Stately Tulips



BED OF DARWIN TULIPS

TULIPS ARE PERSIAN, NOT DUTCH

A LL OF the various species of tulips are originally supposed to have been natives of Asia.

It is believed that the bulbs were first taken thence to the countries adjoining the Eastern Mediterranean about two thousand years ago. It is quite probable that they were given wide distribution on account of the bulbs' being edible. The first trace in more recent years is a definite record that tulip seeds were taken to Vienna from Turkey in 1554.

As the word TULIP is from "tauleban", the ancient Persian name for a turban, it is safe to assume that the Persians secured their first bulbs from nearby Turkestan and from there the plants travelled via Turkey

to Europe.

The "Tulip-mania" in Holland during the first half of the seventeenth century has been the subject of stories, both in history and fiction. Because of this craze the Darwin and Cottage sorts, which had been used for nearly two centuries before, were almost lost. Luckily some had still lived in the English and Dutch cottage gardens and were able to be collected.

Western America is fast becoming one of the great Tulip bulb producing areas of the world. Millions of bulbs are shipped East every vear and many are sold locally. The bulbs grown here are comparable to the finest the world produces. The commercial grower knows full well that he must "fatten-up" the bulbs before he sells them. Much of this is done after flowering and before the bulbs are dug. One hundred percent of the bulbs you buy always flower.

A visit to one or more of the commercial bulb fields in this locality in April-May is an eye-opener and a chat with the grower, most interest-

ing and instructive.

PROCESSION OF BLOOM

Since all fall bulb catalogs contain a good list of the named sorts of the various varieties and species, with excellent illustrations and descriptions, it is generally quite simple to make one's selection from them.

Out of doors the Tulip display starts with the Single Earlies in early April and completes the show with the Cottage in late May. A succession of varieties should always be chosen.

TULIPS ARE LONG LASTING

When well grown, tulips in flower last longer than most other garden flowers. This, no doubt, is one of the good reasons for their popularity's

being retained for so many years.

Either as a garden flower or a cut flower they will last for at least twenty days from the time the color shows in the bud until the time when the flowers are fully and widely opened. In cloudy weather flowers last thirty days—and as a cut flower, cut in the tight bud, they will remain in perfect shape in a COOL room for twenty-five to thirty days.



INGLESCOMBE YELLOW

ONE-LEAF TULIPS

When tulip bulbs are used a second or third year many of them fail to flower, throwing up one large thick leaf only.

It is noticeable that this never happens to new bulbs from the grower; these can be relied on to give flowers 100 percent. It is therefore patent that this trouble must be caused by our mis-treatment of the bulbs at some time or other.

One of the reasons why many more tulips are not being grown in gardens here is that the bulbs seem to run out and quit flowering in a season or two. An erroneous impression is that inferior bulbs may have been the cause of this disappointment. The real reason, however, is that the plants are much abused unintentionally, especially just after the flowers are over. Provided the complete instructions given are carefully followed, there is no reason why your tulips cannot live for many years in the various parts of the garden.

