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LONG'S FALL BULB AND PLANT CATALOGUE

1922

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U. S. Department of Agriculture

THE J. D. LONG SEED COMPANY

BOULDER, COLORADO

LONG'S Giant Darwin Tulips, Boulder, Colorado (May, 1920)

These monarchs among tulips are of stately growth, with long, sturdy stems on which are borne the most beautiful globular flowers of remarkably heavy texture. They bloom in May, often, though not always, lasting until Memorial Day, when flowers are most wanted, but always scarce and expensive.

When cut half open the blossoms last for days in water and are exceedingly fine. If left for garden display they are equally delightful.

The range of Darwin colors is indescribable. As one Darwin lover says: "Their supreme loveliness is due to a certain overlaying tint, comparable to the bloom of a grape or plum, which softens but does not obscure the color. The delicate graduations of color are infinite, harmonious, superb. A practical advantage of this blending and softening of the colors is

that you can arrange a great variety of Darwin Tulips in a vase without color discord."

On account of their great hardiness, Darwin Tulips are especially adapted for the permanent flower border or the edges of shrubbery, where they should be liberally planted in clumps or colonies of at least half a dozen of a color together, where they may remain undisturbed for three or four years, when it is well to take them up, divide and reset. Or, they may be planted in solid beds, separate colors or mixed.

Note. Owing to the fact that extra early tulips have proven so unsatisfactory in our western climate, I have discontinued them, offering, instead, **LONG'S** Tried and True varieties of the Giant Darwin and Cottage tulips, which are seldom—almost never—damaged by the spring storms and frosts which cause so many failures with the early kinds.

LONG'S* Glorious Giant Darwin Tulips—Best for the West** LONG'S* "Super-Seven" Named Darwins**

I've planted and compared just about all the leading named Darwins, and have selected the following, that cover the most desirable colors. "The best is good enough for me"—and I'm sure the best will please you also.

68. Baronne de la Tonnaye. Bright rose-pink, margined blush; stem very tall and strong; flower large and lasting. One of the best for Memorial Day. Doz., 65c; 25 for \$1.15; 100 for \$4.50.

69. Clara Butt. Beautiful soft salmon-pink; inside deeper color; a great favorite. Doz., 65c; 25 for \$1.15; 100 for \$4.50.

70. Wm. Copeland. (New.) Light lilac. Fine for forcing and does well in garden also. Doz., 90c; 25 for \$1.70.

75. Farncombe Sanders. Red that is red; fiery rose-scarlet; inside vivid cerise-scarlet; large, broad-petaled flower. Doz., 80c; 25 for \$1.50; 100 for \$5.50.

76. Pride of Haarlem. Well-known to all tulip growers. No list complete without it. Great favorite with florists for forcing; also sturdy and hardy outdoors. Darker than Sanders, being described as brilliant rosy carmine, suffused purple; stem very strong and tall; fine for groups or borders. Doz., 70c; 25 for 1.30; 100 for \$5.00.

77. Sultan. Rich maroon-black; good as a novelty but I would not advise large planting of this one. The reds and pinks are much more desirable. Doz., 65c; 25 for \$1.15; 10 for \$4.50.

78. White Queen. In moist climates with less sun than in "Sunny Colorado" this is practically pure white, but with us in the West it might better be described as blush, or white suffused with pink. Doz., 65c; 25 for \$1.15; 100 for \$4.50.

Finest Darwin Tulips, Mixed

79. *LONG'S* Special Mixture. A splendid mixture of Giant Darwins, with a small percentage of Cottage varieties to increase the range of colors. Many prefer to plant this mixture. Doz., 60c; 25 for \$1.10; 100 for \$4.00.

***LONG'S* Cottage Tulips**

Same season and habit of growth as Giant Darwins, fitting in well with them and supplying several colors lacking in the Darwins.

