for seed purposes. The more pollen that flies, the better the set of kernels. So don't detassel sweet corn in the home garden. If weeds are under control, stop cultivating. If weeds be bad late in the season, work the soil as shallow as possible to avoid injuring surface feeder roots.

Most Sweet Corn is really sweet only if it is home grown. As soon as it's picked, the sugar begins to turn to starch, and six hours after it's picked, most of the sweetness is gone. Illustrated above showing comparative row and kernel characteristics are (1) Golden Bantam (2) Golden Cross Bantam (3) Country Gentleman.

HYBRIDS
We offer Hybrid Sweet Corn varieties known as the best for your garden—the finest that can be procured 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. Talk it over with us.

Golden Cross Bantam (fr)—Extremely uniform. Ears 10 to 14 rows, slightly lighter yellow than Golden Bantam. Highly resistant to Stewart's disease. 85 days.

Joana (fr)—1940 All-America. Ears 7½ to 8-in., well filled with 12 or 14 rows of deep medium narrow, light yellow kernels. Highly resistant to drought and bacteria wilt. 87 days.

Marcross (fr)—An early wilt-resistant hybrid, producing deep golden yellow kernels 7 days earlier than Golden Bantam. Ears 8 to 7½-in., long, 12-14 rows of large sweet kernels, 72 days.

Stowell's Hybrid Evergreen—White. Large ears about 8-in. long; big kernels, very sweet. One of the best late varieties. 95 days.

Open-Pollinated
Bantam Evergreen—a cross of Golden Bantam on Stowell's Evergreen. 14 to 18 rows. Deep, rich golden kernels, tender, sweet, 90 days.

Black Mexican—Pure white corn with purplish-black seed. Ears are 7 to 8-in. long, 8 straight rows. 88 days.

(Continued on Page 10)

**WANT MORE SWEET CORN FOR MORE WEEKS? WE CAN GIVE YOU THE COMBINATION THAT TURNS THE TRICK.**
SWEET CORN, Continued
Country Gentleman or Shoe Peg (fr)—Prolific late variety. Favored by can-ners, irregular kernels, very deep, sweet. 93 days.
Golden Bantam (fr)—The best and most favorably known of all the yellow va-rieties. Stalks often have 2 ears. Ears 8 rowed, kernels broad, with tender hull.
Stowell's Evergreen—White. Large ears about 8-in. long; big kernels, very sweet. Good late variety, 93 days.

POPCORN
South American or Yellow Dynamite—Rich, creamy, yellow, smooth and round kernels, which pop double size of others. Ears 8 to 9-in. long. Vigorous grower, 115 days.

New! Hybrid Pop Corn
You will be delighted with the new hybrid pop corn. Yields are terrific; every plant produces corn with satisfac-tion, big ears, with uniform popping ability. ASK US ABOUT THESE NEW HYBRIDS!

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.

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

Cubit—Won Bronze Medal Award in 1944 All-American Selections. Dark green, white spine cylindrical with blunt ends. Firm flesh and uniform col-orning. New and worthwhile.

Davis Perfect—Mid-season. 9 to 10-in. long, tapered ends, good color, 68 days.

Early Fortune—Rich, dark green fruits with firm, crisp, pure white flesh. Grows to 9 by 2½-in. Ships well and is highly resistant to disease, 66 days.

Long Green Improved—Black spined, good pickling. Grows to 10 to 15 in, long, 70 days.

Marketier—Fine new variety, very pro-life. Attractive rich, dark green color, carried right down to blossom end. Crisp, icy-white flesh, 7¾-in. long 2¼-in. diameter.

National Pickling—Rich dark green. Straight and rather blunt at ends but not chunky. Best all-around pickler, 55 days.

Straight Eight—Unsurpassed as slicing cucumber. All-American Selection. 2½-lb, fruits, rounded at ends, medium green, 68 days.

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. Spread to protect from potato bugs.

Black Beauty (fr)—Large, egg-shaped, smooth, very dark purple fruits. Keep well. Plant bears 4 to 5 fruits. Early.

New Hampshire Hybrid—Developed for short season areas. Round to olive shape fruits, growing low on the bush.

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 stand 6 inches to a foot apart. To blanch, gather the outer leaves together and tie with soft twine or raffia. Do this when plant is nearly grown. Strings should be united after a rain to permit leaves to dry and avoid rotting.

Full Heart or Escarole—A strongly bunched mass of thick, slightly crum-pled leaves, well blanched heart. Upright growing plant about 12 inches in diameter, 71 days.

Green Cured Ruffles—Plants 16 to 18-in. in diameter. Fine fall variety. White, tender, fleshy, 95 days.

HERBS
(Aromatic, Medicinal and Kitchen)
Every garden has a place for herbs, in the vegetable garden or for their
ornamental appearance in the flower garden.

Anise—An annual—used for garnish-ing, seasoning and for cordials. Seeds have an aromatic flavor. Plants 14", 75 days.

Basil—Sweet—Annual. Ht. 12" to 18'. Leaves, green or dried, are chiefly used as a seasoning for soups, stews, etc., 85 days.

(Continued on Next Page)
(HERBS, Continued)

Borage—Annual; Ht. 12-18". Young tender leaves are used as salad and also used for flavor lemonade and other cooling drinks. 80 days.

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

Coriander—Annual; Ht. 24-30". Seeds used for flavoring and in candy and to mask taste of medicine. 70 days.

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

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

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

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

Rosemary—Perennial used as annual; 2' to 4'. Fragrant odor and warm, pungent taste, acceptable seasoning. 65 days.

Sage—Perennial; Ht. 14" to 16". Used for seasoning either fresh or dried. 75 days.

Thyme—Perennial; Ht. 8' to 12', Aromatic foliage used as seasoning. 85 days.

KALE OR BORECLOLE

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—Wide spreading, fine curled blue-green plant plume-like leaves. Use as a vegetable and for ornament. Exceptionally uniform. 55 days.

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)—8 to 10-in. leaves on slender stems. Bulbs 2 to 3-in. globular light green. Crisp, tender, clear white flesh. 55 to 60 days.

LEEK

Large American Flag—An early, popular variety, with thick, long white stems.

Leaves large and drooping, medium green. 130 days.

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-rotted 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—Early, small headed lettuce of excellent quality and flavor. Perfect for home gardens. Very smooth, dark green leaves, bleaching to a rich yellow.

Boston or Mammoth Boston—Popular for cold frame forcing and outside culture. Medium, compact heads with creamy yellow heart. Smooth, glossy texture is improved by making it looser—allowing plant roots greater freedom in their reach for food and moisture; (4) creates an environment suitable for bacteria and other microscopic life to break up the complex soil chemicals in simpler forms more easily absorbed by the plant. A very recent scientific addition is Vermi-lite. Vermilite, also known as Terra Lita, is the new mineral which likewise performs many of the functions of peat moss. Its freedom from weed seeds and exceptional ability to retain moisture makes it well worth your consideration for soil conditioning. The type and amount of humus to use and methods of application are STRICTLY A LOCAL PROBLEM TO MEET LOCAL SOIL CONDITIONS. Another good reason why your local seedman KNOWS BEST. See our Supply Section in the back of this book.
MANGEL WURZEL
(See Beets, Stock)

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.

Bender's Surprise—Similar to Tip Top. Coarse netted 7-lb., oblong fruit, distinctly ribbed hard greenish-yellow skin. Flesh bright salmon, 95 days.

Hale's Best—Flesh thick, deep salmon-pink, sweet and tasty. Heavily netted rind, with faint stripe. Small seed cavity. Outstanding variety, resistant to powdery mildew. 4 lbs. 86 days.

Hearts of Gold or Improved Hoodoo—Nearly round 2-lb. fruit, distinctly ribbed, deep green with fine grey netting. Thick, deep salmon flesh, tender sweet. 94 days.

Honey Rock or Sugar Rock—Round, 4-lb. fruit. Gray-green skin, coarse, sparse netting. Orange-salmon, thick flesh, fine flavor. 83 days.

Pride of Wisconsin—Small seed cavity and thick, orange flesh, excellent flavor. Matures early. Large size. A new melon which is deservedly becoming a leader. 92 days.


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

Cole's Early—An early variety for the North. Medium size fruit, short oval with alternate dark and light green stripes. Pink-red flesh, black seeds and tender rind. 75 days.

Dixie Queen—Very prolific. Bright red, crisp, splendid quality fibresless flesh. Very few small, white seeds. 85 days.

Kleckley's Sweet or Wondermelon—Large, cylindrical, dark bluish-green, with thin, tender rind. Bright red, juicy, sweet flesh, creamy-white seeds with traces of brown, 85 days.

Stone Mountain—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. Seed white with black tips. 90 days.

MUSTARD
Sow as early as possible in the spring. Keep rows 6" to 12" apart and cover with soil ½" deep. You may also sow seed in autumn to raise greens and for salads.

Fordhook Fancy—Upright growing, mild variety. Bright green leaves, plumlike and deeply fringed on the edges. 50 days.

Southern Curled Giant—Large, frilled and crumpled. Light green leaves. 35 days.

OKRA OR GUMBO
Sow in rows about 3" apart. Cover 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 tender hot weather plant. Pick before woody fibres develop.

Dwarf Green—Early, prolific dwarf growing sort. Dark green flattened, 5 to 7-in. pointed pods. Most desirable, compact growing okra. 50 days.


ONIONS
Plant as soon as soil can be prepared. For best yield, plant on very fertile land—fall plowed, and thoroughly fertilized. When plants are a few inches tall, thin to prevent crowding—using the plants removed as green onions. Leave 4" apart for globe-types and 5" for the big Spanish types to mature for dry onions. Latter can also be started indoors for largest 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 2 weeks during summer.

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

Yellow Globe Danvers—An oval shaped straw-colored onion. White flesh, crisp and mild. Splendid keeper. 110 days.

White Varieties
Southport White Globe—Best of the whites. Medium-sized, round, solid white bulbs, fine thin skin. Waxy white flesh, mild and fine grained. Keeps well in fall. 110 to 112 days.

White Bunching—A good spring appetizer. Crisp and mild. Fine for cooking when grown larger. 60 days.

White Portugal or Silverskin—Excellent flat variety. Dependable cropper, excellent for sets, for green bunching, or as a pickler. 100 to 102 days.

Red Varieties
Southport Red Globe—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. 112-114 days.

ONION PLANTS
Sturdy, hardy plants that come to you all ready to set out. Ask for prices.

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

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pkt.</th>
<th>¼ Oz.</th>
<th>½ OZ.</th>
<th>1 Pk.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSKMELON</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golden Champlain</td>
<td>.10</td>
<td>.35</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Rocky Rock</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fordy, Dwarf</td>
<td>.10</td>
<td>.30</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watermelon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kleckley's Sweet</td>
<td>.10</td>
<td>.30</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Early Fordhook</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tom Watson</td>
<td>.10</td>
<td>.25</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>MUSTARD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giant Southern Curled</td>
<td>.10</td>
<td>.20</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Perfection Plume</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORION SEED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellow Globe Danvers</td>
<td>.15</td>
<td>.50</td>
<td>.90</td>
<td>2.50</td>
</tr>
<tr>
<td>Silver Skin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Swiss Spanish</td>
<td>.15</td>
<td>.50</td>
<td>.90</td>
<td>2.50</td>
</tr>
<tr>
<td>White Bunching</td>
<td>.15</td>
<td>.50</td>
<td>.90</td>
<td>2.50</td>
</tr>
<tr>
<td>ONION SETS Prices</td>
<td>2 Qt.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OKRA or GUMBO</td>
<td>.10</td>
<td>.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Green Pod</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Wrinkled</td>
<td>.10</td>
<td>.50</td>
<td>.90</td>
<td>1.70</td>
</tr>
<tr>
<td>Late, Little Marble</td>
<td>.10</td>
<td>.50</td>
<td>.90</td>
<td>1.70</td>
</tr>
<tr>
<td>Main Crop or Late</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved Telephone</td>
<td>.10</td>
<td>.50</td>
<td>.90</td>
<td>1.70</td>
</tr>
<tr>
<td>Mammoth-podded Sugar</td>
<td>.10</td>
<td>.50</td>
<td>.90</td>
<td>1.70</td>
</tr>
<tr>
<td>Extra Early Smooth</td>
<td>.10</td>
<td>.50</td>
<td>.90</td>
<td>1.70</td>
</tr>
<tr>
<td>PARSNIP</td>
<td>.10</td>
<td>.30</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Long Smooth Hollow Crown</td>
<td>.10</td>
<td>.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARSLEY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Champion Moss Curled</td>
<td>.10</td>
<td>.30</td>
<td>.90</td>
<td></td>
</tr>
</tbody>
</table>
8 Fundamentals of Planning

No one can fully plan your garden for you, because garden planning is a highly personal, individual matter. Give your own ideas and desires plenty of play—and you’ll enjoy your garden more.

There are certain absolutely basic facts that apply to all home garden planning. 

1—Plan to use your garden full time. To do this you’ll need catch crops, intercrops (also called companion crops) and succession crops. Catch crops are early vegetables, like spinach, that you grow very early before a crop like late cabbage is set out. Intercrops are planted between the rows of larger vegetables, like head lettuce between rows of broccoli. Succession crops are catch crops in reverse—they follow early crops. For instance, Chinese cabbage will mature fine heads if planted after an early crop of peas has been taken.

2—Divide the garden into three sections if possible, (1) Root vegetables, (2) Leaf vegetables, and (3) Fruit vegetables. By switching these three groups every year you avoid many soil-borne diseases and insects and get better use of fertilizers. This isn’t absolutely necessary, but it is one of those details that the smart gardener watches.

3—On level ground, you can run either east and west or north and south. If east-and-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 your plant food and much of your topsoil will go down the hill when it rains.

4—Plan to grow enough vegetables for storing and canning. Remember that correct storage begins with planting so provide for this when planning your garden and ordering seed.

5—In smaller gardens, don’t plant space-wasting crops like Potatoes, Pumpkins, Sweet Corn and Vine Squash. On the farm these can be grown with the field crops, saving the more highly cultivated garden space for the more productive vegetables that need closer attention. Many gardeners report that Zucchini and other bush squashes gave better results than Eggplant and satisfied many of the requirements for vining Squashes.

6—Include perennial vegetables when possible, Rhubarb, Asparagus, Horse Radish and Perennial Onions can be grown on one side of the garden where they won’t interfere with plowing or cultivating. Small fruits should be included whenever space will permit, since the quality of home-grown berries is far better than any you can buy.

7—Avoid growing vegetables your family doesn’t like and won’t eat, but be sure to include plenty of those they do like. If they’re fond of beans, for instance, don’t be satisfied with a single large planting, but make several smaller plantings at two weeks intervals.

8—Study the chart on page 22. This will tell how far apart rows should be, how long each crop takes to mature, and how much space you will need to provide the vegetables your family likes. After you have taken into consideration the crops you want to grow, make a rough sketch showing the location of each crop, with catch crops, intercrops, succession crops indicated.
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 and curled.

Moss Curled or Triple Curled — Compact, dark green leaves, curled and fine-
cut, 70 days.

PARSNIP
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 (fr)—The most generally
grown kind. Roots 2 1/2 to 3-in, thick at
shoulder. 12 to 14-in, long, uniformly
tapered, hollow crowned, 95 days.

PEAS
Early peas need a light, warm soil;
but general crop thrives best in
moderately heavy soil. (Avoid fresh
dung and very rich or wet, mucky
soil as this produces large growth of
vine at the cost of quality of the
pea.) 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 for-
get, inoculation improves production.

Early and Second Variety
Alaska — Wilt resistant. Used for can-
nning and early home garden. Blunt,
almost an inch wide and 4 1/2 to 5-in.
long, with 7 to 9 large peas, 62 days.

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

Thomas Laxton (fr) — Medium height.
Strong, vine bears numerous dark green,
blunt ended pods, 4 to 4 1/2 in. Retains
flavor and sweetness. One of earliest,
57 days.

Later Varieties
Alderman or Dark-Podded Telephone
(fr)—Large podded variety of the Tele-
phone family. Excellent for home gar-
dens, truckers, shipping to distant mar-
tkets 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 of highest quality. Seed large,
wrinkled, light green. 74 days.

Hundredfold or Laxtonian — Exception-
ally choice and prolific. Dark green.
Rather coarse vines. Straight pointed,
well-filled 2 1/2" pods. 62 days.

Edible Podded or Sugar
Mammoth Melting Sugar—Wilt resistant.
Coarse light-green vine, 54-in. Single
4 1/2-in. pods, broad, indented light,
blunt, stringless, without fiber, fleshy.
Contains 7 peas. Seed large, round,
crummy-white. 74 days.

PEPPERS
Need long growing season: start in-
doors 8 weeks before plants are
wanted. Set plants 15" x 24" and
seed liberally for bigger fruits.
Warm, mellow soil in sheltered loca-
tion is best. Cultivate regularly,
drawing soil up around stems. When
plants are 7" to 8" tall, hoe in light
dressing of commercial fertilizer. Do
not plant hot peppers near sweet;
they are apt to cross.

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

Continued On Next Page
PEPPERS—Continued

Long Red Cayenne—The hot favorite. For canning, pickling, drying. Pungent flavored fruit, tapering and twisted. 70 days.