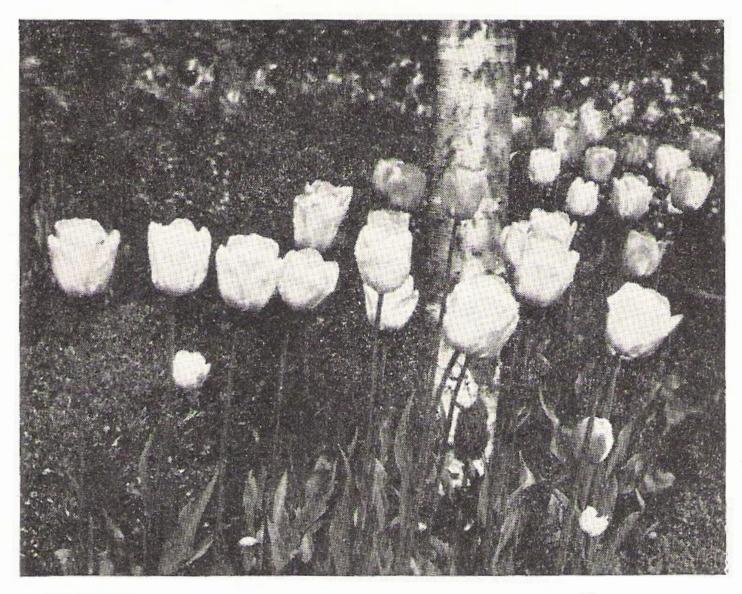
FIRE BLIGHT

Fire blight (Botrytis) is a disease which attacks certain lilies such as Candidum and Testaceum. It also is probably the worst tulip trouble in this country.

Several scientists have lately recommended that tulips be planted 9-10 inches deep (in good rich well-drained soil) and claim that by avoiding shallow planting the disease may be almost eliminated. The lilies mentioned

cannot be deep-planted.

Many growers have found by spraying the leaves of all susceptible plants and the soil around them with FERMATE, that the disease may be controlled practically 100 per cent—IF the application is made in early Spring.



ALBINO (White Giant) PLANTED AROUND A WHITE BIRCH

CUTTING THE FLOWERS

Tulips produce their leaves and flowers all on a single stem.

If properly cut at the right time they will last a long while indoors in water. Do not wait until the flowers have opened and closed up again. Cut them while they are still tightly closed. They will develop fully in water in which a piece of charcoal has been placed. When picking the flowers for indoor decoration, the stem should be broken by snapping or cutting just above the top leaf. On no account should any of the leaves be removed from the plant.

If greens are needed for decoration with the Tulips they should be

taken from some other plant.



"Bizarre" Tulips are one of the old-fashioned sorts yet found in many gardens

When Tulips are used entirely for garden display they generally last for 20 days from bud until they are "over".

AFTER FLOWERING

The faded flowers should be removed close to the top of the stem, preferably at the "neck", and before the plant begins to form seed pods. If the plant is allowed to go to seed, this unnecessary and wasted effort, causes a heavy drain on the vitality of the newly-forming bulb.

NEW BULB FORMED IN SUMMER

The foliage should be encouraged to remain green as long as is possible. During this period after flowering occurs the intensely important function of formation of the new bulb for next year. The next season's display depends entirely on the successful completion of the function, and the care given to it, culturally, will prove of great assistance.

The best system to use, is to avoid any disturbance of the plant until after the leaves have completely ceased to function. While there is foliage above ground that remains green, the tulip is able to continue to function naturally in the production of next year's bulb and to increase its size great-

ly, provided the ripening period is lengthened; not curtailed.

Should the foliage wither too soon, or be prematurely removed, there is no "factory" for the production of the material which is to be stored in the bulb until required for next season's flowering.