62. Yellow. Pure golden yellow; charming indeed. Doz., 65c; 25 for \$1.15; 100 for \$4.50.

65. Picotee. (Maiden's Blush.) White, margined rose-pink; petals recurved. Doz., 65c; 25 for \$1.15; 100 for \$4.50.

STOP! LOOK! LISTEN!!! Some Bulbs must be planted in the Fall. Its Nature's way—and Nature is very sot in her ways! Tulips, Hyacinths, Narcissi, Crocus must be planted in the Fall. They bloom when you are making your Spring garden—just when Flowers are most welcome after Winter has deprived us of them for months.

LONG'S Fragrant Hyacinths

The individual bells are single and more graceful than the heavy, crowded double ones.

LONG'S Hyacinths for Pots

Good size bulbs that do especially well in pots, but are of course splendid for outdoors also. Six choicest named varieties, embracing all the most desirable colors.

1. **L'Innocence.** Best pure white.
2. **Gigantea.** Large blush-pink; fine.
3. **Gertrude.** Splendid rose-pink.
4. **Rio des Belges.** Best red hyacinth.
5. **Queen of Blues.** Light blue or lavender.
6. **King of Blues.** Rich, deep blue or purple.

Price for any the above, assorted or alike, each kind labeled. Each, 15c; 2 for 25c; doz., \$1.40; 25 for \$2.75; 100 for \$9.00. These are the good size ones, for potting, or bedding.

LONG'S Bedding Hyacinths

The same fine named varieties as described above, but smaller size, though plenty large for potting also, and just as fine for outdoors. Produce splendid spikes, though not quite so large as the special potting bulbs.

- 11, White; 12, Light Pink; 13, Rose Pink; 14, Red; 15, Light Blue; 16, Purple. Prices: Each, 10c; doz., \$1.10; 25 for \$2.00; 100 for \$7.00.

LONG'S Mixed Hyacinths

Nice bedding size bulbs, in mixed colors. Doz., 90c; 25 for \$1.70; 100 for \$5.50.

LONG'S Single Narcissi **Empress Narcissus**

The most graceful and charming narcissi are the fine large single kinds, those listed herewith. When you have these few I have selected from many varieties you have the best. All are good for either pots or garden.

20. **Empress.** The favorite bi-color; trumpet large, rich golden yellow; petals or perianth white; long stem; a beauty. Each, 10c; doz., 80c; 25 for \$1.50; 100 for \$5.75.

21. **Emperor.** Like Empress in size and type, and robust growth, but entire flower is pure, golden yellow. The two make a fine pair. Each, 10c; doz., 80c; 25 for \$1.50; 100 for \$5.75.

22. **Golden Spur.** Similar to Emperor but somewhat smaller and earlier; deeper yellow. Much used for pots. Each, 10c; doz., 75c; 25 for \$1.40; 100 for \$5.25.

23. **Ornatus** (Poet's Narcissus). Pure white perianth or petals, with yellow cup margined scarlet. Each, 10c; doz., 60c; 25 for \$1.10; 100 for \$4.00.

Double Narcissus

24. **Von Sion.** The well-known yellow daffodil much grown in pots by florists. Is hardy in garden also. Blossoms often have a green tint. Each, 10c; doz., 75c; 25 for \$1.40; 100 for \$5.25.

Mixed Narcissus Bulbs

25. **LONG'S Special Mixture.** Contains many fine varieties in a most pleasing assortment of kinds and colors. Doz. 60c; 25 for \$1.10; 100 for \$4.00.

King Alfred Giant Narcissus

26. **New.** Largest of all Trumpet Narcissus. A monster, for pots or outdoors. Same type as Empress shown above, but both trumpet (which is deeply frilled) and perianth deep, rich yellow, the shade of Golden Spur. A large, bold flower; tall and strong grower. Don't miss this. Each, 20c; 6 for \$1.00.

Must Be Planted in Fall

Get this straight: Tulips, hyacinths, narcissi, etc., must be planted in fall, the only time you can get these bulbs. Nothing doing in spring. These bulbs are hardy, standing coldest winter conditions.

LONG'S "Paper Whites" **Narcissus That Blooms in Water.**

For indoors only. Will bloom in soil or water, usually put in dish or bowl with small stones and water, treated same as the well-known Chinese lily. Is now used in place of Chinese lily by many, as it is more certain to bloom.