Sweet
California Wonder Improved—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. Remarkably

Pimento or Perfection—Best of the medium sized sweet peppers. Excellent for stuffing. Smooth, heart-shaped, about 3-in. long. 125 days.

Ruby King—All-America, bred for size and uniformity. Dark green turning to bright deep red fruit. Thick flesh sweet and mild. 60 days.

World Beater — One of the best large peppers. Glossy-green, changes to bright red. Mild, very sweet, thick flesh. 75 days.

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) and store in warm, dry place.

Connecticut Field—Large fruit with flat ends. 15 to 25 lbs. and up to 15-in. Surface, slightly ribbed, deep orange. 118 days.

King of the Mammoth — Largest of all pumpkins. Valuable for stock feeding and exhibition. Globular, slightly ribbed, flattened, weight 50 to 500 lb. Flesh solid, yellow-orange, coarse, but good quality, 120 days.

Small Sugar or New England Pie—Desirable for pie or general use. Round, flat and fruit, deep orange. Thick, yellow-orange flesh. 118 days.

RADISH
Soil should be light, quick and rich to insure rapid growth. Slow growth makes the flavor too strong. Sow as early as ground can be worked, as radishes are very hardy. Make successsive sowings up to hot weather. When in the third leaf, thin to give roots plenty of room. Pull promptly when mature. The secret of crisp, delicious radishes is quick growth, prompt picking.

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

Early Scarlet Globe—Globular, slightly elongated, bright scarlet. 24 days.

Early Scarlet Turnip, White Tipped— Carmine red with white tip. Flesh white, crisp and mild. 26 days.

French Breakfast—Roots thicker toward bottom. 1¼-in. long by ½ to ¾-in. Dull scarlet, white tipped. 25 days.

White Icicle—Tapering roots 5 to 5½-in. very white, mild wilesh. 27 days.

Fall and Winter Varieties
Celestial or Chinese White Winter— White flesh, rather mild in flavor. Roots large, 8" long and 2½ to 3 inches in diameter, cylindrical with heavy shoulder, 60 days.

Long Black Spanish—Good keeping winter variety. White, crisp and pungent. 6 to 9 lb. long, slightly tapered. 58 days.

Round Black Spanish—Top-shaped, 3" to 4". Flesh white, crisp and of strong flavor. 56 days.

RUTABAGA
(See Turnip)

SALSIFY
Light, rich soil best and it must be stirred to a considerable depth. Sow in rows 18" apart. Cover seeds firmly with ¼" of fine soil and thin plants later to 2" to 3" apart in the row. Cultivate the same as carrots.

Mammoth Sandwich Island—A palatable and nutritious vegetable when cooked. Flavor is remarkably similar to oysters. 120 days.
**5 Facts on Site and Soil**

Even though you may not have any freedom of choice for the location of your garden, there is still much that you can do to make the most of your site and soil.

1. **Locate the garden in an open spot** that receives at least six hours of direct sunlight each day, away from the roots of trees that might rob the soil of moisture and fertility.

2. **A rich sandy loam is the best garden soil**, but if you have either heavy clay or light sand, the same materials will improve both—decomposed vegetable matter—old rotted manure, peat moss, commercial humus or well-rotted leaves.

3. **Don't apply lime unless it is really needed.** Usually a soil that will grow good beets is all right. If beets do poorly and grow irregularly, you can add about 50 lbs. of hydrated lime or 100 lbs. of ground limestone to each 1,000 square feet of garden. If you have a pH tester, most flowers and vegetables will do well in a soil between 6.0 and 7.0.

4. **Do supply plant food.** Before digging or plowing the garden, apply 4 lbs. of balanced fertilizer over every 100 sq. ft. of garden. Divide fertilizer into two lots, sowing one with the wind and the other across the wind. Or, better yet, use a fertilizer spreader.

5. **Don't plant in wet ground.** No soil is right for gardening that can't pass the "mud pie" test. To make a mud pie test, pick up a handful of soil and squeeze it slightly. If it balls or packs together and won't crumble when you apply light pressure, it is too wet to work.

---

**Planting the Seed**

Place a stake at each end of the row and stretch a line tightly between them. **Don't try to make rows without a line or straight edge.**

Make the furrow for the seed with a hoe. **Fine seed** (onion, lettuce, cabbage, etc.) should not be planted more than ½" deep. **Medium seeds** (okra, spinach, cucumber) 1" deep. In heavy soils, beans, squash, onion sets and peas need not more than 1" but the soil must be moist. In lighter soils, 2" is deep enough.

The old theory that seed should be planted deep enough to come in contact with soil moisture still holds, but in dry weather the soil should be watered thoroughly before planting so the moisture will be right at the surface. If the row is then covered with a board until the seed germinates, it will not be necessary to bury the seed even though the weather is dry.

Tear the corner from the pocket. If seeds are very small, mix with three times their bulk of perfectly dry sand, then hold the packet over the row, tapping gently with your forefinger. This enables you to distribute the seed more evenly and avoid sowing too thickly.

Don't sow seed too thickly. To do so wastes both seed and labor as the crowded seedlings must later be thinned by hand to allow space for proper development. Also, poor growth and poor quality vegetables result if seed is sown too thick and not properly thinned. (This is true whether planting in seed flat, holed or in open ground.)

---

**When to Sow**

Seed catalogs and garden books usually offer you a list of definite planting dates. We’d like to do this, too, but experience has taught us that such dates are often dangerous. Weather variations from year to year are likely to make the most carefully compiled dates look foolish.

Here's a guide to planting time that doesn’t rely on dates, but rather on Nature’s own signs.

**FULLY HARDY CROPS:** When the daffodils and earliest tulips bloom, or when maple trees are in full flower, plant these: Beets, wrinkled peas, Swiss chard, and onion sets.

**TENDER CROPS:** When the crocuses and snowdrops are in bloom at this time, and if the ground is ready sooner, plant anyway. These crops include lettuce, cabbage, broccoli, carrots, cauliflower, kale, kohlrabi, parsnips, radishes, rutabagas, spinach and turnips. Also round-seeded peas.

**TROPICAL CROPS:** When the petals on apple blossoms will have fallen and the tall late irises are in full bloom, plant these: Bush beans, sweet corn, pumpkins, and squash are included.

---

**SQUASH**

- Acorn
- Rutgers

**PEA**

- Laxton’s Progress

**KOHRLABI**

- White Vienna

**SWEET CORN**

- Country Gentleman

---

**CABBAGE**

- Early Jersey Wakefield

**TOMATO**

- Jubilee

**TURNIP**

- Purple Top White Globe

---

Image of squash, tomato, and turnip varieties.
UNLESS warm, any Giant, long, thick, sweet, firm, flesh, low acidity, 72 days.

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

Valiant — Plant sparse and open. Fruits large for an early variety, globe shaped and of bright scarlet color. 70 days.

Small Fruted — Red and yellow varieties, shaped like miniature pears, plums, and cherries; excellent for preserves.

**TURNIP**

For summer greens or roots, sow as early as radishes and lettuce. Then cut when plants are 6" high. Sow again in summer for fall and winter use. Turnips do best when most of their growth is made in autumn or early spring. Should be grown rapidly for best flavor and texture.

Golden Ball or Orange Jelly — Medium size, deep yellow with bronze-green top. Creamy yellow flesh of fine texture. 65 days.

Purple Top White Globe (fr) — Large, sweet tops, Smooth, globe-shaped roots, purple-red above, white below. Sweet tender, crisp, white flesh. 50 to 60 days.

Purple-Top Staple Leaf — Home and market garden variety, Deep purplish-red on top, white below. Flesh white and never stringy.

**Foliage Turnip**

Seven Top or Winter Greens — For greens or foliage. Young shoots extremely tender. Roots tough, undesirable for food. 50 days.

Rutabaga or Swede Turnip American Purpletop — Hardy and productive. Tender firm, light yellow, sweet flesh, 88 days.

<table>
<thead>
<tr>
<th>Seed</th>
<th>Pkt.</th>
<th>1/2 oz.</th>
<th>1/4 lb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPINACH — New Zealand</td>
<td>.10</td>
<td>.25</td>
<td>.75</td>
</tr>
<tr>
<td>SQUASH, Summer — Mammoth White Bush, Zucchini, Golden Custard, Cocozelle Italian Marrow</td>
<td>.10</td>
<td>.35</td>
<td>1.00</td>
</tr>
<tr>
<td>Winter — Imp. Hubbard, Golden Hubbard, Acorn or Table</td>
<td>.10</td>
<td>.35</td>
<td>1.00</td>
</tr>
<tr>
<td>SWISS CHARD — Fordhook, Lucullus, Rhubarb Chard</td>
<td>.10</td>
<td>.35</td>
<td>1.00</td>
</tr>
<tr>
<td>SEED POTATOES — Irish Cobbler, Katahdin, Russian, Early</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio, Prices on request.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURNIPS — Extra-early Milan, Purple-Top White Globe, 7-Top</td>
<td>.10</td>
<td>.20</td>
<td>.65</td>
</tr>
<tr>
<td>RUTABAGA — American Purple Top</td>
<td>.10</td>
<td>.15</td>
<td>.40</td>
</tr>
<tr>
<td>TOMATOES — Early — Bonny Best, John Baer, June Pink, Rutgers, Fritsch's</td>
<td>.10</td>
<td>.40</td>
<td>.75</td>
</tr>
<tr>
<td>Main Street — Crimson Cushion, Globe, Ponderosa, Marglobe</td>
<td>.10</td>
<td>.45</td>
<td>.85</td>
</tr>
<tr>
<td>Improved, Yellow Ponderosa</td>
<td>.10</td>
<td>.45</td>
<td>.85</td>
</tr>
<tr>
<td>Jubilee — 1/4 oz. 50c, Burpee Hybrid</td>
<td>.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROOTS ASPARAGUS — Mary Washington; doz. $1.00; 50, $3.00; 100, $4.50.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HORSERADISH, roots 25c each</td>
<td>RHUBARB, Victoria Clumps 25c each, $2.50 doz.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Starting in Coldframes, Hotbeds, or Indoors

The gains you can make by "heating the weather" are well worth going after, particularly on tomatoes, cabbage, peppers, cauliflower, broccoli, and kohlrabi.

But remember that a plant which hasn't been treated right in the flat will not be a good plant in the garden. A transplant that has had to struggle against over or under heating, too much water or too little, etc., will not do as well as a direct-seeded plant or a purchased transplant that has had expert attention.

However, the right conditions for a successful indoor start are not difficult to achieve. Any gardener can do the trick by applying a reasonable amount of care and attention.

Don't begin too soon, unless you have a greenhouse or light hotbed and can give the seedlings plenty of room. For most vegetables, 6 to 7 weeks is time enough to allow between seedling and transplanting.

Fill shallow boxes (flats) with a mixture of 1/2 good garden soil, 1/2 clean sand and 1/2 compost, leaf mold or other well-rooted organic matter. Make very shallow rows or furrows with the edge of a ruler or a wood lath, 3" apart. Sow seeds in these rows 1" apart in the row.

DON'T let your soil dry out, and don't let it be soggy. Spray lightly two or three times a day, using an atomizer or bulb sprinkler. When the best seedlings can be selected, thin out to stand 2" to 3" apart. Before transplanting into the garden, withhold water for 2 or 3 days.

Transplanting

Tomato, eggplant, and pepper plants are tender and should not be set out before danger of frost is past. Cabbage, cauliflower, and kohlrabi are less tender but it is not safe to set them out much before the frost-proof date.

Where care is needed

Use care in transplanting or you will injure the tender plants.

When soil is sufficiently moist so a ball of soil can be retained around each individual root there is less chance of injury or of air pockets being left around roots. Use a trowel. (It is important that roots be kept in close contact with soil so they can get moisture.)

When seedlings are to be transplanted without a ball of soil, long tap roots should be shortened, and the whole root system placed and "firm in" so that it is well spread out, not bunched. Soil in which roots are placed must be finely pulverized.

When roots have been carefully placed in position, firm the soil around each plant enough to insure that roots are in contact with the soil, and that there are no air pockets.

Transplant in cool or cloudy weather or at evening or early morning.

As soon as the garden has been planted, water thoroughly; but gently with a fine spray. This, by the way, is the only time we sprinkle a garden; once the plants are established, any watering should give the soil a good soaking.

Watering

Soak, don't sprinkle. Your garden needs water when the leaves look wilted in the sun and do not recover freshness over night.

Except for transplants, try to avoid watering the garden until it really needs water.

Don't wash away topsoil

When you do water, soak, don't sprinkle. Do a thorough job. The hose or sprinkler should be allowed to run on one spot until water stands on the surface. The best way to do a thorough soaking job is to use a canvas hose that leaks all along its length, placed along a row at a time. Let the water run until the soil is saturated to a good depth. Then move hose to next row.

If an overhead sprinkler is used be sure it doesn't have too much force, or it will wash the soil away.

If you have only an ordinary hose (without holes), remove nozzle and place a small board under the end of the hose to distribute water gently.

Water in the evening or early morning. After watering, the soil should be moist to a depth of five to six inches. Check this with a spade to be sure.

A Program for Garden Sanitation

About 75% of the work and much of the damage caused by insects can be eliminated by a simple, regular program of sanitation. Preventive dusting or spraying is much easier than waging a losing battle against bugs when they appear. Usually, less than 30 minutes a week should be needed for a regular sanitation program for both flowers and vegetables.

CANTALOPE
Rocky Ford

Hearts of Gold

CARROTS,
Imperator

CUCUMBER,
Long Green

CORN, Golden
Cross Bantam

LETTUCE, Oak Leaf

COS LETTUCE, White Paris
Cultivation and Weeding

Frequent, shallow cultivation or hoeing is best. It requires less effort and gives better results. Never let the weeds get a start. They rob the plants of food and moisture.

Cultivate after each rain or soaking, as soon as soil is dry enough, and as often between as necessary to keep weeds under control.

1. "Destroy them young" should be the first principle in controlling weeds. Weeds rob the soil of moisture and food. Worst of all, if allowed to grow, they shade the crops that require six hours of full sunshine to grow normally. Plan to spend half an hour a day hoeing weeds and the average garden can be kept up without difficulty.

2. Keep the soil from caking or cracking because when rain comes, it cannot penetrate the hard surface and may run off and be lost. A prong cultivator will leave the surface loose and ready to absorb rain.

3. Air is vital to plant growth: Stir the soil as soon as the ground is dry enough after a rain or after watering. This also saves moisture. Use the hoe and save the hose.

4. When cultivating stay as far away from the plants as you can to avoid packing the soil around the roots.

Harvesting

The big advantage the home gardener has over the commercial grower is that he can pick his vegetables one minute and have them in the kitchen the next. All vegetables are better if left on the plant until ready to serve. Sweet corn in particular loses sweetness every minute it is off the stalk. Pick only what vegetables you can use right away and not until you are ready to use them.

Most vegetables, particularly summer squashes, sweet corn, cucumbers, carrots, beets, peas and string beans, should be used much younger than usually harvested by the commercial growers. Learn the "feel" of an ear of corn that is ready to pick. The tip of the ear will feel full and the silks should be turning brown.

Most melons do not get sweeter after picking. For full flavor leave them on the vine until a crack appears all around the point of attachment between the stem and melon. The free end should feel definitely soft when the melon is ready.

Avoid harvesting beans while the plants are wet with dew or rain, as moisture spreads disease.

Cover crops—after vegetables

Save and improve your soil and plant food supply by growing cover crops. After a row of vegetables has been harvested (if you aren't planting a succession crop in this spot) sow some quick-growing plant that will take up any excess fertilizers and store them in its tissues. Plow under that plant just before the next crop grows in, and decay will release that plant food just when you want it most. Also, the rotting vegetable matter produces humus, without which good crops cannot be grown. Ask us for advice on cover crops for the garden.

Ask us also how to control root maggots that harm cabbage, Brussels sprouts, onions, radishes, and turnips—also how to guard against the carrot rust fly.

For insecticides always see the seedsmen!

These Vegetables STORE Well

Beets, Carrots, Turnips, Winter Radishes—Do not wash. Pack in loose moist sand or fine moist soil. Store in unheated cellar, or in ventilated room away from heat.

Cabbage—Roughly trim heads, cut off roots. Store in temperature of 40 to 60°F, with high humidity or cover heads with moist soil or sand.

Celery, Kale, Chinese Cabbage, Endive, Leeks—Store in trenches outdoors or in boxes of soil in basement. Outdoors must be covered with straw to prevent freezing.

Squash, Pumpkins—Harvest as they mature, leaving 3 or 4" of stem. Cure for a few days at 80 to 85°. Store in dry place.

Peas, Beans—May be picked off plants or the whole plant pulled and placed in dry airy place to cure. After thoroughly dried, shell, clean, sort and store in jars or cans in cool, dry, dark place.

Onions—Collect as soon as most of the tops fall over. Place in racks or spread out on dry wooden floors—or hang in dry airy place. Store in dry well-ventilated place at a temperature just above freezing.

 Parsnips, Salsify, Horseradish—Not injured by freezing; and may be left in the garden, or stored in moist soil or sand in cool building.

 Potatoes—Should be kept in slatted bins for ventilation and left uncovered. Protect from strong light. Keep longer at 35 to 40°F, but cook better if stored at higher temperature.