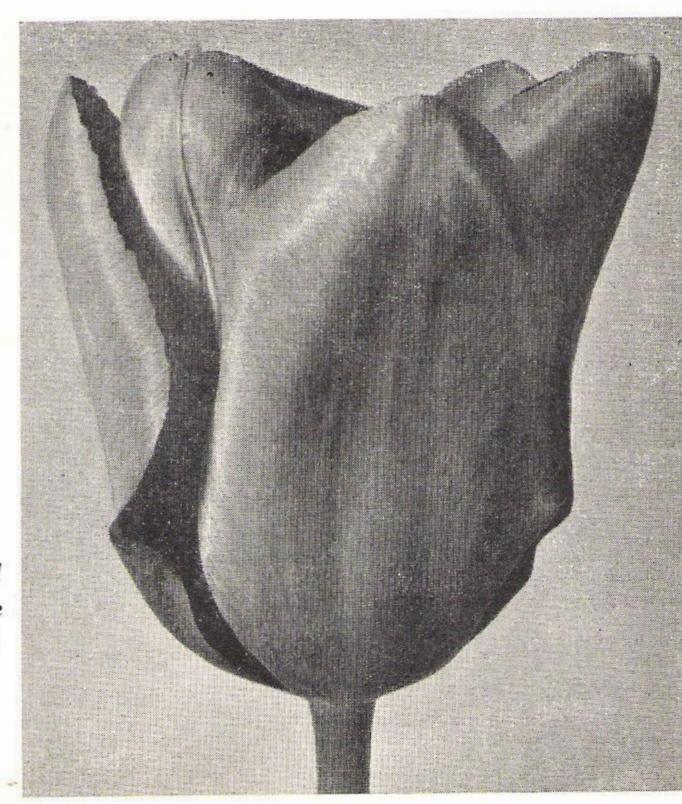
DON'T DISTURB

It is a mistake to lift or transplant tulips immediately after they have finished flowering.

Even though they be handled with the greatest care and "heeled-in" in some other spot, the root-disturbance and shock of moving causes such a severe stoppage of the function of complete new bulb production, that future results are bound to be very poor. The new bulb must be large and contain next year's flower in miniature in its center before the leaves' "building" job is done. After that the leaves (and bulb) should slowly ripen and be ready for lifting about the middle of July.

Actually, for a fine tulip display, it is as important to pay attention to feeding the newly forming bulb from April to July as to care for the feeding of the growing plant in early Spring before blooming.

Occasionally the tulips suffer from a disease known as "fire-blight". This disease causes the leaves to cease to function months too early, and the ultimate result is the same as if the leaves had been picked off—a poor bulb for next year. Fire-blight is quite often the cause of one-leaf tulips. General experience is that tulips grown in soil in which marl or other forms of calcium or magnesium have been used are much less likely to suffer from this disease.



Fiery Red Early Cottage (See page 69)

ADVANCE

Several tests in various parts of the country in recent years show that tulips that are planted too shallow are much more liable to develop fire-blight than those planted at the correct (9-10 inches) depth. Many commercial growers have to fight fire-blight, simply because they are unable to plant tulips deep enough for safety.

WHEN TO PLANT

The tulip is recognized as the last of the hardy fall bulbs to be planted. In this area the best time to plant the bulbs is from October 1st to November 15th. The most satisfactory time of all, by general experience, has proven to be the first week of November.

This is really quite a convenience, because one can remove Dahlias, Gladiolus, Cannas, Geraniums and the other summer flowers and set tulips right in the same areas.

ROOTS GROW ALL WINTER

Between early November and Spring, the bulbs must produce many roots, which will grow and become well established before any satisfactory top or stem growth can be made. It is of great importance to have a sturdy, healthy root growth, or the stored food in the bulb cannot be properly utilized in production of a handsome well-colored flower on a long strong stem.

HOW TO PLANT

Because of the need for inducing much winter root growth, strict attention must be given to careful and exact planting.

Drainage is of the greatest importance. No amount of good care is of any use to bulbs that are in a soil that becomes water-logged or muddy during winter. Under too-wet conditions the new root formation is delayed and if the bulb does not rot, it is damaged by suffocation.

Never plant tulips shallow and you will avoid many of the troubles which beset them (including moles). Tulips may be left for several years without replanting, provided the soil under and around the bulb is rich

and properly prepared when the bulbs are set out.

The bulb should be set between 8-9 inches below the soil level. Since its roots go at least six inches below the bulb's basal ring it is necessary to dig the planting hole at least 15 inches deep. The enriching of the soil below the bulb, where feeding takes place is of more importance than the conditioning of the soil above the bulb. Below the bulb it is necessary to incorporate ample humus and nourishment in the form of available plant foods mixed with rich compost soil.

Since all soils vary, it is impossible to give exact proportions, but a mixture of 50 percent good garden soil and 50 percent compost is best. Add to this some small pieces of charcoal, a handful of good organic plant

food and about the same amount of napthalene.

After the soil BELOW the bulbs has been carefully placed and well firmed, a thin layer of sand should be spread over it. The sand course should be nine inches below soil level.

Place the bulbs carefully about four inches apart on this sand, and then sift more sand around to just cover them.