Paper Whites may be put into pots or bowls any time from September to December.

Every season I receive many orders after bulbs are sold. This is because customers are so pleased with their first Paper Whites bloom that they want more and wish they had ordered enough for a succession of blooms. For this reason you should order liberally early in the season while you can get them, for you will surely want to start another bowl after you see the first lot in bloom. You can keep them for several months before putting into water or soil. Takes about eight weeks for the early lots to bloom. Later on, after the bulbs have begun to sprout before being planted, they bloom several weeks sooner.

A bowl of Paper Whites makes a delightful present. Or, just the bulbs may be sent. And by all means let the children enjoy seeing these bulbs send their roots out among the pebbles in clear water, and push up flower stalks on which are produced clusters of clear "paper white," fragrant blossoms, that last for three or four weeks or more if kept in a cool room. You may put a single bulb in any old jelly glass and it will be happy, thrive and bloom. Or put three to six in a bowl. Good Paper White bulbs very scarce this season. Each, 10c; doz., 90c; 25 for \$1.70.

LONG'S Yellow "Paper Whites"

So called because similar in every way to the Paper Whites, except the blossoms are a beautiful yellow. Bulbs usually larger, stalks taller and flowers larger. Treat same as the Paper Whites. Very scarce. Each, 20c; doz., \$2.20.

Freesia Bulbs

For pot culture. Order and plant early. Freesias are very beautiful, graceful and delightfully fragrant. Do not set the potted bulbs in dark as is best for most bulbs, but put them in lighted room as soon as potted. Price for Improved Purity Strain White Freesia Bulbs: Doz., 45c; 25 for \$5c.

LONG'S Oxalis Bulbs

For indoors. They do splendidly in pots, also in hanging baskets, producing a mass of flowers throughout the winter. Easy to grow. Yellow, Pink, White, Lavender or Mixed. Doz., 40c; 25 for 70c.

LONG'S Crocus Bulbs

Good, strong bulbs, better than usually sold. Colors yellow, white, purple or mixed. Price for any color or mixed: Doz., 35c; 25 for 69c; 100 for \$2.25.

Wild Cucumber Seed

Plant this seed in fall where wanted for shade the next season. Freezing in winter insures germination. May be planted in spring also. Large pkg., 10c; oz., 25c; prepaid.

Sow Spinach Seed This Fall

Remember how discouraging it is to try growing spinach in hot weather? Runs to seed before you get much good from your spinach patch, doesn't it? That's because spinach is a cool weather plant. Does best very early in spring. Even early spring sowing does only "fair to middlin'."

Now the way the big gardeners grow spinach—the kind you buy in spring at 10 to 15 cents a pound before yours is ready—is to sow the seed along in September or early October, let the plants get a start before winter, then cover just lightly with some coarse trash—something that will not smother the plants yet will prevent blowing and drying out. Or, in many places, the spinach will rustle for itself without any covering. Try this yourself. Price for our best spinach seed: Oz., 10c; ¼ lb., 25c. Another good scheme is to sow spinach seed very late in the fall, just before ground freezes up. Do the same with head lettuce. Just sow the seed as usual, and forget it.

Extra Fine Perennial Phlox

For years I've been wanting to get a good start in perennial phlox, but one thing or another has prevented my doing so until this fall. As "the best is good enough for me," I'm going to plant only the choicer kinds, as the first cost isn't much more, and will soon be offset by the more desirable flowers.

I'm going to plant the following kinds this fall as a starter, and have engaged an extra supply of each variety. These extra roots I offer you as listed. Roots ready about October 15th, when will be well ripened. I'm getting these from a specialist, who has promised me good strong roots. These varieties were selected by myself when the phlox were in full bloom.

Coquelicot. Intense scarlet, with deeper eye.

F. G. von Lassburg. Pure white. Large flower and truss.

Pharaon. Enormous flower; clear lilac-rose, with star in center.