Sweet Potatoes—Dig as they mature or after first killing frost. Sort them in dug, and place in crates. Cure for two weeks at 80 to 85°F. before storing. Best storage temperature 50 to 55°F.

ENDIVE, Full Heart

ONION SETS

SQUASH, White Bush Scallop

OKRA, Perkins Mammoth

PEPPER, Long Red Cayenne

PEAS, Alderman (dark podded Telephone)

BUSH BEANS, Tendgreen

RADISH, Early Scarlet Globe
CLOVERS

MEDIUM RED. Most popular Clover for short rotations. When grown with timothy it usually makes two good hay crops. Plants grow 2 feet or more in height. Sow seed in late winter on winter grains or on a firm seed-bed with spring grain. Sow 8 to 10 pounds with timothy, or 15 to 18 pounds alone.

ALSIKE. A favorite with timothy on acid soils, thin soils, and for wet sites. It may be sown in spring or late summer and is perfectly hardy. Flowers are sweet-scented and attractive to bees, are larger and more pink than White Clover. Adapted only to short rotations. Sow 8 to 10 pounds to the acre alone, or 3 to 6 pounds in mixtures.

WHITE DUTCH. A small, low-growing White Clover used principally in lawn and pasture mixtures. Succeeds in nearly all types of soil and is quite persistent. Use 3 to 5 pounds to the acre in mixtures.

ALFALFA

Northwestern Common. Grown successfully and entirely satisfactorily in this area.

SOY BEANS

A good soil-builder when plowed under for green manure. Makes excellent hay or silage. Sow when ground is thoroughly warm, in May or June. If used for hay, cut after the pods form. Use 2 bushels to the acre; broadcast: 1½ bushels when drilled. Seed should be inoculated. We offer Wilson Black.

OATS

Allalla, red clover, permanent grass and clover mixtures can all be satisfactorily sown with Oats. Sow during April or early May at the rate of 2 to 3 bushels by weight to the acre.

VICLAND. By all odds the best grain Oats for this section. Kernels plump and heavy: straw stiff and strong. Early maturing and resistant to rusts and smuts. A good yielder and because of its short straw is not likely to lodge. Does best in good soil.

SPRING BARLEY. Valuable either as a grain crop or as a nurse crop for clover or allalla. Requires 2 bushels of seed for an acre.

BUCKWHEAT. A dependable crop for poor land. Matures in about two months and makes an excellent feed for poultry. Sow during June or early July, using 1 bushel of seed to the acre.

WINTER WHEAT. We can supply the best of Winter Wheat. Write us for prices before seeding time.

SPRING WHEAT. Grain is smaller and harder than Winter Wheat. Not so popular as Winter Wheat but gives a satisfactory yield and makes excellent flour. Sow in early spring, about 2 bushels to the acre.

WINTER RYE. Grown principally for a winter cover-crop, sometimes for winter pasture or cut for hay. Can be sown up to the middle of November. Requires about 2 bushels of seed for an acre; for small garden plots, about 5 or 6 quarts for 2,500 square feet.

SPRING RYE. Makes an excellent green food when cut, or will supply pasture for several weeks. Sow early.

FIELD CORN

10 to 14 pounds of Seed Corn required to seed an acre.

PRIDE OF THE NORTH. Ears 8 to 10 inches long, with 16 rows on the ear. Cob small, grain above medium size and closely set. One of the hardiest. Matues in 90 days.

IMPROVED LEAMING. Produces a good-sized ear with deep, broad grains. Matues in 105 days.

WHITE-CAP YELLOW DENT, Particularly suited for light soil. Ears about 10 inches long, well filled, with 16 or 18 rows; grain is yellow with white tip. Ripens in about 115 days.

HYBRID CORN

If you have not been growing any of the hybrids, we recommend that you try at least one of them this year.

OHIO W17. Well adapted to this section, and a heavy yielder. Stalks are leafy and of medium height, ear about 8 inches in length, and kernel light yellow in color. Maturity 100 to 105 days.

US-13—This corn is a high yielder for both grain and silage. Medium tall with medium ears. Kernel is yellow. Matures in 110 to 115 days.

ENSILAGE CORN

LANCASTER COUNTY SUBE-CROP. The leading ensilage variety. Ears are long, with yellow grains, and not proportionately thick. Stalks are quite tall and very leafy. An extremely heavy yielder and a most desirable ensilage variety.

EUREKA. Produces unusually heavy foliage and often grows 18 to 18 feet tall. Ears are very long; grain is large, broad, and ivory-white.

FARM SEED PRICES ON REQUEST

SEED POTATOES

EARLY OHIO. An early sort that is well known by market-gardeners who want a first-early Potato for home trade.

IRISH COOLER. An extra-early, round, white Potato with rather deep eyes.

Late Varieties

KATAHDIN. A handsome, shallow-eyed, glossy, white-skinned variety of fine table quality.

RUSSET. Tubers round to oblong, of good size, with pure white flesh, russet skin, and few shallow eyes.

This Seed Sower can be used for sowing clover, timothy, lawn grass seed, and all other seeds that can be sown broadcast. Has positive force-feed and is quickly adjusted for different seeds.

Price $3.75
PLANTING BY THE MOON

1950 Moon Phases and Positions

Many gardeners like to govern their planting by the phases of the moon. For them, we show here all the necessary information generally shown by more voluminous arrangements. As seedsmen, we cannot vouch for the effectiveness of this method, but we are glad to provide this complete and up-to-date chart for those who want it.

**Signs of the Zodiac and Their Influence**

- **ARIES**: Tends to dryness, barrenness. Fairly good for cultivating, spraying and weedng.
- **TAURUS**: Fairly productive. A good sign for planting root crops particularly potatoes and bulbous plants.
- **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, etc.
- **VIRGO**: Moist but barren. Not recommended for planting or transplanting; good for cultivating and destroying.
- **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, seed- hay for hay, destroying weeds, etc.
- **CAPRICORN**: Earthily, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.
- **AQUARIUS**: Somewhat barren. Good only for cultivation and extermination of pests.
- **PILES**: Similar to Cancer so use for same purposes. Very productive. Do not dig potatoes.

**When to Plant**

The tables at right show 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). Then we show the moon changes (day and hour) for each month.
# VEGETABLE GARDEN PLANTING GUIDE

<table>
<thead>
<tr>
<th>Seed Required for 50 ft. of row</th>
<th>Distance Between Rows (inches)</th>
<th>Distance Apart In Row (inches)</th>
<th>Depth to Plant (inches)</th>
<th>Approx. Yield Per 50 ft. of row</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTICHOKE</td>
<td>1/2 oz.</td>
<td>48</td>
<td>1/4</td>
<td>25 lbs.</td>
<td>50 head</td>
</tr>
<tr>
<td>ASPARAGUS</td>
<td>1/2 oz.</td>
<td>24</td>
<td>20</td>
<td>1/2 20 qts.</td>
<td>50 fruit</td>
</tr>
<tr>
<td>BEANS, BUSH</td>
<td>1/2 lb.</td>
<td>24</td>
<td>4</td>
<td>1 32 qts.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>BEANS, LIMA</td>
<td>1/2 lb.</td>
<td>24</td>
<td>3</td>
<td>1 32 qts.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>BEANS, POLE</td>
<td>1/2 lb.</td>
<td>36</td>
<td>8</td>
<td>11/2 30 qts.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>BEANS, POLE LIMA</td>
<td>1/2 lb.</td>
<td>48</td>
<td>8</td>
<td>11/2 1 1/4 bu.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>BEETS, TABLE</td>
<td>1/2 oz.</td>
<td>28</td>
<td>4</td>
<td>1 1/2 bu.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>BROCCOLI</td>
<td>1/4 oz.</td>
<td>24</td>
<td>24</td>
<td>1/2 25 head</td>
<td>1 bu.</td>
</tr>
<tr>
<td>BRUSSELS SPROUTS</td>
<td>1/2 oz.</td>
<td>24</td>
<td>18</td>
<td>1/2 1 15 qts.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>CABBAGE</td>
<td>1/2 oz.</td>
<td>24</td>
<td>12</td>
<td>1/2 40 qts.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>CHINESE CABBAGE</td>
<td>1/2 oz.</td>
<td>24</td>
<td>12</td>
<td>1/2 40 qts.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>Carrots</td>
<td>1/4 oz.</td>
<td>16</td>
<td>3</td>
<td>1/2 24 qts.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>CAULIFLOWER</td>
<td>1/4 oz.</td>
<td>24</td>
<td>20</td>
<td>1/2 25 head</td>
<td>1 bu.</td>
</tr>
<tr>
<td>CELERY</td>
<td>1/2 oz.</td>
<td>24</td>
<td>6</td>
<td>1/4 100 stalk</td>
<td>1 bu.</td>
</tr>
<tr>
<td>COLLARDS</td>
<td>1/2 oz.</td>
<td>30</td>
<td>18</td>
<td>1/2 3 bu.</td>
<td>1 bu.</td>
</tr>
<tr>
<td>CORN, SWEET</td>
<td>4 oz.</td>
<td>36</td>
<td>9</td>
<td>1 100 ear</td>
<td>1 bu.</td>
</tr>
<tr>
<td>CORN, POP</td>
<td>3 oz.</td>
<td>34</td>
<td>9</td>
<td>1 100 ear</td>
<td>1 bu.</td>
</tr>
<tr>
<td>CUCUMBER</td>
<td>1/2 oz.</td>
<td>48</td>
<td>36</td>
<td>1/2 100 fruit</td>
<td>1 bu.</td>
</tr>
<tr>
<td>DILL</td>
<td>1/4 oz.</td>
<td>18</td>
<td>4</td>
<td>1/4 75 fruit</td>
<td>1 bu.</td>
</tr>
<tr>
<td>EGG PLANT</td>
<td>1/2 oz.</td>
<td>36</td>
<td>24</td>
<td>1/2 50 plant</td>
<td>1 bu.</td>
</tr>
<tr>
<td>ENDIVE</td>
<td>1/2 oz.</td>
<td>18</td>
<td>12</td>
<td>1/2 50 plant</td>
<td>1 bu.</td>
</tr>
<tr>
<td>KALE</td>
<td>1/2 oz.</td>
<td>32</td>
<td>22</td>
<td>1/2 50 plant</td>
<td>1 bu.</td>
</tr>
<tr>
<td>KOLHRABI</td>
<td>1/4 oz.</td>
<td>24</td>
<td>6</td>
<td>1/2 1 bu.</td>
<td>1 bu.</td>
</tr>
</tbody>
</table>

**Beets, Crosby's Improved Egyptian**

BEETS, Fordhook Bush Lima

**Beans, Plentiful**

**Egg Plant, Black Beauty**

**Beans, Little Marvel (Top)**

**Beans, Improved Golden Wax**

**Beets, Early Thos. Laxton (Bottom)**

---

**BEANS, Improved Golden Wax**

**BEETS, Crosby's Improved Egyptian**

---

22
BEATING THESE INSECTS IS EASY WITH KNOW-HOW

Ever since the first garden was planted, the fight between gardeners and insects has gone merrily along.

But nowadays that fight is growing easier, year by year. Just reasonably good strategy is all the gardener needs to win.

To make the job even easier, we present here a highly valuable anti-­bug weapon. This is our series of natural color portraits of the common garden enemies (at the right).

To Beat Them, KNOW THEM!

These unique pictures have just one purpose—to help you identify the pests in your own garden.

Once you know exactly which insect you are fighting, the job is easy. There's a proper insecticide for every one of them.

That's where our color pictures are so extremely useful. When you have these life-like portraits before you, identification is easier and more certain than ever!
FREEZING VEGETABLES

How When Where

Freezing vegetables to retain their garden-fresh flavor and texture for winter use is being done successfully by increasing tens of thousands of homemakers each year. Varieties suitable for freezing are indicated by "fr" in the vegetable seed listings of our Garden Annual. Plan your garden to include them.

Select your vegetables as to family likes and dislikes and the number of meals you plan to serve. Each package should contain a "one meal portion" for the whole family. Balance your freezer space accordingly to assure a variety of choices.

**AT-A-GLANCE QUICK FREEZING GUIDE**

<table>
<thead>
<tr>
<th>VEGETABLE</th>
<th>PREPARATION</th>
<th>SCALDING TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPARAGUS</td>
<td>Freeze within 2 hrs. after picking. Cut in 6&quot; spears for quart packages or 1&quot; pieces. Wash well. Iron utensils should be avoided.</td>
<td>3 min.</td>
</tr>
<tr>
<td>BEANS, Green and Wax</td>
<td>Sort for tenderness, crispness medium size and quality. Wash in cold water, snap off ends. Break into 1&quot; pieces or slice lengthwise. Leave small beans whole.</td>
<td>2 min.</td>
</tr>
<tr>
<td>BEANS, Lima</td>
<td>Use green tender easily opened pods. Shell, wash, sort for size and color. Keep picking to freezing time within 2 hrs.</td>
<td>Young beans 1/2 to 2½ min. Mature white 2 1/2 to 3 min. 2½ min.</td>
</tr>
<tr>
<td>BEETS</td>
<td>Choose tender, medium size, young 2&quot; beets. Top thoroughly, peel. Dice or 1/4&quot; slices.</td>
<td>Small stalks 3 min. Large stalks 4 min.</td>
</tr>
<tr>
<td>BROCCOLI</td>
<td>Select for compactness, dark green color and tenderness. Let stand in salt water 1/2 hour to kill insects. Wash well, trim off waste, split stalks and heads long way in 1&quot; pieces.</td>
<td>3 min.</td>
</tr>
<tr>
<td>CARROTS</td>
<td>Coreless, medium length carrots are best. Top, wash, scrape. Dice or 1/4&quot; slices, leave small ones whole.</td>
<td>4 min.</td>
</tr>
<tr>
<td>CAULIFLOWER</td>
<td>Use smooth, firm heads. Trim off waste. Break into 1&quot; pieces.</td>
<td>None</td>
</tr>
<tr>
<td>EGG PLANT</td>
<td>Wash, peel, slice 1/2&quot; thick. Prepare one scalding at a time to avoid discoloring. Cool in 3 teaspoons citric acid powder crystals to one quart of cold water. After blanching use freezer paper between slices.</td>
<td>45 to 60 sec.</td>
</tr>
<tr>
<td>PEA</td>
<td>Select tender firm pods. Avoid using immature, wrinkled and bleached pods. Wash, shell, sort for quality, removing large starchy peas. Wash. Keep picking to freezing time within two hours.</td>
<td>None</td>
</tr>
<tr>
<td>SQUASH, Winter</td>
<td>Use firm flesh squash, acorn, green Hubbard or other hard rind variety, Cut, remove seeds. Bake or steam until done. Scoop from shell, Mash, Set pan in ice water to cool quickly. Do not season.</td>
<td>Scald according to ear diameter 1 1/2 ear—7 min. 2 1/2 ear—9 min. Bigger—11 min. See above</td>
</tr>
<tr>
<td>SQUASH, Summer</td>
<td>Best type is young with small seeds, tender skin. Cut into table size used cubes after washing well. Cook as though for table use without seasoning and minimum of water. Set pan in ice water. Freeze quickly.</td>
<td>2½ min.</td>
</tr>
<tr>
<td>SWEET CORN on Cob</td>
<td>Select as though for immediate table use eliminating flavorless immature and over mature tough kernelled ears. Remove silk and husk, trim waste. Use 8 ears per quart in scalding. Set rack in ice water. Drain corn completely. Wrap individually, seal ends of wrapper. Freeze promptly.</td>
<td></td>
</tr>
<tr>
<td>SWEET CORN Cut Kernels</td>
<td>After scalding, slice corn from cob. Rinse well in cold water to remove inedible cob hulls. Drain quickly and thoroughly. Freeze promptly.</td>
<td></td>
</tr>
<tr>
<td>TURNIPS</td>
<td>Medium size, tender, perfect, non-pithy turnips are best. Top, wash well and peel. Wash and dice in 1/4&quot; cubes.</td>
<td></td>
</tr>
</tbody>
</table>

**SCALDING and COOLING**

Because the scalding period is so short it is best to handle only one pound at a time. Use one gallon of water per pound. Scal- ling time counts the second you have immersed your collander, wire basket, or cheesecloth in the boiling water. If the steam method is used, increase scal- ling time one-half.

Cool in a pan of iced or very cold water for the same time as the scalding period and drain well.

**HINTS ON VEGETABLE FREEZING**

1. Rapid handling of your pack from your garden to package, prompt freezing and storing at a constant zero temperature will give your family some wonderful garden-fresh treats during the winter-months ahead.
2. Select and freeze only those vegetables that are high in quality. Freezing does not improve quality, it protects original appearance and flavor.
3. Process your vegetables as soon as possible after early morning picking that's the way "professionals" do it. Select and pick your vegetables for packing when they are ready for immediate table use.
4. Prepare your vegetables just as though they were to be cooked and served, removing all excessive and waste material, slicing or cubing as desired. Wash thoroughly in cold running water.
5. Date your packages at time of sealing and use those foods stored longest, first. Keeping an "inventory" of your frozen food, its location in the freezer and the date of freezing is an invaluable reminder and labor saver.

24
CRABGRASS CAN BE CONQUERED

In areas where crabgrass and similar weeds are persistent in lawns the timing of the treatment is important. Crabgrass germinates in the spring and does not survive winter temperatures. Early spring treatments tend to kill the crabgrass seedlings as they germinate. Close mowing favors the growth of crabgrass. Bluegrass should be cut no shorter than two inches if crabgrass is a problem. Fertilizing and seeding the vacant spots in the lawn left by weeds should be a regular part of your weed killing program.