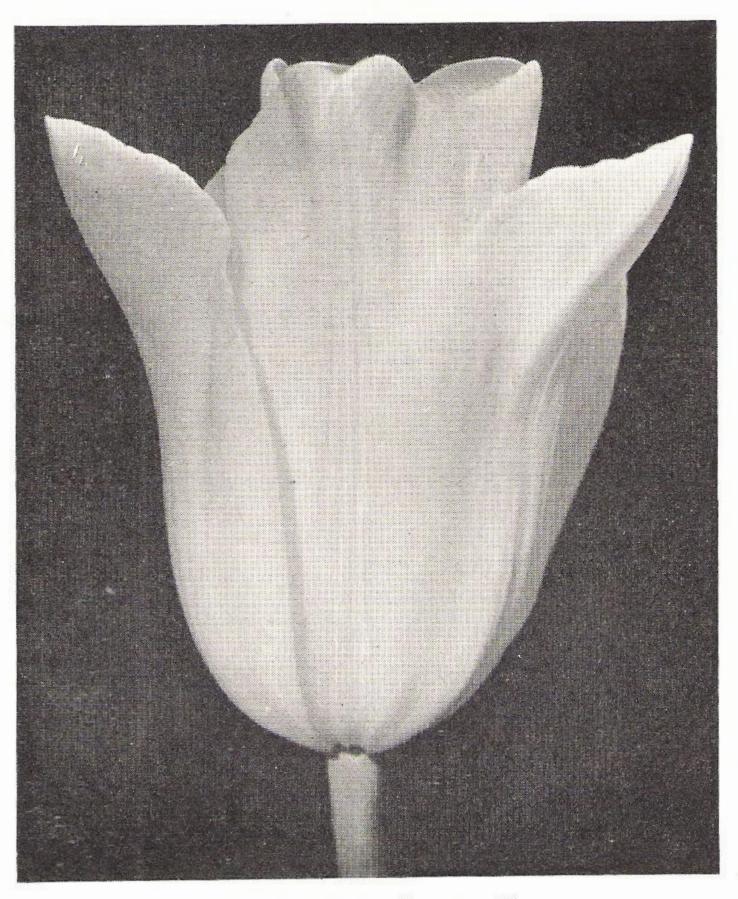
Before setting the bulbs, it is wise to dust the Basal-ring with a good root invigorating hormone.

Before the sand course is spread it is strongly advised that Napthalene be mixed thoroughly with it. This will prevent all soil insects from approaching the bulbs and will definitely eliminate mole trouble.

Moles, which are blamed for much tulip loss here each year, seldom go down to the 9-inch level at which tulips should be planted. It is the shallow-

set ones they usually bother.

If they ever did approach the tulip planting, the napthalene which is applied in the sand course, will definitely keep them away.



RED EMPEROR (See page 73)

The only requirement for the soil above the bulb is that it be good, but

light and porous.

The best fertilizer to use in the bed, below the bulb and above, before planting is a lasting one which contains a properly balanced supply of all the essential plant foods. Wood ashes, if procurable, should also be used in the soil preparation.

Tulips are one of the plants that thrive best in sweet soils. They demand some calcium, which is best supplied in the form of marl (calcium oxide) or lime (calcium carbonate).

Calcium is not only a plant food in itself but it acts as a catalyst in the soil, freeing many minerals by making them usable to the plants and thus

"conditioning" the soil.

Since most garden soils are slightly acid here, I believe that calcium should be used in every tulip bed.

WHERE TO PLANT

The only important point to watch when choosing the site for tulips is that they are able to obtain as much sun as possible. The more open the

space, the more exposed the position, the better the results will be.

Bulbs will give a very good account of themselves in almost any other part of the garden too, even on the shady sides of the house. The only position where they are unable to respond favorably is when they are planted under the shade or drip of evergreen trees or shrubs.

NATURAL SURROUNDINGS

In many gardens, companion plants are used. This means of covering the ground prevents the display's looking too heavy and severe, and serves to

help them appear "at home" and natural.

There are many plants that are used successfully with tulips. The most generally used are forget-me-nots, Winter-blooming Pansies and some lowgrowing annuals, such as Baby Blue Eyes, Nemophila-lobelia, candytuft

or Alyssum.