Rynstrom. Large truss; immense flower; clear pink.

Price for any these superb varieties, each 30c; 4 for \$1.00; doz., \$2.75.

"Liberty" Iris

The Orchid of the Garden

Giant Lavender from *ONO'S* Garden.

"The exquisite beauty of the Iris, with its soft and iridescent coloring is rivaled only by the orchid," so the saying goes. But I would add,—*"and the gladiolus."* The iris comes and goes before the gladiolus appears, so there is no rivalry.

A great dry land plant is the Iris, the national flower of France. It thrives in sun or partial shade, wet or dry, being especially desirable for dry locations. I know of no other hardy perennial that will prove as satisfactory where little water is available. It should be planted liberally on non-irrigated lands, though does still better where gets a moderate amount of water. Even after the flowers are gone the foliage makes an attractive border or hedge, as stays green most all summer.

Iris may be planted most any time, as it is sure hardy and dies hard. A root may lie around for weeks or sometimes all winter, then grow when stuck into the ground most any old way. But careful and timely planting gives it a better show, of course.

Fall planting is ideal for Iris. You know how it begins growth very early in spring, before you are ready to order and plant your spring seeds and bulbs. Plant this fall.

Mixed Iris at Half Price

Formerly: Doz., \$1.20; 25 for \$2.00. **Now: Doz., 60c; 25 for \$1.00.** (Prepaid within 4th zone only.) Colors not labeled. No certain colors or certain number of colors promised.

Iris prices are for divisions, as usually sold.

Iris for Decoration Day. In most localities, and most seasons, the iris can be depended on for cutting May 30th. Some varieties earlier than others, so it's a good plan to set out a number of varieties to be practically sure of having flowers for Decoration Day. **Plant iris in the fall for best results.**

For several years I've been overhauling and improving my iris collection, discarding many varieties, and adding some splendid new ones, though retaining a few of the well known favorites, which are hard to beat at any price. Having now ample stocks in my own garden of each variety listed herewith, I'm making reasonable prices on them. Some usually sell at 75 cents to \$1.00 each.

Note this: The iris blossom is tripartite. Three portions droop. These are called the **falls**. Three stand erect, their tips meeting. These are called the **standards**. Often the two sets are of different colors, shadings or markings. In describing iris blossoms "S" means standards, "F" means falls.

1. Albicans. Splendid early pure white. Same season as Kochi, and combines splendidly with it. 15c; doz. \$1.30.

3. Kochi. Both S. and F. rich velvety purple. Early. 15c; doz. \$1.40.

5. Eldorado. S. bronze, shaded yellow; F. violet-purple, touched at sides with bronze-yellow. Unique color combination. 25c; doz., \$2.20.

7. Flavescens. Delicate shade of soft yellow; large and sweet scented; fine for massing. 15c; doz. \$1.30.

9. Florentina. White, very faintly tinted lavender; fragrant; early, and, like Albicans, combines well with Kochi. 15c; doz., \$1.40.

11. Her Majesty. S. lovely rose-pink; F. deeper, tinged crimson; the general effect is that of pink, a rare color in iris. Should be in every collection. 25c; doz. \$2.20.

13. Jaquesiana. S. bright coppery-brown; F. rich maroon. 20c; doz. \$3.00.

15. Juniata. Similar to Pallida Dalmatica, but darker. 30c; doz., \$3.00.

17. King of Iris. S. old gold; F. rich maroon, edged with gold. Flower large, and one of the most brilliant. Well named, "King of Iris." 40c; doz. \$3.50.

19. Lohengrin. Large pink silvery-mauve. 25c; doz., \$2.30.

21. Madam Chereau. White, elegantly frilled with a wide border of lobelia blue. One of the best, though inexpensive. 15c; doz., \$1.30.

23. Montezuma. S. deep gold, minutely dotted brown; F. yellow and white, veined purple, and dotted brown; unique. 50c; doz. \$3.80.