THESE 2-4D Don'ts IMPORTANT TOO

The regular use of 2-4D will keep down all of the broad-leaved weeds, without danger of poisoning animals, children, or damaging equipment with corrosive sprays. In using 2-4D around flowers and vegetables, however, be extremely careful not to allow the spray to drift onto these, as many garden plants are as easy to kill with this material as the weeds. Here are some other points: use a coarse instead of a fine spray. Don’t store it around your seeds or plants. Do not apply in the proximity of cotton, fruit or ornamentals, it may injure susceptible plants.

WEEDS ARE GRASS ROBBERS!

Their root systems thrust laterally through the grass roots and steal moisture and valuable mineral salts needed by your lawn to insure hardy growth. Some weeds send out runners on the surface which take root, form new plants and proceed to take food from the grass, stunting it, shading newly germinated grass and ultimately discouraging growth. Tap roots (the central roots) are weed storage plants from which the lateral root system draws its reserve strength. Some weeds can be destroyed by merely spraying weed killing chemicals on the leaves; others require chemical injection at the tap root. Some folks report that the tap root injection of 2-4D is comparatively easy if one of those long spouted oil cans is used. Others require chemical treatment as well as physical removal by hand or with tools. Modern chemical weed killers are selective and formulated to do a specific job. Tell us the weed you’re going after and we can prescribe the remedy for you. Successful weed removal means getting them early—before the flowering stage, go after them in the spring or early summer. Weeds should be two or more inches high before spraying however, otherwise the leaf is not broad enough to fully absorb the chemical and the tap root will revitalize them.

2-4D, HOW IT HELPS CONTROL

2-4D is a selective herbicide because it can be used to kill certain plants while the same dosage will not kill others. This selectivity is due to differences in plant susceptibility. It is comparatively slow acting and must penetrate to the inside of the plant tissue to do its work. When it is sprayed on broad leaved plants it first penetrates the outer layer of cells—then to the inner-layer where it is picked up by the leaf veins and circulated into stem and roots along with the fluid of the plant. With most weeds the killing cycle requires about two weeks. Reaction is noticeable when the leaves and stems twist and curl. When it has reached the roots, the cell breakdown makes them vulnerable to attack by the decay organisms always present in the soil. These organisms attack the weakened roots and complete decomposition of the weed.

SPRAY THESE!

Dandelions can be easily controlled with 2-4D. Their root systems are comparatively simple and being a medium-broad leaved plant the chemical has freedom to work out effectively. It has been found that some regrowth of dandelions will occur if they are treated when the turf in general is suffering from drought. Lawn weeds are best gotten when they are green and actively growing. Other weeds which can be as effectively controlled as dandelions are the Common Plantain, Common Chickweed, Ground Ivy and the Pennywort.
**Window Boxes**

There's nothing finer than window and porch boxes to make a house look "lived in" and gay.

The necessary boxes may be bought ready-made, or constructed at home. Redwood or cypress are the best lasting materials, but ordinary yellow pine will do nicely if well painted. Paint at least two coats, and use brass screws instead of nails to join the boards.

**Drainage** of flower boxes is important. Use about two inches of coarse gravel at the bottom. Cover this with a layer of sand, and then with good, rich soil. Fertilizing may be done with liquid manure, but commercial plant tablets are even better, and much easier to apply.

Plants suitable for window boxes are quite numerous. Among the best are Petunias, Nasturtium, Ageratum, Candytuft, dwarf Marigold, Corn-flower, Babysbreath, Love-in-a-mist, Verbena, Sweet Alyssum, Vinca. English Ivy adds a nice touch, as do various ferns.

**Good Points to Remember**

*Pinch 'em off! To make annual flower 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 ½".*

*Divide your perennials. Most perennials must be divided every 3 or 4 years. Cut away all the dead roots and stalks, save the best portions, and start afresh.*

**Formula for Pansy Growing**

Pansies are not annuals but near-hardy perennials that need special culture. Cold frames, with glass sash and mats for winter protection are essential. Soil should be rich: up to one-third of soil can be well-rotted manure or sifted compost. Sow seed in August. Protect frame with shades made by tacking muslin or cheese cloth over window screens. Thin plants to stand 4" x 4". After first frosts, cover with glass and mats, and allow to freeze slowly. Remove mats in early spring and allow sun to warm frame. Move plants into permanent position when in full bloom. Keep faded flowers picked; they will stop blooming if any seeds are allowed to form. Growing good Pansies from seed is the test of a real gardener.

**Two Interesting House Plants**

The Heavenly Blue Morning Glory makes an excellent house plant for winter flowering if grown in a sunny window. Sow new plants in late August, using 6" pots (they make heavy root growth). They can be trained up strings on either side of the window. Lobelia plants can be lifted just before frost, cut back, potted and will flower indoors in late winter.

---

**5 "Where to Plant" Ideas**

Flowers in the vegetable garden. 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 rows of early lettuce or radishes, where they can bloom after the vegetables have been used.

Annuals in the tulip bed. Just after the late tulips finish blooming, set out some annuals between the tulip plants. If you do this, you may safely leave the tulip bulbs in the ground for several years, or at least until they need separating.

Flowers for trellis or fence. Vines for quick cover here are quite numerous. For brilliant color effects, plant Cardinal Climber, Scarlet Runner Bean, Cypress Vine, or Japanese Morning Glory. Less colorful are the Cup-and-Saucer Vine, Hyacinth Bean, Balloon Vine, and Heavenly Blue Morning Glory. For heavy foliage effects, gourds are good.

For garage cover. Sometimes it is highly desirable to screen off the bare walls of the back-yard and garage. For quick results, the taller annuals, such as cosmos, hollyhocks and sunflowers are desirable. Any of the vines named in the last paragraph above are suitable, too.

Between drive and property line. This narrow strip is often a very nice place for a long flower border. A low effect may be had by plantings of balcony petunia, portulaca, and sweet alyssum. Or a hedge-like effect is easy to get with Kochia, Four O'clocks, Zinnias, or Marigolds.
103 FLOWER SUGGESTIONS FOR PLANNERS

For Shady Locations
Most annuals need plenty of sunlight, but there are a few which do fairly well in the shade, or with partial sun. The following are worthy in shady spots:

- Cleome
- Sweet Bleeding Phlox
- Portulaca
- the-mountain
- Candytuft
- Portulaca Pinks
- Shirley
- Petunia
- Zinnia
- Snow-on-Marigold
- Scabiosa
- Nasturtium
- the-Shirley
- Lobelia
- Sweet
- Marigold
- Salvia
- Lupine
- Larkspur
- Godetia
- Baby'sbreath
- English Daisy
- Bleeding Heart

In the vine group, those which often prosper in fairly shady places are Cardinal Climber, Cup-and-Saucer Vine, and Morning Glory.

For Hot, Dry Locations
In spots where the sun beats down mercilessly all day long, many flowers can not prosper. But some of the annuals can do well, even in these difficult locations. Here's a good list:

- Sweet Alyssum
- Petunia
- Phlox, Annual
- Bachelor Button
- Poppy, California
- Cosmos
- Portulaca
- Ageratum
- Dianthus
- Scabiosa
- Dimorphotheca
- Zinnia
- Galliardia
- Four O'Clock
- Marigold
- Salvia
- Perennials for hot locations are less plentiful, but you can usually do well with Baby'sbreath, Perennial Asters, Sedum Acre, Statice, and Blanket Flower (Galliardia).

Flowers for Poor Soil
Of course, the right answer to poor soil conditions is "Improve the soil!" But if you can't or don't want to do this, you can usually get fairly good results in poor soil with these:

- Amaranthus
- Marigold
- Balsam
- Nasturtium
- California Poppy
- Petunia
- Calliopsis
- Portulaca
- Galliadilla
- Sweet Sultan

These Need Successive Sowings
Some of the annuals which come into bloom quickly, keep blooming for only a little while. If you want them in bloom through the season, make several successive sowings at two to four week intervals. Flowers in this class include:

- Calliopsis
- Gyposphila
- Candytuft
- Larkspur
- Cornflower
- Mignonette
- Forget-me-not
- Poppy

For Late Gardens
Even in mid-summer, there's still time to start some of the annuals from seed and have lots of bloom before the season is over. The soil must be well prepared and fertilized. The proper flowers for such late planting are:

- Babysbreath
- Cosmos
- Calendula
- Portulaca
- Cornflower
- Shirley Poppy
- Petunias and Snapdragon seedlings may be started late, too.

Most Dependable Annuals
As every experienced gardener knows, some annual flowers succeed under exactly the same growing conditions which let other flowers fail. There is quite a list of annuals which are highly dependable. Given proper soil and care, these "old reliables" are practically sure to produce good results:

- Balsam
- Calendula
- California Poppy
- Calliopsis
- Cornflower
- Cosmos
- Flowering tobacco
- Four O'Clock
- Gaillardia
- Globe amaranth
- Hollyhock
- Shirley Poppy
- Larkspur
- Snow-on-the-mountain
- Nasturtium
- Zinnia
- Marigold
- Petunia
- Pinks
- Portulaca
- Scabiosa
- Stocks
- Sweet Alyssum
- Zinnia

Annuals for Fragrance
We are often asked, "What annuals are really fragrant?" We recommend Alyssum, Candytuft, Carnation, Mignonette, Gleam Nasturtiums, Petunia, Scabiosa, Stocks, Sweet Peas and Wallflower.

For Winter Bouquets
Several flowers can be dried and used for winter decorations. The everlasting are best known but Statice and Gyposphila are also fine. Celosia will last a long time but is not as showy as the others.
FLOWER SEEDS

The finest in the world

KEY TO SYMBOLS
The symbols below the name of each flower give you the following information.
(a)—Annual
(b)—Biennial
(hp)—Hardy Perennial
The Culture Number shown for each variety refers to the “How to Grow” Information on page 33.

AGERATUM—Blue-Eyed African Daisy
(a) Culture I or II, 3’
Grandis—Two-inch daisies of pearly white with bluish center. Pkt. 15c.

AGERATUM—Thrift
(hp) Culture VI, 1½’
Dwarf rock plants with grassy foliage and globular flowerheads. Pkt. 15c.

ATHER—California Light Blue
Sunshine—4” flowers. Loose row of petals, quilled center. Pkt. 25c.

BACHELOR’S BUTTONS—Centaurea, Cornflower
(a), Culture II or IV, 3’
Blue Boy—A fine, clear blue. Flowers are large. Colors intense. Pkt. 15c.
Pinkie—Lovely rose pink. Pkt. 15c.
Red Boy—Bright crimson. Pkt. 15c.
Snow Man—Snow white. Pkt. 15c.

Blanket Flower—See Gaillardia.

Balloons Vine—Love in a Puff
(a) Culture I, 1½-2½’
A clean, free-growing vine with small white flowers, and balloon-like seeds.

BALSAM—Lady Slipper
(a) Culture II, 1½-2’
Mixed—Double Camellia-like flowers all summer on bushy plants. Pkt. 15c.
Bellis Perennis—see Daisy, English.
Blue Lace Flower—see Didiscus.
Brachycome—see Daisy, Swan River.

ASTERS—Burn Bush—see Kochia.
Butterfly Flower—see Schizanthus.

ASTER—El Monte

AUBRIETIA—Purple
(hp) Culture VI, 6’
A creeper with large colorful flowers in early spring. Ideal with bulbs. Pkt. 25c.

California Giants—Large double with curled petals. 3’ plants. Pkt. 15c.

El Monte—A huge flower 6” across, interlaced crimson petals. Pkt. 20c.

Giant Credo—Large 4-inch flowers with fluffy effect. All colors. Pkt. 15c.

Los Angeles—Huge flower with curled petals of shell pink. Feathery. Pkt. 20c.
Pompon—Early 18-inch plants. Many brilliant colors. Mixed Pkt. 20c.

Princess—Three-inch flowers are compact with a crested center. Mixed. 15c.


CALEDONIA—Sunset Shades

ALL FLOWER SEEDS 10c PER PACKET UNLESS OTHERWISE NOTED

28
CALENDULA—Pot Marigold
(a) Culture II or IV, 1½’
Orange Shaggy—Large orange flowers with fringed overlapping petals.
Orange Quills—Mid-Orange, bright, unusual petal habit, curve beneath blossom to meet underneath. Pkt. 25c.
Sunshine—Golden flowers, with drooping petals. Odorless, Pkt. 15c.
Pacific Beauty, Persimmon—Large, bright orange, double flowers. Pkt. 15c.
Sunset Shades—Large flowers in shades of yellow and orange. Pkt. 15c.
Mixed—Fine mixture of many colors and types. Good for cutting.
CALLIOPSIS—Tickseed
(a) Culture II or IV, 1-3’
Dwarf mixture—One-foot plants with many colors of yellow and red.
Tall mixture—A splendid range of colors on tall plants.
CAMPA NULA—Canterbury Bells
(b) Culture VIII, 2’
Double—Fine double flowers in blue, pink and white shades. Mixed. Pkt. 15c.
Cup and Saucer—Bell-shaped, Saucer of petals at base. Mixed. Pkt. 15c.

CELOSIA—Cockscomb
(a) Culture I or III, 1-3’
Shades of Red—Low grower with large, crested heads. Like rooster combs.
Feathered—Tall, feathery heads of flowers in red and yellow shades.

CH LARA KIA—See Bachelor’s Buttons
(a) Culture II or IV, 1½’
Double mixed—Large double flowers in many gorgeous colors. Graceful plant. Does well in light shade.

CLEOME—Spider Plant
(a) Culture II or IV, 3-4’
Pink Queen—A tall plant with many clear pink flowers, neat foliage. Pkt. 15c.

COCKSCOMB—See Celosia

COR CE RIS—Sunburst—Large double flowers of rich golden color. Fine for cutting. Pkt. 15c.

COLUMBINE—See Aquilegia

CORN FLOWER—See Bachelor’s Button

COS MOS—Sensation

DAHLIA
(a) Culture I or II, 14”
Unwin’s Ideal Bedding—Semi-double flowers on low bushes. Fine for beds or borders. Many colors. Pkt. 20c.

DAISY, AFRICAN—See Arctotis

DAISY, ENGLISH—Bellis Perennis
(hp) Culture VI, 8’
Low plants with colorful double daisies in early spring. For beds, edges. Pkt. 15c.

DAISY, SWAN RIVER—Brachycome
(a) Culture II, 10”
Mixed—Many colored small daisy-like flowers freely produced all summer. Pkt. 15c.

DELPHINIUM—Perennial Larkspur
(hp) Culture VI, 5’
Giant Pacific Hybrids—World famous strain of immense double flowers on tall stems. Many new colors. Pkt. 35c.

D I ANTHUS—Pinks
(a) Culture I or VIII, 1’
Double and Single mixed—Fine mixture of colorful, sweet-scented, garden pinks.

DIDISCUS—Blue Lace Flower
(a) Culture I or II, 2½’
Coeruleus—Lacy heads of lavender and blue flowers. Lovely to cut.

DIGITALIS—See Foxglove

ESCHSCHOLTZIA—California Poppy
(a) Culture III, 1’
Large single poppy-like flowers in many showy colors. Fern-like leaves.

EVERLASTING FLOWERS
(a) Culture II, 1½-3’
Mixed—Contains such favorites as Strawflower and Globe Amaranth. Fine for dried bouquets and winter use.

FLOWERING FLAX—See Linum

EUPHORBIA—See Snow-On-The-Mountain

FOUR O’CLOCK—Mirabilis
(a) Culture III, 2’
Bushy plants covered with flowers of red, pink, white, violet, and yellow. Flowers close in bright sun. Pkt. 15c.

FOXGLOVE—Digitalis
(b) Culture VIII, 3’
Tall spikes of lovely thimble-shaped flowers of pink, rose, and purple. Blooms second year.

EVERLASTING FLOWERS
(a) Culture II, 1½-3’
Mixed—Contains such favorites as Strawflower and Globe Amaranth. Fine for dried bouquets and winter use.
HOME GARDENING GUIDE

HOW TO GROW BETTER, BIGGER ROSES

Give roses the best location possible, they want well-drained soil; at least a half-day's full sunlight (morning sunlight is not especially desirable), shelter and protection from prevailing winds. They should not be too close to large trees. Prepare the rose beds in advance, if possible. Where the soil is good garden loam which has been under cultivation for some time and is well drained, so there is no standing moisture, the preparation is easy. Dig to twice the depth of a spade—about 24 inches. Mix thoroughly generous quantities of Manure and Bonemeal and two tablespoonsful of Sulphate of Potash with soil in bottom of hole. Let stand and settle.

Summer Care

Giving your Roses close attention throughout the summer months can add a great deal to the enjoyment you get from them. Here are some of the things you can consider in growing the full-blooming beauties that are the pride of every gardener.

CULTIVATION—Throughout the summer, until September, roses should be cultivated regularly to destroy weeds and aerate the soil. The soil should never be allowed to bake. One method used to keep a crust from forming is the application of a peat or terra-cotta mulch. This also helps conserve moisture. After a heavy rain, it is advisable to hoe and rake rose beds just as soon as the soil has dried sufficiently.