After the tulips are over and their flowers picked, the "companion" provides a pleasant show and camouflages what would otherwise be an ugly spot due to the finishing and ripening of the tulip's leaves. The "companion" should be planted in between the tulips and as a border around them as well.

A Few Fine Combinations Are:

Clara Butt Tulips and blue Forget-Me-Nots.

Niphetos and pink Forget-Me-Nots.

Pride of Haarlem and white Forget-Me-Nots.

Scotch Lassie and vellow Pansies.

Mrs. Moon and blue Pansies.

Red Emperor and blue Lobelia.

Peach Blossom and white Candytuft.

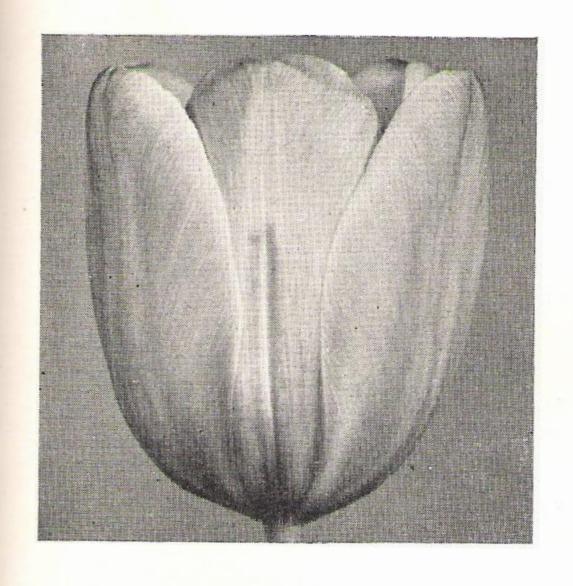
IN THE GENERAL GARDEN

A group of any one variety, placed in the herbaceous border will flower before the first of the perennials are making a display. Groups dotted here and there will add brightness and color to that part of the garden which ordinarily does not begin its flower display before June.

WINDOW BOXES IN SPRING

After the summer flowers in window boxes are all over, it is becoming quite general to prepare the boxes for a winter-spring display so that they may be enjoyed for all twelve months of the year.

In late October the window boxes are cleaned out and fresh rich soil placed in them. Winter-blooming plants and small evergreen shrubs are



General de Wet
Single Early Tulips
are lovely in
window boxes in early
Spring

then set in the boxes. Small Thuya, Winter flowering Heather and Winter-blooming Pansies are generally used.

Between the shrubs and heathers the Pansies are planted with Tulip bulbs set underneath them. Care must be taken that the tulips are short ones, or the display would be too leggy. The varieties used in window boxes are the Single Early and Double Early sorts. Colors must be chosen to suit the taste and to blend with the Pansies, which will be a riot of bloom all winter. In April the Tulips thrust their heads through the Pansies to produce a gorgeous and colorful display. Two varieties of the many charming sorts that have given much satisfaction are Keizerkroon and Red Emperor.

If blue colors predominate in the pansies, the tulip varieties Fred Moore or DeWet are best, but if yellow pansies are used, such tulip reds as Vuurbaak (double scarlet) or Couleur de Cardinal (single crimson) are best.

The double sorts are invariably very sweetly scented and their odor combined with that of the pansies, wafted through an open window on a spring morning, is incomparable.

ROCK GARDEN SORTS

There are more than a dozen sorts listed in all bulb catalogs that are generally termed "specie" tulips. They are used to bring early color in splashes to the rock garden. Great care should be taken that the bulbs are planted properly in the rock garden pockets, that they may thrive undisturbed for many years.

In my own garden I have a rather dry bank on which "Greigii" stands out of a carpet of the Vinca minor early each Spring, with brilliant effect.

Groups and Varieties of Tulips

Tulip flowers generally last for about 20 days in the garden. Provided a carefully planned selection of the various types and groups is made, Tulips may be relied on to provide a fine display during the whole of the months of April and May.