25. Mrs. Newbrunner. Deep golden yellow. Considered by many the best rich yellow. 25c; doz. \$2.40.

27. Pallida Dalmatica. A giant among iris. S. fine lavender; F. clear, deep lavender; plant tall and robust; flowers large and lasting and delightfully fragrant; superb for garden display, and wonderful when cut for bouquets. Special price. 20c; doz. \$2.00.

29. Prosper Laugier. S. fiery bronze; F. velvety ruby-purple. This new bronze is unique in its striking combination, yet harmonious blending of colors. 40c; doz. \$3.50.

31. Rigollette. S. and F. rich maroon, shaded yellow. Very showy; free bloomer. 15c. doz. \$1.30.

33. Rose Unique. S. and F. bright violet rose. 25c; doz. \$2.10.

35. Storm Cloud. Large flowers of grayish slate-blue, with bronze shading. A novelty but not cheerful. 40c; doz. \$3.50.

37. Wyomissing. S. creamy white, suffused rose; F. deep rose base, shading to flesh-colored border. 50c; doz. \$4.00.

"Iris—the Fool Proof Plant!"

This, the national flower of France, thrives in sun or partial shade, wet or dry, being especially desirable for dry locations. I know of no other hardy perennial that will prove as satisfactory where little water is available. It should be planted liberally on non-irrigated lands, though does still better where gets a moderate amount of water. Even after the flowers are gone the foliage makes an attractive border or hedge, as stays green most all summer.

Protect Cinnamon Vine Roots

Although the cinnamon vine is almost universally recommended as being absolutely hardy, yet here with us it is apt to winter kill the first winter after being planted, unless given a little protection. Late in fall cover plants a few inches with some coarse stuff, as tomato vines, leaves, straw, cornstalks, etc., removing early in spring. The vine dies down each season, starting again the next spring from root. After first winter there is little danger from winter killing.

LONG'S Double Hollyhocks

Here's another item that does splendidly planted in the fall. The plants get an early start the next spring and make the most of the season. All finest double varieties in Pink, Red, White and Yellow, labeled. Each, 15c; 4 for 50c; 9 for \$1.00; doz., \$1.30.

Mixed Hollyhocks. Same as above, but colors not labeled. Doz., \$1.00.

So confident am I that you will succeed splendidly with Fall-Planted Hollyhocks, that I will replace at half price, next Spring, any that might fail to grow and thrive. Plant early enough this fall so plants will make some new growth before ground freezes.

LONG'S Double Peonies

Absolutely, the best time for planting peonies is in the fall. Most peony specialists will not plant or sell in spring.

Prices are for good strong divisions, 2 to 5 eyes.

Festiva Maxima. The favorite medium priced white, with center flecked crimson. 50c.

Couronne d' Or. Large crystal white semi-rose type, with carmine flecks, having a ring of yellow stamens around the center, hence its name, "Crown of Gold." Later, and better keeper than Festiva Maxima. 75c.

Edulis Superba. Extra early pink, often in bloom for Decoration Day in many localities, though later in others. 50c.

Monsieur Jules Elie. Glossy flesh pink, shading to deeper rose at base, the entire bloom covered with a silvery sheen. Large flower, strong stem. One of the very best of its type or class. \$1.25.

Officinalis Rubra. The deep bright red peony of the old-time garden. Earliest of all good peonies. Almost always in bloom for Decoration Day. Used to be cheap

when imported from Holland, but stock now scarce, as no more importations are permitted. 60c.

Felix Crousse. A brilliant, dazzling, ruby-red mid season variety; strong grower. \$1.00.

Lost Label Pinks. Regular 50c to \$1.00 varieties, but labels lost or lots too small to list separately; mostly medium or rose pink, but sold as they run, simply as pink. 40c.

Lost Label Whites. Same as Lost Label Pink lot, except white, and sold cheaper for same reason. 40c.

Discount of 10% allowed on order for \$5.00 or more of peonies.

Pansy Plants for Fall

LONG'S Super-Giants

Most of my own Pansy Plants are set out in the fall from seed sown the last of July. The plants are just a nice transplanting size from about September 20th to middle of October, and this is a good time for fall setting.