WATERING—Any watering should be thorough. Sprinkling is actually bad for your roses since it brings feeding roots to the surface and causes burning. Water early in the morning, preferably. This way, foliage will be dry by nightfall, lessening the danger from mildew, a disease which likes the combination of cool nights and wet foliage. During extremely hot periods, it is a good idea to hose plants with a strong stream of water several times during the day.

DISBUDDING—Beautiful flowers for cutting may be had by disbudding. The central bud of a cluster is usually the best and by allowing only this bud to develop, you can enhance its beauty. This applies to Hybrid Teas and Hybrid Perpetuals. Polyanthas and landscape Roses need no disbudding. In cutting flowers, it is best to cut in early morning before petals start to unfold. Cut the stems two buds above the point where they branch from the main stem.

How to Plant Perennials

The soil should be well worked and free of big lumps and air pockets. The average planting distance for perennials is one foot apart. Vigorous growers like peonies and mallows require as much as three feet apart. No. 1 plants (see below), such as iris, should be planted with the main root just below the surface of the ground. No. 2 plants, such as peonies should be planted with the tips of the buds at or just below the surface of the ground. No. 3 plants, in which the leaves spring from the crown, should be planted with the crown on the level of the dirt line. No. 4 plants, such as hollyhocks, should be planted with the root straight down and the bud just below the surface of the dirt. Seedlings should naturally bring the soil in contact with all roots and press firmly. If the plants are watered, water the roots and not the tops.

How to Plant Shrubs

Keep roots covered with damp sack or something similar and do not let them become dry. Spade ground deeply, digging large holes with perpendicular sides. Cut off broken or bruised roots and cut back top one-third to one-half. Plant slightly deeper than they stood in nursery. Tamp soil firmly around roots and fill top of hole with several inches of loose earth to serve as mulch.

How to Prune and Plant Trees

With shade trees having a heavy top, at least one-third of the top should be removed. Prune to avoid crowding branches. Cut out some of the small branches, shorten back the side branches, but do not cut off the leader or main stem. Try to get well developed head, strong leader and branches at wide, not close, angles. Cut off all broken roots.

In choosing trees for the home grounds, study the house and the effect you want to produce. If the house appears tall or seems to stick up too much in the air, plant trees that will tower and spread over it, or trees that will shoot up tall and narrow and make it appear lower in contrast. If it is a low house it can be made to hug the ground or to appear higher by a judicious selection of trees.
All flowers listed in this Garden Annual

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 may be started later in the summer when sown directly in the garden. Some gardeners sow both ways to obtain a succession of flowers. When starting seedlings indoors, select a place with plenty of light. North or shaded windows will be too dark for best results. Cold frames are generally very good. The seed is planted in small boxes (or cells) of punnet trays. Fill the spaces with the soil mixture and water thoroughly. The seedlings are then chilled and will fit the space you are going to use. Fill the boxes with a mixture of 3 parts good soil, 1 part sand and 1 part humus such as peat. Press the soil down firmly and make small rows with the edge of a ruler and filled with a fine spray. Keep soil moist until the seedlings have rooted. Very fine seed such as that of petunias should be dusted carefully onto a smooth soil surface and covered with a pane of glass. Shade it with newspaper until the seeds sprout. These are best watered by setting the flat in a pan of water until the soil has become thoroughly moist. This will dampen the surface layer of soil and keep the soil moist. When the seedlings have formed the second true leaves, set them into other flats so the plants are about 2 inches apart. This will give them room to grow to good size before being set out. Expose gradually to outside conditions and plant outside after the weather is warm and settled. When sown directly outdoors, follow directions under Culture II.

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. It wanted especially early, they should be started as directed under Culture I. 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. The soil must have organic matter and be well drained. If the seed is to be started indoors, the seed should be kept cool until it germinates. This will prevent sprouting from the seed and will result in more active growth. These will produce late flowers. Quick-growing annuals from Group II may be sown in mid-summer and kept well watered. They will grow slowly until the cooler weather comes, forcing them into more active growth. These will produce late flowers. Quick-growing annuals from Group II may be sown in mid-summer and kept well watered. They will grow slowly until the cooler weather comes, forcing them into more active growth.

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

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 fall, they should be planted as early in the spring as possible. Fall sowing gets the seedling 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 general use, follow 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 cool until the roots fill the soil until they are finally in 6-inch pots. Annuals in pots should have (at least) 4 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 cold can be shielded from the cold frame or sheltered bed which can be shaded from the direct sun be kept. Prepare soil thoroughly with rich organic matter. A loose, friable soil will produce a thick mat of growth. This 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. This prevents packing of the soil over the seeds. Always water with a fine spray. 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 they are 6-8 inches high. This is a permanent culture, only a few species will bloom the first year and they will not produce normal flowers. Flowers that bloom earlier does increase the chances for flowers the first year. But, if it is more convenient, Culture I may be used.

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

Culture VIII
These flowers are biennials. They make a leafy growth the first year but do not flower. The leafy growth of the first season forms food for blooming the following year. The flowers appear the second year and then the plant dies.

This means that a continuous show from biennials must be provided by starting them every year to replace those that are 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 as much food as possible for the next year's bloom.

Many gardeners start biennials in the vegetable garden or special starting bed and transplant the ones needed to the flower garden the following spring. During the winter, biennials should be given the same treatment as perennials.
GAILLARDIA—Blanket Flower (a) Culture II, (hp) VI, 2' Single, Mixed (a)—Large daisy flowers in many brilliant colors. Pkt. 15c.

Double, Mixed (a)—Double flowers in wide range of showy colors. Pkt. 15c. Picata (a)—Showy round flowers with tubular petals. Many brilliant colors. Pkt. 15c.

Monarch (hp)—Superb daisy type flowers in shades of red and yellow. GILLIFLOWER—See Stocks.

LOBELIA—(a) Culture II, 1'2" Tangerine Sunlute spots. in Giant brilliant Perennial

Annual flowers. Mixed be

Pkt.

HUNNEMANNIA—Mexican Tulip Poppy (a) Culture III, 1'2" Sunlitte—Soft yellow double poppy type flower. Bluish fine cut leaves. Pkt. 15c.

HOLLYHOCK (hp) Culture VI or VIII, 5' Double mixed—Large double flowers on tall spikes. Bloom in midsummer. Excellent backgrounds. Pkt. 15c.


Ruby—A genuine ruby red. A bright color in garden or bouquet. Pkt. 15c. Giant Imperial mixed—A fine mixture of the above kinds and others. Pkt. 15c.

LAVATERA—Annual Mallow (a) Culture II, 2'-3' Loveliness—Large bowl shaped, rosy pink flowers all summer. Attractive bronzy foliage. Pkt. 15c.

LINUM—Flowering Flax (a) Culture III, (hp), VI, 1'-2' Scarlet (a)—Bright red flowers in a constant succession all summer. Perennial Blue (hp)—Low bushy plant blooming from spring to mid-summer. Small, clear blue flowers in profusion. Pkt. 25c.

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.

LUPINE (hp) Culture III or VII, 3' Russell's Mixed—Finest of all the lupines! Brilliant colors in long, strong spikes of pea-shaped flowers. Pkt. 25c.

MALLOW, ANNUAL—See Lavatera

MALLOW, ROSE—See Hibiscus

MARIGOLDS (a) Culture I or II, Tall Types 1'2'-3'

Burpee Gold—Large carnation-like flowers in bright orange. Odorless foliage. Pkt. 15c.

Guinea Gold—Large round flowers in a rich gold. Very popular.

Yellow Supreme—Light yellow, large flowers of carnation form. Pkt. 15c.


Double Dwarf Types 1'2-1'

Melody—Foot high plants with loads of orange ball-shaped flowers. Pkt. 15c.

Spry—Compact plants with showy yellow flowers bordered with mahogany. Pkt. 15c.

Sunkist—Compact plants with masses of golden orange blooms. Pkt. 15c. Scarlet Glow—Compact, with bright red, 2" blooms. Reddest of all. Pkt. 15c.

Double French Hybrids mixed—Compact plants with flowers in yellow, orange, mahogany, and bronze. Pkt. 15c.

Single Dwarf Types, 1'-1'1" Flash—Plants have many 1'-2" flowers in tangerine and red shapes. Grows about 18". Pkt. 25c.

Naughty Marietta—Open 2" flowers are rich gold with maroon at base of petals. Splendid for edging. Pkt. 25c.

Red Head—New! 1948 All-America Award. Crested center of gold edged maroon, petals deep changeable red. Pkt. 25c.

Royal Scot—Alternating stripes of red and gold. Very different. Pkt. 15c.
### HANDY PLANTING GUIDE FOR FLOWER GARDEN PLANNERS

**KEY**—For classification of flowers by purpose, location, etc., see the second column below. The meaning of the key letters in this column is as follows:

- 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.

| Flower          | Height (inches) | Suitable for | Average Days to Germinate | Approx. Time of Bloom | Shape of Plant | How? When?
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ageratum</strong></td>
<td>4-12</td>
<td>E F J</td>
<td>5-10</td>
<td>10 Wks.</td>
<td>bushy</td>
<td>For the rock garden.</td>
</tr>
<tr>
<td><strong>Alyssum, Sweet</strong></td>
<td>2-12</td>
<td>B C D E F I J</td>
<td>5-10</td>
<td>6 Wks.</td>
<td>spreading</td>
<td>Plant for fragrance.</td>
</tr>
<tr>
<td><strong>Antirrhinum</strong></td>
<td>12-60</td>
<td>C J L</td>
<td>20-25</td>
<td>3-4 Mos.</td>
<td>bushy</td>
<td>western locations.</td>
</tr>
<tr>
<td><strong>Aquilegia</strong></td>
<td>12-36</td>
<td>C E F</td>
<td>15</td>
<td>3 Mos.</td>
<td>branchy</td>
<td>Poor soil.</td>
</tr>
<tr>
<td><strong>Balsam</strong></td>
<td>14-20</td>
<td>A E</td>
<td>10-12</td>
<td>6 Mos.</td>
<td>erect</td>
<td>Rock garden.</td>
</tr>
<tr>
<td><strong>Calendula</strong></td>
<td>12-36</td>
<td>D</td>
<td>10-14</td>
<td>12-14 Wks.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Campanula</strong></td>
<td>18-24</td>
<td>F</td>
<td>8-15</td>
<td>10-12 Wks.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Candytuft</strong></td>
<td>6-18</td>
<td>B F I</td>
<td>5-10</td>
<td>8-10 Wks.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Centaurea</strong></td>
<td>18-36</td>
<td>A B C D E I J</td>
<td>5-20</td>
<td>3-4 Mos.</td>
<td>erect</td>
<td>Rock garden.</td>
</tr>
<tr>
<td><strong>Chrysanthemum</strong></td>
<td>24-36</td>
<td>A E</td>
<td>5-20</td>
<td>8-10 Wks.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Celosia</strong></td>
<td>12-35</td>
<td>D E H</td>
<td>20-25</td>
<td>10 Wks.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Cosmos</strong></td>
<td>36-60</td>
<td>A</td>
<td>5-15</td>
<td>10-12 Wks.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Coreopsis</strong></td>
<td>18-36</td>
<td>A B D</td>
<td>10-20</td>
<td>4-5 Mos.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Dahlia, Dwarf</strong></td>
<td>14</td>
<td>F</td>
<td>10</td>
<td>3-4 Mos.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Delphinium</strong></td>
<td>36-72</td>
<td>L</td>
<td>15-21</td>
<td>3-4 Mos.</td>
<td>tall</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Digitalis</strong></td>
<td>30-48</td>
<td>F</td>
<td>10-20</td>
<td>3-4 Mos.</td>
<td>erect</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Dianthus</strong></td>
<td>4-15</td>
<td>F I</td>
<td>5-10</td>
<td>12 Wks.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
<tr>
<td><strong>Eschscholtzia</strong></td>
<td>10-12</td>
<td>C D F</td>
<td>5-12</td>
<td>12-15 Wks.</td>
<td>bushy</td>
<td>Everlasting.</td>
</tr>
</tbody>
</table>

**Four O'Clock** | 24-30 | A D | 5-10 | 3-4 Mos. | bushy |
**Galillardia** | 18-30 | D | 15-20 | 2-3 Mos. | bushy |
**Gardenia** | 12-24 | C D | 15-20 | 2 Mos. | erect |
**Gypsophila** | 18-36 | B H | 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 | A B | 15-18 | Foliation | bushy |
**Larkspur, Annual** | 30-72 | L | 15-20 | 10-12 Wks. | tall |
**Lathyrus** | 60-72 | I K | 25-40 | 2-3 Mos. | vine |
**Labella** | 4-8 | E | 10 | 10-12 Wks. | bushy |
**Marigold** | 8-36 | B J | 5-8 | 6-8 Wks. | bushy |
**Mignonette** | 10-12 | B I | 3-4 Mos. | erect |
**Moonflower** | 12 ft. or more | I K | 5-8 | 4-5 Mos. | vine |
**Morning Glory** | 12 ft. or more | A K | 5-8 | 3-4 Mos. | vine |
**Nasturtium** | 12-36 | D E F K | 8-15 | 2-3 Mos. | bush, vine |
**Nicotiana** | 10-18 | I | 10-15 | 10-12 Wks. | bushy |
**Pansy** | 30-48 | C E F | 10-15 | 10-12 Wks. | clump |
**Petunia** | 10-24 | D E F J | 18-20 | 10-12 Wks. | bushy |
**Phlox** | 10-18 | A B C F I J | 20-25 | 8-10 Wks. | bushy |
**Papyp** | 18-36 | B | 20 | 12-15 Wks. | erect |
**Portulaca** | 4-6 | A D E F J | 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 |
**Stacks** | 12-24 | I | 5-15 | 12-14 Wks. | bushy |
**Schizanthus** | 18-36 | C E | 20-25 | 6-8 Wks. | bushy |
**Sweet Pea, Wild** | 36 or more | K | 15-20 | 10-12 Wks. | vine |
**Sweet William** | 12-24 | F | 10 | 12 Wks. | bushy |
**Verbena** | 6-12 | E F J | 8-10 | 12 Wks. | spready |
**Zinnia** | 12-36 | A F | 5-10 | 6-8 Wks. | bushy |

---

**Eschscholtzia** | **DELPHINIUM**, Pacific Hybrids
**BACHOLER'S BUTT**, Blue Boy
**Pinks** (Dianthus) **HEDDENISIS**, Tetra Mixed

---

**GAillardia**, Double Mixed
MIGNONETTE—Reseda
(a) Culture III, 1'.
Low grower with tiny, white blooms that are very sweet scented.

MORNING GLORY—Ipomoea
(a) Culture III, V or VII, 12'.
Blue Star—(All American Winner) Beautiful sky blue with five deep blue midribs forming a star. Early flowering. Pkt. 25c.


Pearly Gate—A shining white form of Heavenly Blue. Pkt. 25c.


Mixed—Many lovely shades.

Moss Rose—See Portulaca
Mourning Bride—See Scabiosa NASTURTIUM
(a) Culture III or V

Dwarf or Bush Kinds 1'
Golden Globe—Semi-double flowers of bright gold. Pkt. 15c.

Scarlet Globe—Fiery scarlet double flowers. Pkt. 15c.

Mahogany Gem—Deep velvety mahogany red double flowers. Pkt. 15c.

Gemmixed—All colors. Pkt. 15c.

Single Mixed—Complete mixture of all colors in the well-known single type.

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—A mixture of all the lovely colors of the Gleam series. Pkt. 15c.

Tall Single Mixed—The old single type in the tall growers. All colors.

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'.
Long-tube starry flowers. Fragrant at night. White or light pink mixed.

PAINTED TONGUE—See Salpiglossis SALPIGLOSSIS

PANSY
(a) Culture I, II or VIII, 8''
Swiss Giants—Large flowering strain with fine range of colors. Best of the imported pendants. Pkt. 50c.

TUFTED PANSY—See Viola PERIWINKLE—See Viola

PETUNIA
(a) Culture I or IV
Small Flowered, 10-14''

Balcony—Trailing kinds for use in window boxes and bedding. White, red, rose, or blue. Each. Pkt. 20c.

Blue Bee—A lovely violet blue. Pkt. 15c.

Cheerful—Clean salmon pink with rose veining in throat. Compact. Pkt. 25c.

English Violet—A fine purple-violet color. Spreading plant. Pkt. 20c.

Fire Chief—Brilliant red. All American Gold Medal Winner for 1950. The first flower to win this award in eleven years! Pkt. 35c.

Flaming Velvet—A velvety blood red. Best of its color. Pkt. 25c.


Martha Washington—Ruffled flowers of pale pink, violet throat. Pkt. 25c.

Rose of Heaven—Best of the rose-colored strains made famous by Rosy Morn. Color is slightly deeper and more uniform. Compact. Pkt. 15c.


Large Flowered, 12-20''

America—Double carnation-like flowers of a deep rose pink. Pkt. $1.00.

Burgundy—huge single flowers of a rich wine red, white throat. Pkt. 25c.

Colossal Shades of Rose—1948 All-American. Large plants have huge flowers of light and deep pink shades. Very double with many frilled and fringed petals. Pkt. $1.00.


Giants of Cool—Huge flowers of many fine pastel tints. Pkt. 25c.

Little Giants mixed—Compact plants with medium flowers in many new colors and shapes. Pkt. 20c.

Snow Storm—Large plain glistening white flowers with creamy shading in throat. Very beautiful. Pkt. 50c.

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


PHLOX
(a) Culture II, 8-12''

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

Separate colors, each. Pkt. 25c.

Mixed. Pkt. 15c.

PINKS—See Dianthus

PINCUSHION FLOWER—See Scabiosa

POPPY
(a) Culture IV, (hp) VI, 1 1/2-3'.

Iceland mixed—Excellent perennial for borders and rock gardens. Large colorful flowers from ferny foliage. Pkt. 15c.

Oriental Scarlet—Large red blooms in early summer from perennial root. Useful for bold color. Pkt. 15c.


POPPY, CALIFORNIA—See Eschscholtzia

POPPY, MEXICAN TULIP—See Hunnemania

PORTULACA—Moss Rose
(a) Culture, III or IV, 6''

Jewel—Huge crimson flowers. Much larger than old kinds. Pkt. 25c.

Single, mixed—Many brilliant colors.

Double, mixed—All double. Pkt. 15c.

POT MARIGOLD—See Calendula

RICINUS—See Castor Bean

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.

Blue Bedder—Deep medium blue. Slender plant for airy use. Use to lighten up thick heavy plantings. Pkt. 50c.

SALPIGLOSSIS—Painted Tongue
(a) Culture III, 30''

Mixed—Large petunia-like flowers of rich velvety colors, veined with gold.

SCABIOSA—Mourning Bride, Pincushion Flower
(a) Culture III or IV, 2'

Blue Moon—Large double flowers of deep lavender blue. Pkt. 15c.

Peace—Round double flowers of pure white. Fine for cutting. Pkt. 15c.

Rosette—Beautiful deep rose flowers with salmon shadings. Pkt. 15c.

Imperial Giants, mixed—Large globe-shaped flowers in a wide range of red, white, coral, rose blue. Pkt. 15c.

Mixed—All colors of the old type.

SATIN FLOWER—See Godetia

SCARLET FLAX—See Linum

SCARLET SAGE—See Salvia

SCHIZANTHUS—Butterfly-Flower
(a) Culture II or IV, 1 1/2'


SEA LAVENDER—Staticia
(a) Culture I, 2'

Bondue—Bright yellow flowers. Useful when dried. Pkt. 20c.

Mixed—Small tubular flowers in branching spikes. Many colors. Pkt. 20c.

Suworowii—Bright rose flowers crowded on slender spikes. Pkt. 20c.

SPIDER PLANT—See Cleome

STRAW FLOWER—See Everlasting Flowers

SHASTA DAISY
(hp) Culture VI, 2'

Alaska—Largest of the Shasta strains. Big, white flowers with yellow centers.

SNAP DRAGON—See Antirrhinum
SNOW-ON-THE-MOUNTAIN—Euphorbia
(a) Culture III, 2'
Bright green foliage edged with white. Effective for edging or contrast. Pkt. 15c.

STOCKS—Gilliflower
(a) Culture I or IV, 1-2'
Giant Imperial—Excellent double flowers on tall stems. Many bright colors. Pkt. 25c.
Beauty of Nice—Branching, with large double, fragrant flowers. Pkt. 15c.
Dwarf Ten Weeks—Low growing with strong spikes. Many fine colors.

SWEET PEAS
(a) Culture III, 3'
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. By colors or mixed. Pkt. 15c.
Margaret O'Brien—Salmon-coral diffused with an unusual luminous orange sheen. Pkt. 25c.
Ruffled Spencer—Wavy and ruffled petals give fine effect. Many fine colors or mixed. Pkt. 15c.

SWEET SULTAN
(a) Culture II or IV, 2'/2'
Mixed—Lovely colorful thistle shaped flowers. Easily grown.

SWEET WILLIAM—Dianthus Barbatus
(hp) Culture VI, 1'/2-2'
Double—Double flowers with the heavy heads of many colors. Pkt. 15c.
Single—Lovely single pinks in large flat clusters. Fine for cutting.

THRIFT—See Armeria
TICKSEED—See Calliopsis

TITHONIA—Golden Flower of the Incas
(a) Culture I, 6'
Fireball—Single dahlia-like scarlet flowers on tall plants. Pkt. 15c.

TRITOMA—Red Hot Poker
(p) Culture VI, 3-4'
Plitner's Hybrids—Narrow tubular flowers on tall spikes, orange red. Graceful grassy foliage. Not perennial under some conditions. Pkt. 15c.

VERBENA
(a) Culture I, 8'
Lavender Glory—Lavender with white eye. Large clusters. Fragrant. Pkt. 15c.
Mammoth White—Large heads of pure white. Useful for contrast. Fragrant. Pkt. 25c.
Scarlet—Flaming scarlet heads, Brilliant in beds. Pkt. 15c.
Blue Shades—Medium and dark blues in mammoth type. Pkt. 15c.
Mixed—Huge flower clusters, all colors. Ideal for beds and borders. Pkt. 15c.

VINCA—Periwinkle
(a) Culture III, 15'
Mixed—Colorful starry flowers on glossy-leaved, bushy plants. Does well in shade. Pkt. 15c.

VIOLA—Tufted Pansies
(hp) Culture VI, 6'
Mixed—Miniature pansies from neat plants. Flower all season. Many showy colors mixed. Pkt. 20c.

WALLFLOWER
(a) Culture I or V, 1'/4'

WILD FLOWER MIXTURE
(a) Culture II or III 1'/2-3'
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 that gives a "wild" garden look when planted in a border. A good way to get acquainted with some of the unusual kinds of garden flowers.

ZINNIA
(a) Culture I or II
Small Types, 12-18'
Black Ruby—Compact, round little flowers of a deep velvety maroon. Lilliput type. Pkt. 15c.
Lilliput pastels—Lovely soft colors in the miniature strain. Fine for borders or small bouquets.
Linearis—Single daisy-like type with small flowers in orange colors. Pkt. 15c.
Mexicana—Single and double flowers in varied and variegated colors.
Navajo mixed—Resembles Gaillardia in shape. Many colors in showy mixture. Medium size plants and flowers. Pkt. 15c.
Pumila Sunshine Tints—Dwarf plants with medium flowers in a wide range of soft colors. Pkt. 15c.
Scabious Flowered—Medium size flowers on a semi-tall plant. Resembles Scabiosa in shape. Bright colors mixed. Pkt. 15c.
Tom Thumb mixed—Lilliput type flowers on a very dwarf plant. For low borders and miniature displays. Pkt. 15c.
Fantasy—Medium tall plants with medium size flowers having shaggy petals.
Melody (orchid lavender), Star Dust (golden), White Light (white), Wildfire (scarlet), and Mixed. Pkt. 15c.

Large Types, 2-2'/2'
Crown of Gold—Lovely golden shades with deep golden base to the petals. A large type resembling California Giants. Pkt. 15c.
Super Crown of Gold Pastels—New, improved, with many pastel colors overlying the golden base. Pkt. 15c.
Dahlia Flowered mixed—Huge flowers in a bewildering range of bright and pastel colors. Pkt. 15c.
Giants of California, mixed—Mammoth flowers in many striking colors. Largest of all. Pkt. 15c.
Will Rogers—Dahlia type with deep scarlet color. A striking and popular variety. Pkt. 15c.
How? When?

As every gardener knows, good seed alone can’t make a successful garden. No matter how good the seed, it needs proper feeding. Like any living thing, it must be nourished.

As seedsmen, we do everything in our power to bring you the finest of seeds. We select seeds with the right heritage, with the inborn qualities that are needed to win out in the battle every growing thing must fight.

But once our good seed is in your hands, the rest is up to you! So—in your plans to get the best possible results from your good seed, consider carefully the information on plant feeding which we give you here.

Actually, plant feeding nowadays is a rather simple, easy job. While plants need many different elements of food for best growth, all these elements can be provided by one complete balanced plant food such as Vigoro. Without odor or muss, the modern balanced plant food takes care of all the usual plant needs of the garden—and does it inexpensively.

As to the questions of “How, when, where and why”—most of the information you need can be told in a few words. The basic routine of plant feeding for the home garden and lawn is this:

For LAWNS:
Follow these 3 steps...
1. Check to see that grass is dry!
2. Apply evenly 3 pounds of complete plant food per 100 feet of area, either with a spreader or by hand.
3. Soak the plant food into the soil immediately after applying. If water is not available merely work the plant food off blades of grass with back of rake. NOTE: If plant food is applied early, before growth starts, steps 1 and 3 do not apply. Early thaws and spring rains work the plant food into the soil.

For FLOWERS, VEGETABLES, BERRIES . . .
Apply complete plant food at the rate of 4 pounds per 100 square feet of area before seeding or setting plants. For established perennials apply around plants or along both sides of row early in Spring and at six to eight week intervals.

For TREES . . .
Make a series of holes 12 to 18 inches deep with a 2” soil auger or a pointedd stick under the drip of the branches. Figure the plant food need per tree by measuring diameter four feet from the ground and allowing 3 pounds of complete plant food per inch of diameter. Fill holes with a mixture of half plant food and half soil or sand.

Where? Why?
As to your choice of plant food: We recommend VIGORO because of its unexcelled balance and its long record of unfailing reliability.

Two more gardening aids by the makers of Vigoro Gardeners in our area are getting a lot of help from two other gardening aids presented by Swift & Company, the makers of Vigoro. These two gardening essentials are END-o-PEST and END-o-WEEED. End-o-Pest provides all the protection most gardens need against chewing insects, sucking insects and fungus diseases. It comes ready to use in a dust gun applicator that’s easy to refill with a refill cartridge. End-o-Pest is also available in large economical packages for use in standard dust guns. End-o-Weed is an improved selective lawn weed killer. It kills over 100 weeds, roots and all. And it is easy to apply with the new End-o-Weed Side Spray that applies diluted End-o-Weed to the side while you walk. No pumping . . . no wet feet. The Side Spray fits on an ordinary gallon glass jug. Ask us about these two great gardening aids. You’ll find them a real help in making your gardening easier and more successful.

Year after year VIGORO develops humus in lawn soil

Vigor helps develop vigorous root systems. Each year as part of the old roots decay, humus (organic matter) is formed in the soil—rich, fertile! Your soil becomes more capable of sustaining your lawn through all kinds of weather . . . a better storehouse for moisture and plant food.

What’s more, the vigorous roots and the thick top growth that Vigoro helps produce actually tend to choke out weeds! For a lawn of lasting beauty, feed Vigoro regularly.
PLANT FOODS
and SOIL CONDITIONERS

Whenever you buy plant foods, remember that the safe place to buy them is the seed store. As seedsmen, we know the plant feeding needs of your area. And our know-how is always at your service.

ALUMINUM SULPHATE—Used in creating acid soils needed for successful culture of Azaleas, Rhododendrons, etc.

BONE MEAL—All-purpose fertilizer, rich in nitrogen and phosphorus.

BLOSSOM-SET—Hormone spray. Prevents blossom-drop on Tomatoes, greatly increasing crop. Also causes high percentage of health stems.

FRUITONE — The remarkable hormone spray that stops pre-harvest drop of fruit. Sprayed on flowers of tomatoes it makes a high percentage of the crop SEEDLESS! Also beneficial on beans and on flowers.

HY-GRO—Extra-highly concentrated plant food, quickly soluble in water. Excellent starter solution and all-round fertilizer

HYPERSON PLANT FOOD—Can be used in dry or liquid form; also excellent as a foliar feed. 1 gallon contains 1 lb. pen. 1 gallon contains 1 lb. pen.

LIME (Hydrated)—Sweetens sour soil for lawns, and croppers. Used as a reducer and in combating many insects. For: whitewash, dewaterizing.

NITRATE OF SODA—Very quick source of nitrogen. Hastens maturity of crops. Should not be applied until plants are well above ground.

PEAT MOSS—Fine winter protection for lawns; also as a mulch on strawberries, 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.

ROOTONE—You can help cuttings to root faster by dipping them in this hormone powder before planting.

ROSTONE—New hormone powder designed to reduce loss in transplanting rose bushes and to make them develop better root systems.

ROSL FOOD—A balanced combination of organic ingredients, selected for the particular “make-up” and sequence availability that the roses need. Improves the color and size of your roses.

SHEEP MANURE—An economical and effective balanced plant food. Weed-free and rapi-dacting action reduces an abundance of humus and all the essential plant-food elements.

SUPER PHOSPHATE—Aids plant nutrition and assists in plant to assimilate other ingredients. An efficient fertilizer element for lettuce, truck crops, cereal crops and alfalfa.

TERRA-LITE (VERMICULITE)—Use as much to protect plants during winter; doesn’t melt down or become soggy. In Spring work it into and base of plants as soil conditioner. Unexcelled growing medium for flats; aids seed germination, speeds root development. Also excellent for stoning root crops and bulbs.

TRANSPLANTONE—New Vitamin-Hormone stimulant effective in reducing transplant shock, and will of all families of plants or shrubs. Also effective in bringing about earlier maturity on tomatoes, lettuce, celery, peppers, tobacco and cabbage.

VIGORO—The complete plant food. Supplies all the elements growing things need from the soil. Because it offers such complete nourishment, Vigoro helps produce greater yield of better-flavored, more nutritious vegetables. Produces lovelier lawns and flowers. Clean and odorless.

PLANTABBS—Good for Everything That Grows

A Rich Meal of Nitrogen, Phosphates, Potash, Plus Vitamin B1

Feed them PLANTABBS. If you don’t get lovelier plants and flowers, and a greater yield of finer vegetables, you get your money back. PLANTABBS are clean, odorless, highly concentrated PLANT FOOD which help produce sturdy stems, luxuriant leaves, strong roots and bounteous yields of 25c, 50c. $1.00 and $3.50 size boxes.

HY-GRO
SOLUBLE PLANT FOOD

(13-26-13)

For flowers, potted plants, vegetables and lawns

Brings a balanced diet right to the roots. Use according to directions on package for proper starter solution and transplanting. Easy to use.

3 oz. 30c.—20 oz. $1.00
1 lb. $4.50. Also in 50 and 100 lb. sizes for estates and larger growers.

Ask for FREE booklet

A PRODUCT OF MccORMICK & CO.
**ACME GARDEN DUSTS AND SPRAYS**

**ACME GARDEN GUARD**

- Widest range of all insecticides for the garden
- **(.75% Rotenone)**
- Controls practically all leaf-eating and chewing insects of any insecticide on the market today. Non-injurious to humans, pets, and animals. Use as dust or spray to control aphids, bean beetles, asparagus beetles, hornworm, tarnished plant bug, cabbage worms, currant worms, rose caterpillars, blister beetles, and other common insects. 1 lb. sifter $.45; 1 lb. pump gun, $.60; also available in 4 lb. pkgs. and 50 lb. bags.

**ACME 6% CHLORODANE DUST**

- Outdoors and indoors—for garden, lawn, house
- For dusting in gardens and on lawns to control ants, cutworms, chinch bugs, chippers, earwigs, slugs, snails, sod webworms, wireworms, white grubs, including Japanese beetle grubs, root infesting maggots, and many others. In the home for cockroaches, silverfish, carpet beetles, crickets, etc.

1 lb. .................................. $0.50
4 lb. ................................... $1.40

**ACME ALL ROUND SPRAY**

- For roses, azaleas, other flowering shrubs, vegetables and fruit trees. A new, modern, carefully formulated multi-purpose product designed to provide with one application the best possible protection against both insects and fungi such as rose chafers, azalea flower spot, thrip, black spot, downy mildews, leaf spot, many rusts, Japanese beetle, leafhopper, flea beetles, aphids, cabbage worm, and many others.

Suitable for dusting as well as spraying. 1 lb. Carton $.95; 4 lb. Carton $3.00.

**ACME DURADUST No. 50**

- Contains 50% wettable DDT in micronized form. Controls codling moth, leaf hopper, flea beetle, psyllid, potato bug, potato aphids, Japanese beetle, thrip, cabbage worm, rose chafers and many others. Use as a spray, like Arsenate of Lead, or extend with inert for dusting. Highest strength possible in quality arsenates.

1 lb. $1.75; 4 lbs., $1.75; also available in 40 lb. bags.

**ACME BORDEAUX MIXTURE**

- The most widely used copper fungicide for preventing fungal spores gaining a foothold on plant surfaces. Prevents losses caused by blight, rot, mildew, scab, anthracnose, etc. Recommended for vegetables, flowers, and ornamentals. Contains copper sulphate and lime in equal proportion for maximum protection and minimum burn.

1 lb. carton $.45; 4 lb. bag $1.15.

**ACME ARSENATE OF LEAD**

- The favorite arsenical insecticide for the control of most chewing insects, including Japanese beetles, and maggots. Safe to use on tender foliage. 1 lb. carton .................. $1.60
4 lb. bag ................................ $4.40

**ACME TOMATO DUST**

- A general garden insecticide and fungicide with special emphasis on complete tomato protection. Controls early and late blight as well as hornworm, fruit worm and flea beetle on tomatoes as well as on cucumbers, beans, cabbage, potatoes and many flowers such as hollyhocks, asters, roses, azaleas, etc. 1 lb. sifter, $.30; 4 lb. pkg., $1.15; also available in 50 lb. bags.