By following directions I send with each Fall Pansy Plant Order you should be able to winter your plants over with little or no loss. I seldom lose a plant and don't fuss much with them either. Pansy Plants set out in the fall, even though small, start off very early in the spring and make a wonderful showing before spring-set plants get well established. Such plants are at their best for Memorial day. We sell many thousands of cut pansy blossoms at this time, cutting them with branches and leaves of the plant, which adds wonderfully to the appearance and value of the cut pansies. The hardy plants, wintered outdoors, soon renew their foliage and blossoms.

Prices for Fall Pansy Plants same as for the spring transplanting size: 16 for 50c; 40 for \$1.00; 100 for \$2.00.

Business Terms

Cash with order.

All goods prepaid, parcel post.

Half dozen at dozen rate; 50 at 100 rate.

Orders accepted with understanding that goods will be sent when ready. Holland stocks sometimes delayed but have always arrived in ample time for planting. Many orders will be filled in several sections, part being sent as soon as ready, balance later when other goods are available.

It's a good idea to mention when ordering whether you wish us to refund money in case we cannot supply an item, or send another kind of our selection. We always aim to give as good value and usually still better in substituting. Just a line as to this, along with your order, may avoid needless correspondence and delay.

LONG'S Suggestions for Fall Planting

Outdoors

First, a few general suggestions that will apply to all bulbs and many roots and plants:

Take time to prepare the ground. Plow or spade the soil deep and pulverize it thoroughly. Do not use any manure, unless some that is well rotted. It is fairly safe, however, to use fresh manure if you will use sand, or soil free from manure, when setting out the bulbs or roots, working the sand or clean soil all around the bulbs or roots, so no manure comes close to them.

Avoid working the soil or doing your planting when ground is wet, but water all bulbs and roots as soon as planted, especially hollyhock roots and pansy plants. Pack soil well around such roots. One big secret of successful transplanting of roots is this matter of tramping or packing the soil good and firm around the roots. Pay close attention to this.

Tulips may be planted any time from September to Christmas, but October is the ideal month, though November is also O. K. You can influence the time of spring blooming of fall bulbs, to some extent, as follows: Time of planting; depth; character of soil; location; winter treatment of beds.

To delay spring blooming, plant late—any time will do, just so you get the bulbs in the ground before it freezes up. The deeper you set the bulbs, the later they will come on and bloom; the shallower, the earlier—but watch your step—don't plant too shallow or you may fail. Light sandy soil favors early growth and blooming. Heavy, clay soil tends to hold back these fall planted bulbs.

Location of your fall bulb beds has much to do with time of blooming in spring. Planted on the south side of a building or fence (not barbed wire fence), these bulbs will bloom earlier than on the east or west side. North exposure brings latest of all blooms. In this section it is not necessary to protect the fall bulb beds in winter, if planted deep enough. **But,** you can retard spring blooming by covering the beds with leaves or straw—leaves best—**after ground is frozen hard.** This covering is not to keep the bulbs warm, but to keep them cold. Hold the leaves, etc., in place with poultry wire or cornstalks or some such coarse covering. Brush is very good.

Tulips and other fall bulbs are planted best and easiest by first digging a trench with hoe or shovel the right depth, then setting the bulbs in single, double or triple rows in trench, covering by raking the soil back, and lightly tamping or tramping the soil. If soil is dry, walk right on top of the covered bulbs. Tulip bulbs should be covered about 5 inches, and may be as close as 3 or 4 inches apart, if space is limited, or as much farther as you care to give them room. About 6 inches is very good for planting to remain several years.

Don't worry if your tulips show growth above ground in winter or early spring. Late tulips are seldom harmed by spring cold spells, though it is best to plant some other place than on south side of building. Partial shade is best.

Tulips—other flowers also—but especially tulips—make a nice showing when planted in groups of several to a dozen or so of a kind or color. They may also be worked in with the shrubbery, where they do splendidly and make a pleasing appearance.

Cultivate the tulip beds in spring, keeping the ground loose and mellow, and free from weeds. Water moderately until buds show, then give lots of water to produce the largest blossoms.