**ACME LIME SULFUR (Dry)**

- For use on fruit trees, rose bushes and nursery stock after leaves have fallen and before they appear in the spring to protect against scale, peach blight, leaf curl and twig borer.

1 lb. $4.49; 5 lb. $18.95

**BORDEAUX MIXTURE**

- Standard copper fungicide for controlling black spot, mildew, blight, other fungal diseases.

**CERESAN**

- Covers controlled smut and stripe of barley, oat smut, and bunt or striking smut of wheat.

**DU PONT FLORAL DUST**

- Contains mepoxychlor and rotenone. Especially recommended for rose disease control; protection against insects.

**DURADUST**

- A ready-to-use dust for home gardens, contains 5% DDT and 9% metallic copper. Particularly effective on rose chafers, leaf hopper and corn ear worm.

**D X SPRAY**

- Economical spray for both sucking and chewing insects. Harmless to human beings.

**LIME SULPHUR, Liquid**

- A dormant spray material against scale of all kinds.

**LIME SULPHUR, Dry**

- A dormant spray to kill scale or use as a summer spray for control of fungus disease.

**MILDEW SPRAY**

- Strong liquid spray for control of mildew, leaf spot and black spot on rose bushes, flowers.

**MO-GO**

- Kills moles and gophers. Just place in runs. Results guaranteed.

**PARIS GREEN**

- For control of chewing insects, particularly potato bugs.

**PESTMASTER—Rose Treatment**

- All in one package, a pre-mixed, ready-to-use treatment for the control of the chief rose insects and diseases.

**PHYGON-XL FUNGICIDE**

- Controls all leaf blights and fruit rot of Tomatoes, black spot of Roses, aphids, and many other plant diseases caused by fungi. A spray protectant to be dusted on Beet, Tomato, Spinach, Swiss Chard, Peppers, and other seeds, before planting to prevent seed decay and "damping-off."

**THE COMPLETE DORMANT SPRAY**

- Kills Scale, Aphids, Red Mite, as well as Garden Insects.

**WEED-NO-MORE**

- Magic weed killer. 2, 4-D. Rid lawns of ugly weeds such as dandelion, plantain, chickweed, ragweed, poison ivy, poison oak and many others without injury to common lawn grasses, just mix with water and spray. 1 oz., bottle covers average lawn. The handy applicator to fit a garden or bailallon jug simplifies the job. 8 oz. $1.00; Qt. $2.98; Applicator $4.39.
RABBIT SCAT—Keeps rabbits out of the garden, protects bushes and trees, repels birds from grape vines. A repellent, not a killer.

RED ARROW GARDEN SPRAY—Contains Pyrethrimum, Rotenone, Soap. Harmless to animals.

RED ARROW DUST—Use as spray or wash for fruits, flowers, vegetables.

RED RIVER POTATO MIX—Contains 9.5% Wettable DDT, 15.1% Metallic Arsenic, 25.7% Metallic Copper. Controls all insects which eat the leaves, suck sap, irritate leaf surfaces of cause disease infection. Acts as a stomach poison and by contact. High copper content.

SCALECIDE—Reliable spray for scale and soft-bodied sucking insects.

SEMSAN—Effective in controlling damping-off, scab, hard rot, etc.

SEMSAN BEL—For use on potatoes. Controls many seed-borne diseases.

SNAROL—An insecticide bait to combat snails, cut worms, sow bugs, grasshoppers.

SPERON SEED PROTECTANT—A powder to be applied to seed before planting to prevent "Damping-off," particularly in cold wet weather. Recommended for Peas, Beans, Lima Beans, Corn and other seeds, it is easy to apply to the seed and non-injurious to the user. NON-TOXIC.

SULPHUR, DUSTING—For controlling powdery mildew, black spot, rust and most rose diseases.

SULPHUR, WETTABLE—An improved sulphur which can also be used as a liquid spray.

SYNKLOR CHLORANE INSECTICIDE—Controls ants, club bugs, grasshoppers, Japanese Beetles and many other insects; roaches, ticks and wire worms.

Rabbit Scat

Now you can keep those pesky, nibbling rabbits out of your garden—with Rabbit Scat! Rabbit Scat is a repellent, not a killer, does not hurt soil, plants, animals or people. It lasts through a number of storms and stays effective.

Rabbit Scat protects your bushes and trees all year. . . . repels pigeons from lawns and buildings. . . keeps birds away from grape vines. Scatter Rabbit Scat around the outside of the garden and the rabbits stay out.

6 oz., $1.00; 1 lb., $2.50.

ANTROL ANT TRAPS

Metal traps containing two types of material that attract and kill grasshoppers and sweet-eating ants.

Each . . . 15c

SNAROL Cutworm Bait

Non-injurious to vegetation. Attracts and kills cutworms, grubs, slugs, sow bugs, earwigs.

1 lb., 35c; 2 lb. 1-2 lbs., 75c

Controls most chewing insects, sucking insects and fungus diseases. Packaged in cartridge-refillable dust guns or spout pouring containers. With confidence on edible fruits and vegetables. Made by Swift, maker of Vigoro, it's

ALL THE PROTECTION MOST GARDENS NEED!

STOP INSECTS

...use DU PONT METHOXICHLOR

50% WETTABLE POWDER

This new insecticide, because of its low toxicity to humans, can be used on vegetables right up to harvest time. Kills bean beetle, corn borer, potato beetle, Japanese beetle, flea beetle, cabbage worms and many others. Also safe for flowers.

Available in 8-oz. canister—75c.

DU PONT DDT

—50% wettable powder. A highly effective control for DDT on many plants, lawns and around buildings.

1-lb. canister—75c.

PREVENT BLIGHTS

...use

DU PONT FUNGICIDE-A

—65% Zinc Ethylene Bis Dithiocarbamate. New, better, safer disease control for vegetables and ornamentals. Stops early and late blight of tomatoes, potatoes; downy mildew of cucurbits. Stops various diseases of chrysanthemums, azaleas and camellias. (Not for roses.)

Available in 6-oz. canister—85c.

DU PONT "FERMATE"

—Controls rose black spot, powdery mildew, and rust. Many diseases of other flowers; fruit diseases such as apple scab.

8-oz. canister—75c.

Pestmaster

Rose Treatment

Ofers rose growers—In a single packaged formulation—an insecticide/fungicide combination. Contact for control of the chief rose insects and diseases. 1/2 lb. can—$1.00; 1 lb. can—$1.50.

Flower Treatment

A premixed insecticide/fungicide combination for protection against rust, leaf spots, aphids, etc. Safe for lawn and garden.

Available in 8-oz. dust gun—$ .79

DU PONT FLORAL DUST

You’ll have more beautiful flowers when you use Floral Dust. Contains "Fermate" and sulfur for black spot, powdery mildew, rust, methoxichlor and rotenone for Japanese beetles, rose chafer, aphids, etc.

DU PONT VEGETABLE GARDEN DUST

Safe to use right up to harvest time. Contains methoxichlor and rotenone to control most insects. Contains Zinc Ethylene Bis-Dithiocarbamate for disease such as early and late blight of tomatoes, potatoes. Safe on cucurbits for downy mildew.

Available in 8-oz. dust gun—$ .79

DU PONT GARDEN DUST

REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY
**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!

---

**THE FACTS about the newer Pest Controls**

With the remarkable advances that have been made in the past several years in modern pest control chemicals, it is easier than ever for you to grow a bigger, better and more beautiful garden.

Thanks to modern scientific research, such potent chemicals as DDT, TEPP, chlordane, methoxychlor, 2, 4-D and 2, 4, 5-T and the recently-developed "lindane" are now available to home gardeners.

**Multi-Purpose Sprays**

From the home gardener's standpoint, perhaps the most important development in modern garden pest control is the combining of several of these chemicals into one multi-purpose dust or spray...so that many different kinds of pests can be controlled. All you have to do is to dust or spray regularly at seven to ten-day intervals...and you get control of most of the pests you'll find in your garden.

For the pests which do not yield to this treatment, science has provided many specialized sprays and dusts. These are all easy to use—and are available at your seed store—together with all the information you need.

**Modern Dusts**

If you prefer to dust, you have several good multi-purpose garden dusts to choose from. These dusts contain balanced combinations of modern insecticides and fungicides—but may also contain reliable old-type chemicals such as sulfur.

An example of a good multi-purpose garden dust is one that contains two insecticides and two fungicides—the most important ingredient being, of course, the potent new insecticide, lindane. This multi-purpose dust controls certain sucking insects, chewing insects, wireworms and other soil insects; ants, earwigs, spiders; and also such plant diseases as mildew, black spot and rust.

Another example is a general flower and rose dust. This is especially formulated for your roses, other flowers, ornamentals and shrubs. It is a combination of several chemicals, two of which are lindane and DDT. This dust also is effective in controlling sucking, chewing and soil insects; ants, earwigs, and many plant diseases.

**Modern Sprays**

If you prefer to spray your flowers and other garden plants, there are modern multi-purpose garden spray sets and rose spray kits you can use. These consist of several bottles, each containing one of the modern insecticides or fungicides. You combine them in your sprayer according to the directions and you get multi-purpose control of both insects and fungus diseases.

In one such spray set, for example, you will find a bottle of modern insecticide spray, a bottle of the reliable older-type oil spray, and a bottle of copper fungicide spray for powdery mildew. In another spray set you'll find a bottle containing the newest of garden insecticides—lindane, and a bottle of a recently-developed fungus spray that has been doing wonders in controlling powdery mildew, rose rust and peach leaf curl. In addition, this particular spray set contains one of the new-type garden hose sprayers that is designed to make your garden spraying as easy as watering. You just connect the sprayer to the end of the garden hose and turn on the water to spray.

**Modern Garden Baits**

When it comes to controlling such garden pests as smalls, slugs and cutworms, you have another improvement over the old-style meal baits in the modern pelleted-type of bait. The pellets contain metal-dehyde-arsenic poisons and give multi-purpose protection to the young, succulent growth of your garden plants.

**Modern Weed Killing**

When the rains come, weeds start coming up in the driveway and paths, along the curb, among the patio bricks, along the fence and garage, and in other places where you don't want any vegetation to grow.

You can now keep these places free of weeds easily and quickly—without the old-fashioned method of hand hoeing—simply by using a modern weed killer containing arsenic trioxide. This chemical kills weeds and also sterilizes the soil so no vegetation will grow for a year or two. You simply apply it to these places with a sprayer or an ordinary sprinkling can. An important feature to home owners is that the chemical is non-inflammable and can be used to reduce "dry-weed" fire hazards.

**New 2, 4, 5-T Kills Brush**

Latest of the hormone-type chemicals is new 2, 4, 5-T. This chemical is even more potent against broad-leaved weeds than 2, 4-D and is especially effective against hard-to-kill perennial weeds and brushy plants. If you want to get rid of poison ivy, poison oak, willows, sagebrush or similar brushy weeds, just spray or paint them with a 2, 4, 5 brush killer.
NEW ANT KILLER
Controls all species. Does not have to be set. Kills by contact; vapor, ingestion. Grows complete cleanup within 24 hours. Ideal for home and gardens. Contains 5% CHLORDANE.

6-oz. sifter can $1.00 1-pound sifter can $2.50

NEW (all-in-one) FRUIT TREE SPRAY
for the man with a few fruit trees
1-pound can $1.00 1-pound bag $3.25

WEED KILLERS

Our week killer department, as usual, is keeping right up with the times. And that's saying a good deal, nowadays, when miraculous developments in weed killing are coming so fast.

Ever since the new selective weed killers began to appear, we have kept in close touch with leading authorities on this work. Therefore, we KNOW the new weed killers thoroughly, and can safely advise you about their use.

For weeds that are not controlled by 2, 4-D, we have all the other good killers you need, including:

AMMATE WEED KILLER. Effective for control of poison ivy, ragweed, Canada Thistle, and other troublesome weeds.

NON-SELECTIVE WEED KILLER (Acme) — A quick acting arsenical product that destroys weeds and all other vegetation.

The proper killer for weeds in drive ways, tennis courts, paths, and all areas which must be kept free of plant growth. Creates a sterile soil condition for a long period.

KILL Crab Grass
WITHOUT DESTROYING Lawn Grass
ZOTOX

Rid your lawn of unsightly Crab Grass and enjoy the beauty of smooth, luxuriant turf. ZOTOX kills Crab Grass in 3 to 5 days without destroying good lawn grasses. Easy to use—simply dilute with water and spray it on. A 16 oz. bottle makes 10 gallons, and treats 2000 sq. ft. or more. Tested and recommended by leading turf experts.

Priced by yards of area treated.

3 oz. can $1 5 oz. bottle $1.00 8 oz. bottle $2.00 16 oz. bottle $3.50

WEED BURNERS

For some of the toughest weed problems, there’s nothing better than a good weed burner. The extremely hot and concentrated flame is totalement destructive. It consumes not only weeds but destroys insects, too. It can burn out stumps and even crack rocks.

Once you have used a good weed burner, you’ll wonder how you ever got along without it!

Famous No. 59
AEROIL

FLAME GUN
Kills all weeds with fire

Endorsed by leading agricultural authorities. 2009° F. flame kills stumps, weeds and roots. Destroys insects, grass and pebbles, burns out stumps. 99 other uses. Burnes only 6% kerosene and 94% air. OUTFIT INCLUDES 4 gal. all-welded tank, brass pump, 60 lb. air gauge, 7" oil resisting hose, bronze valve, and stainless steel removable coil burner. Nothing else to buy. Guaranteed for a full year (Spray attachment if desired. $3.50 extra.) PRICE AEROIL No. 59 SENIOR FLAME GUN $22.

USE End-o-Weed to
Spray Weeds Away

New Improved WEEDONE

Now Weedone kills woody plants as well as dandelions, plantains and other lawn weeds, without killing grass. It kills poison ivy, poison oak, the brambles (blackberry and raspberry), honeysuckle and over 90 other woody plants. Sprayed on top and sides of tree stumps, it prevents resprouting.

The improved Weedone does not give off vapors that cause injury to rose bushes, tomatoes, flowers or ornamental shrubs. Harmless to humans and animals.

8-oz. can $1 1-gal. can $6.95 5-gal. can $25

Weedone Plastic Applicator. Cap makes handy 1½ oz. measure and fits any screw-top gallon jug. All plastic; no sharp metal edges to cut and scratch hands.

2, 4-D for the farm

Now that practically everybody is using 2, 4-D preparations for lawn weed control, the 2, 4-D spotlight is centered on farm uses.

2, 4-D, properly used, is one of the greatest of all farm developments. Everywhere, farmers are getting amazing results in time and money savings and increased yields.

We can help any user to plan wisely in using 2, 4-D. Just ask us!
**GARDEN SUPPLIES**

If you want to **ENJOY** your gardening . . . **if you want better results with less effort** . . . **we can help you in many ways. We know which tools are best for each job—and just which of the new "gadgets" are really good. Our selection of garden-aids is sound, and sensible. We choose each item for just one of two reasons—improved results or saving of effort.**

That’s why gardeners can shop with confidence here!

**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.

**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, 6 inch, 12 inch.

Wood Tree Labels, Wired. Painted wooden labels equipped with wires, for marking trees or shrubs; also used extensively for labeling dahila 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 — Woodlen—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 2 ¼ 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. 2 ¼ in. to 6 in. diameter.

**HOTKAPS**

Patented individual hot-houses protect seedlings, young plants during critical period of root development against FROST, HOT SUN, SPORUS, INSECTS. Hotkaps ripen plants 3 to 5 days ahead.

**TWIST-EMS**

Strong, dark green "in- visible" tape with wire reinforcing—protects plants against FROST, HOT SUN, SPORUS, INSECTS. Stocked in 10, 100, 1000 foot sizes.

**TRAIN-ETTS**

6 inch sizes, 50, 100, 150, 200, 300, 500, 1000, 10,000, 50,000.

**BEMIS EROSIONET**

Prevent seed washouts, grow beautiful lawns and terraces with one seeding by using this open-mesh woven paper fabric to hold seed and soil in place.

**DOUBLE DUTY PLANT FOUNTAIN**

The Ideal Bulb Sprinkler for Home and Garden

- Clean
- Handy
- Attractive

LASTS Indefinitely—curved stem and detachable sprayer are made of plastic materials (various colors). Bulb of quality green rubber.

Preferred among plant fanciers—The New Double Duty Plant Fountain is greatly preferred to the clumsy water-pitcher or old fashioned watering can.

**Masters Fertilizer Miser**

Sows Fertilizer and Grass Seed Evenly—Saves Plant Food—Saves Seed

Every Ounce Controlled

New design spreader with fingertip microscopic control; year ahead in ease and accuracy of operation.

**Three Home Lawn Models**

285 Steel wheels, 20 lb. cap. $5.75
32D Rubber tires, 20 lb. cap. $7.75
30 Rubber tires, 50 lb. cap. $10.75

For larger uses—estates, golf courses, etc.

241B—Steel wheels, 24" 75 lb. cap. $27.50
241D—Rubber tires, 24" 75 lb. cap. $35.00
361—Steel wheels, 36" 120 lb. cap. $37.00
362D—Rubber tires, 36" 120 lb. cap. $46.00
362B—Stainless steel bottom, 36" 120 lb. cap. $53.75

**TRAIN-ETTS**

Ideal support for

- SWEET PEA'S
- GARDEN PEAS
- CABBAGE, CAULIFLOWER, TOMATOES, Etc. Home in 5 minutes. Doesn't rot like string, nor burn like wire. 3 sizes: 50-inch x 72-inch, 60; 60-inch x 60-inch, 65c; 60-inch x 180-inch, $1.26.

**Protects your GARDEN**

**SCARE-AWAY**

The modern scarecrow


Pkg. of 10 only 25c

See Scare-Away at our store

You have to see SCARE-AWAY to appreciate it. Doesn’t harm the birds, but just makes them shy away! The reflected light and crackle and rattle do the trick!
GARDEN 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, 1 1/2 ft. handle.
Norcross—Adjustable steel teeth.
Hand Cultivator Weeder—3 or 5 prong.
FORAGE, Spading—4 tines, D handle, light and heavy weight.
Hay Fork—Bent handle, 3 or 4 tines.
HOONS, 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.
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.
Pruning Shears—Again available in several styles.
Flower Gathering Shears—They cut the stem and hold the flower for you.
SPADES, Square Point—Flat Blade, D handle.
TROWELS—All Steel Garden—Made of one piece of rigid steel, shaped ventilated handle.
Transplanting Trowel—6" blade of solid steel.
WEEDERS, Hand—3 steel prongs; short handle.
Lawn Weeder—Curved forged-steel blade. Weeder and Hoe Combined—A labor saver.
Dandelion Weeder—V-shaped design.

GROWTH AIDS

Plant hormones, the modern garden wonder, can do many amazing things. They stimulate seed germination, make cuttings root faster, give you better seedlings, help transplanting by reducing shock and wilt. They stop fruit and blossom drop, produce better tomatoes, beans, etc., and help in many other ways.

But, for the best results, be sure you have the right hormone for each purpose! We have them all and can advise you about their correct use.

NO-SEED HORMONE

Blossom-set

FOR TOMATOES

Grow EARLIER, larger, meatier, more delicious TOMATOES, more on each plant, with this approved plant hormone. Just mix with water and spray. Stops blossom-drop; makes blossoms set fruit chemically. Tomatoes ripen up to 3 weeks earlier. Fruits are larger, firmer, more delicious. Many are SEEDLESS because fruit is set chemically, not by pollen. Use on STRAWBERRIES, peppers, cucumbers, others. Tested by USDA, leading Universities, Fla., Colo. Expt. Stations. New low prices. 4 oz. bottle (makes 1 gal.) 75c; Pint (makes 4 gal.) $1.75; Agric. Size (8 oz. makes 50 qts.) $5.75.

FASTER, SUWER ROOTING

for cuttings, seeds and bulbs

ROOTONE®

the plant hormone powder

Rootone stimulates the natural tendency of seeds, cuttings and bulbs to put out roots. Rooting is faster and heavier, resulting in bigger, earlier plants. Endorsed and used by leading growers everywhere.

Trial packet, 25c • 2-oz. package, $1
1-lb. can, $5

TRANSPORT SAFELY

TRANSPANTONE®

Transplantone reduces shock and wilt when seedlings and plants are moved. Stimulates root growth so that fewer seedlings die and more come to early, healthy maturity. Used to water plants, shrubs and trees. Transplantone encourages growth and bloom.

1/2-oz. packet, 25c • 3-oz. package, $1
1-lb. can, $4

LOVELIER ROSES

ROSETONE®

(Trademark)

Before setting out rose bushes, soak bare-rooted plants in Rosetone solution. Also water established plants with Rosetone. Plants take hold quickly and bear finer, earlier roses. Indispensable for the rose enthusiast.

1/4-ounce package, 25c
3-ounce can, $1

MORE TOMATOES!

FRUITONE®

Spray Fruitone at blossoming time and each plant will set more fruit and bear more big, meaty tomatoes. Spray Fruitone for bigger crops of beans and Lima beans too. The dollar package makes 55 gallons of spray.

2/5-oz. packet, 25c • 2-oz. package, $1
12-oz. can, $5

PLANTING WITH A PLANET JR.

This machine can do many jobs for you, quickly and efficiently.

PLANET JR. Garden Trowels fit naturally in your hand. Bulb Trowel is extra long with three notches 3, 4 and 5" from tip, to control planting depth.
LOWELL PENNANT "SEAL-TIGHT" SPRAYER
Never before a sprayer so easy to use, so dependable, so simple, so safe. "Seal-Tight" design uses pressure to seal cover from within, making positive leak-proof seal. The more you pump, the tighter this seal. Powerful, long pump assures more pressure with fewer strokes. 2½" x 7¼" pad on comfortable carrying strap. All-angle nozzle. Finest quality materials and workmanship throughout. Holds 4 gallons.

LOWELL ROTO-BLAST DUSTER
No stooping—no stretching—long extension gives extra reach. All-directional.

LOWELL TWIN-SPRAY
Sprays twice as fast—gives better coverage. Two tubes and two air jets spray more in less time. Large powerful pump; 24 oz. glass jar; cap, pump end and twin tubes are all brass.

LOWELL APEX
Finger-flip attached on "Duo-Spray" nozzle gives choice of a fine mist or wet spray. Perfect for both garden and home use. 24 oz. glass jar; brass tube, nozzle and cap. For "Duo-Spray" design in sprayer with heavy tinplate quart container, ask for Lowell ZENITH.

LOWELL Funnel-Top
LOWELL RELIABLE, Funnel-top sprayer with screw seal top, 3½ gallons. Powerful pump. Valve locks for continuous spraying.

LOWELL TRUSTY. Similar to above but with cam-type lock, shorter discharge equipment.

LOWELL VICTOR. Similar to Trusty, in 2½ gal. capacity.

LOWELL BARON SPRAYER
All-around portable sprayer with choice of steel, cushion or pneumatic-tired wheels, with or without pressure tank, 250 lbs. pressure. Compact, well braced, Non-dripping strainer.

LOWELL Funnel-Top SPRAYERS AND DUSTERS
Efficient, Dependable, Work-Saving

NATURAIN From 2-inch trickle to 25-foot spray, at will:
April showers anytime of year—with this marvelous new method for watering lawns and gardens. No constant shifting, no water waste. Connects in a jiffy. Comes in 5 foot units, weight only 12 oz. Use 5 ft. to 30 ft., according to size of your garden. Primary unit, $2.85; extension units $2.75 each.

Spray Wave
$18.95
A slow swinging fan of gentle penetrating rain. Covers 40" x 60" at 25 lb. pressure.

POWERED BY YOUR GARDEN HOSE!
Hayes Jr.
GARDEN SPRAY GUN
Full 3-gal. capacity. Delivery wetsfan-shaped spray in proper proportion, up, down, sideways. Special long-stream head for trees. Precision-built for years of service.

Hayes FERTL-RAIN
Fertilize while you water! Lift thumb to water, lower thumb over vent to apply liquid fertilizer, lawn moth control, weed killer. Holds equivalent of 15 gal. solution. No moving parts. Built to last!...

Hayes SUDZIT CAR WASHER
Soaks, applies dirt-lifting soda, rinses, in one operation! For cars, porches, screens, etc. Includes enough detergent to wash 24 cars, applicator, sponge.

LOWELL 2, 4-D SPRAYER
Cart carries the load, 3 nozzle boom sprays 24-in. swath with weed-killer solution. Also handles liquid fertilizer. Copper tank; fittings, nozzle. Chemical-proof hose. Two models: 3½ and 2½ gallons.

Let Us Show You These and Other Famous Hayes Products
HAYES-ETTE • HAYES SPRINKL-AIR NOZZLE • HAYES HAND SPRAYER
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.

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

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 flowers are in bud or bloom.

Allow only one main stalk to grow. When stalk is about 18 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 and encourages long stems.

CANNAS

While cannas will tolerate cold soil, they usually do not start growing until hot weather comes. If planted in round beds, you will need 27 plants for a 10 foot bed (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 19 plants, with 12 plants on the outside row, six for the middle row and one plant 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 mould 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 in the garden when weather is warm and settled.

Elephant ears can be planted directly in soil out of doors, but the weather must be warm and settled, otherwise they rot.

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 almost essential for lilies.

CACTUS DAHLIA

DAHLIA

Formal Decorative

POMPON DAHLIAS
AN INVESTMENT THAT PAYS GOOD DIVIDENDS

Few garden flowers pay such high dividends as bulbs and tubers! Lasting for years...they return your investment over and over...by giving so much beauty for such little care, or cost, or effort.

WHEN IS A "BULB" NOT A "BULB"?
Do you know the difference between true bulbs, corms and tubers? A true bulb is a bud, wrapped with fleshy scales which are the bases of leaves. Each bulb must have a period of dormancy, during which time the new plant—in all its details of leaves, petals, stamens, and pistils is formed.

CORMS resemble true bulbs in appearance, but the embryo flowers are not formed within the heart of the corm itself. They are developed rather by the corm's hoarded supply of nourishment. The corm differs also from the true bulb, in that its life is for one season.

TUBERS differ from true bulbs in that they are underground stems with eyes or buds on the surface. While some tuberous roots exhaust their energy in one season, and leave the newly developed roots to carry on, others rebuild their energy, increase in size, and give bloom the next season.

PROPER BULB PLANTING
Take special care to plant your bulbs the right depth, as shallow planting causes much failure in successful bulb growth. While proper planting depth varies with soil conditions, you'll be safe in following the rule of covering the top of the bulb with soil equaling three times its greatest diameter. In preparing the planting pocket for your bulbs, be sure the bottom is broad enough to permit the bulb base to rest on the soil. If an air pocket is left, the roots are quite likely to dry out before the bulb has had a chance to start its growth.

BULBS AND TUBERS FOR SPRING PLANTING

Gladiolus

Bagdad—Smoky old rose, deeper at edge of throat, lighter in throat, 6 to 8 immense blooms open at one time.
Beacon—Clear bright scarlet, with large creamy throat blotch. 8 to 10 medium size florets, moderately ruffled.
Bit o' Heaven—Very nice orange with yellow throat. Opens 9 to 12 medium sized blooms on tall, straight spike.
Blue Beauty—Light blue, edges of petals lined with violet-blue. Throat somewhat lighter on upper petals.
Dream o' Beauty—Large rose red, A very popular shade. Tall strong grower.
Elizabeth the Queen—Clear mauve-ruffled flowers with dark lines in the throat. Large, fine form and opens 7 to 8 blooms at a time.
Ethel Cave-Cole—Light pink with deeper pink throat. Large, wide open florets. Fine propagator.
Leading Lady—Cream white. Very large florets on tall spikes. Slightly ruffled.
King Lear—Clear deep reddish purple with silver line on edge of petals. Extremely large, heavily ruffled. Early.
Margaret Beaton—Huge snowy white florets with a very small vermilion-pink blotch deep in throat.
Margaret Fulton—A beautiful large flower of salmon pink. Blooms early.
New Europe—Vivid garnet red with small purple stripe in throat. Enormous flowers, 10 open at one time.
Oregon Gold—A huge plant the size of Picardy. Flowers are a medium yellow with deeper throat.
Phylis McQuiston—Large deep glowing shrimp pink shading a little lighter in throat; 5 or more open on long spike.
Stoplight—New brilliant red, lightly ruffled blooms, flat and wide open. Consistent performer and heat resistant.
Vagabond Prince—An unusual iridescent garnet brown color, lighter in upper throat and with small blotch of glowing flame scarlet on lip petal.

Lilies

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

Cannas

King Humbert—(Orchard-flowering). Orange-scarlet with bright red markings; deep bronze foliage. 4 feet.
Yellow King Humbert—Beautiful yellow with red spots, 4 feet.
President—Immense bright red in large clusters. Green foliage. 4 feet.
Hungaria—Large dainty rose-pink, frequently edged cream. 4 feet.

Caladium

Fancy-Leaved—Rich ornamental leaves marked, veined and striped with white, pink and dark red.
Elephant's Ear—One of the largest ornamental plants for beds and borders. Huge green leaves give unusual effect.

Tuberoses

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

Dahlias

(I.D. Informal Decorative. F.D. Formal Decorative)

Avalon—(F.D.) A fine garden variety. Profuse bloomer with rich large lemon-yellow blooms.
California Idol—(I.D.) A fine yellow with deep flowers. Heavy blooming with strong bush.
Jane Cowl—(I.D.) Lovely buff and old gold shading to a salmon center. One of the best for garden or cutting.
Jersey's Beauty—(F.D.) Glorious clear pink. One of the finest ever produced. Marvelous for bouquets.
Mrs. I. de Ver Warner—(F.D.) A beautiful orchid pink. Lovely large flowers on long strong stems.
Thomas A. Edison—(F.D.) A fine large flower of a rich, royal purple. Outstanding.
White Wonder—(I.D.) Very sturdy. Has big shaggy blooms of sparkling whiteness.

Miniature Dahlias—Lovely 3- to 4-in. blossoms just like the large ones in form and shape. All have good stems. A wide range of colors. Try them!

Pompon Dahlias—Charming "button" dahlias that require little care. Gorgeous cut flowers.
Cave-Man Gardeners
Get Cave-Man Results

If you have a garden just for the sake of the exercise you get out of it, this won’t interest you. But if it’s results you’re after—if you want better flowers and better crops with less labor, then consider—

Many of the garden tools now being used by home gardeners are about as out-of-date as the plows made of deer antlers and the spades made from great animals’ shoulder blades which the cavemen used.

You may not have noticed it—but garden tool design has moved ahead almost unbelievably in the last decade. Some of our recently developed garden tools let you do as much in one hour as you formerly did in five! Others make play out of jobs that have always been back-breakers. Hoeing, cultivating, weeding have been streamlined and speeded up amazingly.

When we say we can cut your “hard labor” time in half, we’re being conservative. Ask us to prove it!

There's Ways to Beat Rabbit's Destruction

It’s no mere accident that agricultural production has increased so tremendously the last few years. Scientific advancement in the insecticide and weed-killing fields has contributed very much toward it. The men of the test tube and bunsen burner have now come up with a chemical to discourage the invasion of rabbits into the garden. You surround your garden with this repellant and it discourages the raudings of papa and mama rabbit just as though Rover was standing in watching them from the center of your carrot patch.

Where your garden plot is of a permanent nature, an attractive, rabbit stopping, fence can be made by stretching two-foot high close mesh and planting hedge shrubs on both sides. The wire will turn all pests that walk, and flying pheasants rarely fly over this type of hedge if it is closely planted. If a wire fence must be used because of space limitations, plan on covering it with some woody vine.

When to Lime

Liming will help break up heavy clay and will sweeten acid soil. But don’t use lime unless it is needed, since too much lime destroys humus. Use only when needed. We can supply a simple test kit that shows if lime is needed, and if so, how much. Limus paper is not enough: it only shows a plus or minus reading. A good check on the need for lime is the way your beets grow. Usually a soil that will grow good beets contains enough lime. If you have trouble with beets, and clovers do not grow well in your vicinity, it will pay you to have your soil tested.

Most garden plants do best in a soil that is neither strongly alkaline or acid but nearly neutral. A soil test of pH 6.0 to 7.0 is ideal, for most crops.

Building Windbreaks

Many gardeners who have experienced failure with their summer plantings should consider planting a windbreak to slow down the force of the hot, dry winds that suck moisture from the soil and burn up tender seedlings. A summer windbreak should be located to cut off the prevailing summer breezes, usually to the south or southwest of the garden. Because garden plots are small and because garden plants are low-growing, a hedge five to six feet tall should be enough. This will not cut off breezes from the house. A hedge of privet or similar hedging should be adequate.

Vegetable Vitamins

All fresh vegetables are high in the vitamins which we all need for proper nourishment. If we could eat enough vegetables fresh from the garden, we wouldn’t need to buy our vitamins in pills at the drug store.

For Vitamin A—eat plenty beet greens, broccoli, collards, endive (escarole), mustard greens, and spinach.

For Vitamin B—brussels sprouts, kale, green lima beans, and peas.

For Vitamin C—beet greens, broccoli, brussels sprouts, cauliflower, kale, mustard greens, peppers and spinach.

For Vitamin G—beet greens, collards, kale, mustard greens and spinach.
BECKERT’S
Potted Roses

Everblooming varieties that are practical for Every Garden

We offer Northern field grown two year old Rose Bushes, everblooming hardy varieties. Each bush is potted with soil to insure moisture enough to protect the plant until planting time. Individually labeled. Postage extra.

$1.75 EACH

WHITE
K. A. Victoria—Fragrant
Caledonia—Pure White

PINK
Pink Radiance—Silver Pink
Betty Uprichard—Salmon Pink
Mrs. Chas. Bell—Rich Pink
Capistrano—Deep Pink

RED
Red Radiance—Deep Red
Ami Quinard—Velvety Crimson
Cross Von Tiplitz—Rich Red
Etoile de Holland—Fragrant Crimson

YELLOW
Mrs. P. S. DuPont—Golden Yellow
Golden Dawn—Lemon Fragrant

Bi-COLOR
Talisman—Scarlet & Gold
Pres. Hoover—Yellow & Scarlet

CLIMBERS
Dr. Van Fleet—Pale Pink
Seven Sisters—Deep Pink
Pauls Scarlet—Red

Patented Giant Roses
$2.50 EACH

Mission Bells—Pink
Forty Niner—Yellow & Red

BECKERT’S
SEED STORE, Inc.

101 Federal Street
PITTSBURG 12, PA.