In cutting, leave most of the foliage on the plant to mature the bulb. The bulbs grow and mature after blossoms are gone, ripening when the leaves turn brown, usually in July. They may then be taken up, stored in cool airy place, spread out thin, and planted out the next fall. But it is generally best to let tulips remain about three years, then take up, divide the clumps and reset. You will find a big increase of bulbs, ranging in size from fine big ones to quite small off-sets. Bulbs from about $\frac{3}{4}$ inch and up will most all bloom the next season. Smaller ones should be set out also. They will bloom the second or third year after planting. Set the smaller bulbs 4 inches deep.

Asters or other shallow rooted flowers may be planted on top of fall bulb beds with comparative safety. Sometimes much watering in summer will rot some of the fall bulbs, but often no damage is done. Another way is to take up the bulbs, dirt and all, and heal them in by thus transplanting without dis-

turbing the roots of the bulbs, in some unused spot, where the bulbs will mature and ripen for replanting. Never cut the tops off while green.

Hyacinths, narcissus, crocus, when planted outdoors, are handled very much the same as tulips. So then follow directions just given, except that you plant the hyacinths and narcissus deeper, covering about 6 inches. Note, however, that all bulbs stand deeper planting in sandy soil than in clay soil. If soil is heavy, then plant a little shallower. "Use discretion." And plant large bulbs farther apart than small ones, hyacinths and narcissus about 6 to 7 inches. Crocus bulbs should be 2 to 3 inches deep, and about 3 inches apart.

Hollyhocks usually do fine, planted in fall. Set same depth as were in original bed—so crown comes even with ground. Tamp soil firmly around roots, and water well at once. Throw some coarse trash over them late in fall if you wish, and don't cover much. (I will replace in spring at half price any of my hollyhocks planted in fall that fail to grow in spring. This applies to hollyhocks and not to fall bulbs.)

Iris is very hardy. Place the roots flat and cover not over an inch. Tamp soil; water, and forget them. Set about 12 inches apart. Each small root will form a clump in a few years, when may be divided and reset. Iris may bloom the first year, but often does not bloom until the second season. Sunny location best for iris.

Peonies should be planted where they may remain a long time, for it takes several seasons for them to get established, after which they thrive and improve for years. Don't use manure near peony roots or on top of the plants. It may be dug into the soil away from the plant a little, but not in contact. Once planted right, peonies will get along with little attention. Plant in soil very deeply dug and pulverized. Set so the bulbs or eyes are only 2 inches below level of ground. Too deep planting is often cause of not blooming. Peonies seldom bloom much the first year after planting, and the blooms that do appear are often not true or of the quality that the plant will produce when firmly established.

Indoors

Let's take the easiest first. That right—you've guessed it—Paper White narcissus! It's so easy to grow. Almost nothing to it. Just set several bulbs in any old bowl, drop a few small stones around the bulbs to hold them upright and in place, fill in with water to half way up the sides of the bulbs. Will bloom if kept in the living room from the start, but do better if set away about two weeks in cool, dark place until well rooted. Then bring to light. Takes about 8 weeks for early lots, started when bulbs first come in, but later—in November and December—they often bloom sooner.

May be hurried by keeping them warmer or retarded by keeping cooler. Best not to rush them too much, though. May not bloom. Better to put a few in a bowl at a time and start other small lots every two weeks, than to put many in one bowl or dish. The perfume from many is too heavy. When in bloom keep in cool part of room and will last longer. Same treatment applies right through to Yellow Paper Whites.

Hyacinths and narcissus, such as Emperor and Empress, etc., may be bloomed in water, but do better in soil. Hyacinths should be supported so bulb is just above water but not in it. Roots go into water. Narcissus may be set into the water.

The hardy narcissi—Emperor, Empress, King Alfred, etc.—do splendidly in pots. I have had the King Alfred with stems 20 inches high and gigantic blossoms, in pots of common garden soil and handled under average home conditions. Gave them plenty of water after bringing up from the basement, where they were allowed to become well rooted before coming to heat and light.

Oxalis is used for pots and baskets. Just plant and keep them right out in the light. Same with freesias. Give freesias support by setting small stakes around edge of box or pot.

In potting hyacinths, narcissus and tulips, use just good garden soil, with part sand, if sand at hand. Don't use manure unless very rotted and pulverized. Better not use any, to be safe. Do not set bulbs deep

in pots, like outdoors, but just barely cover them. Be sure to give drainage, and water well after potting. Hyacinths and narcissus seem to be easier to bloom indoors than the tulips, yet many get splendid results from tulips also. The big secret of the whole matter is to set the potted plants away in a cool dark place and leave them there long enough, keeping soil just damp but not very wet. Roots must be well developed, and lots of them, and tops well started before brought to light. Don't worry if tops are blanched like celery. They will get green when exposed to light. You must not expect to have hardy narcissus, hyacinths, and tulips in bloom for Christmas. Forget it. That is not their season. They need longer time. But for Christmas, use the Paper Whites. Better order plenty and well in advance, as we are almost always sold out before middle of December.

When potted bulbs show lots of roots in bottom of pot, and tops are a few inches high, bring them to the light, but keep them away from direct sunlight for a while. This will draw up the foliage and stems, and prevent those unsatisfactory short stems and small blossoms. Keep potted bulbs from gas heated rooms as much as possible.

Save bulbs from pots, and set in the garden for outdoor blooming next year. But do not try to bloom them indoors two years in succession. Set these bulbs out in spring, or dry them off and set out in fall.

This does not apply to Paper Whites and Yellow Paper Whites, however. These two are not hardy, as are the other bulbs. They are usually considered of no value and are discarded after blooming. However, I think that if you can protect them from freezing in the garden, by mulching, they could be made to grow and bloom there after being used indoors. But they will not bloom indoors the second time, one year after the other.

Now, friends, I've had my say, but there are lots of things yet that might be said and ought to be said along this line. But one could never tell it all. I have to stop some time. Study the matter yourself. Use sense. But don't expect 100% results. We all fail at times. Often cause cannot be located. Don't ask me, please, to tell you why your bulbs did not bloom. I can't tell you. There are many little conditions that might prevent success. Most everyone does succeed, however. You get good bulbs from me, and if conditions are right you will have good returns.

Some More Peony Pointers

Although we might like to buy and plant big clumps and have them bloom freely the first season, yet this is not Nature's way. Plant divisions any time in fall or very early in spring. Fall is best. Size of divisions often misleading. A small division from a 2 to 4-year-old plant is often better than a larger one from an older plant. Size of root not so very important either, as new roots are formed. Takes several years for peonies to show true to name blossoms.

Never neglect the peonies after they have bloomed. The care and regular watering you give them after blooming until fall produces vigorous buds that will insure large and fine flowers the next year. As one peony grower sees it, the roots may be likened to storage batteries, which should be charged after blooming for the next flowering season. Fertilize by spading in manure around but not very close to peony plants. Never let the manure get close to roots or on top of the plants. This is important.

During the first summer after peonies have been set out the plants often look sick and withered, causing the beginner anxiety. Do not lose any sleep over this, for it's a way they have. If good roots were well planted and cared for the plants will come through.

Long's 1923 Seed Catalogue

Your copy of the 1923 Seed Catalogue will be sent in January. We plan to begin mailing about the 10th and finish by Feb. 1st. All out of town folks who receive this folder are on our file for the spring catalogue, without request. Once in a while a name is overlooked in typing the addresses, so if your catalogue fails to show up on time, just drop me a line. Gee whiz, some customers have a fit if we happen to miss them. Of course I'm glad to know the catalogue is prized, and missed if it fails to come, but don't you think for a minute that we would intentionally fail to send a catalogue to any customer or friend who really cares for it.

I'm not making any promises, but have a hunch that this 1923 Seed Catalogue is going to be mighty interesting and profitable reading for you.

Long's Fall Bulbs and Plants

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