Great care has been taken in compiling this tulip list to omit all varieties that are subject to disease. Those recommended are eminent in their disease-free qualities.

DWARF EARLIES—Among the first to bloom are the Single Early and Double Early groups. These both grow about 15-18 inches high and flower in early April. They are mostly used in low beds in a lawn center or as a low border to shrubs or perennials. Another good place for EARLIES is in window boxes or porch boxes. They are just the right height for this type of planting.



KEIZERSKOON

Among the best varieties are:

Single Earlies

KEIZERSKROON—Brilliant crimson-scarlet deeply edged bright yellow. Handsome large flower on long stem; fine bedder; good forcer.

GENERAL DE WET—Large, sweet-scented flowers of deep orange with golden yellow center. Sport from Prince of Austria. Unique color scheme very showy. Erect stem gives variety an appropriately military bearing.

COULEUR CARDINAL — Rich crimson-scarlet with outer petals shaded a plum hue. A splendid bedding tulip; excellent for mid-season forcing.

Double Earlies

MR. VAN DER HOEFF—The finest primrose-yellow double tulip for forcing. A pure yellow Murillo. Sweetly scented flower is full and large.

PEACH BLOSSOM — Murillo sport, bright pink double flowers, flushed white. The large flowers deepen in color with age to a carminerose. Excellent for pots; recommended for forcing and bedding.

VUURBAAK—Finest of all double scarlet tulips. When fully open flowers take on orange sheen. Recommended highly for bedding.



Cottage Tulips are not as tall as Breeders and Darwins and may be used in many "show places" in the garden

COTTAGE TULIPS—are among the oldest of all present types. They vary from the sleek lily flowered ones, to the goblet-shaped varieties. They are the ones which graced European and American gardens about 200-250 years ago. There are two groups in this class: the EARLY COTTAGE and the COTTAGE (later). The EARLY Cottage sorts flower in midlate April. This group is shorter stemmed than the (later) Cottage sorts, and is slightly honey-scented.

Among the best EARLY Cottage sorts are:

ADVANCE—A gorgeous new Hybrid, introducing into the Cottage strain the blood of Tulipa Greigii, the fieriest red of the Botanicals. Giant flowers are blazing red with blackish blue base.

ALBINO—Large, exquisitely formed flowers of pure, clear white with ivory colored anthers. Of excellent substance and perfect for cutting. Its moderate height fits it for the front of a border planting.

The COTTAGE varieties flower around May first. This is the time when Darwins are about through so they act as a bridge of color to intro-

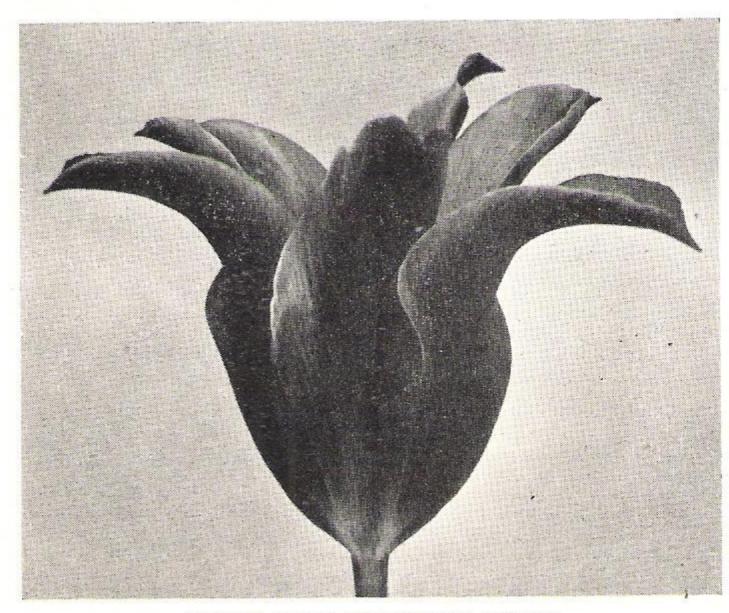


The delicate
"honey" scent of the
Cottage Tulips
adds to their charm

PICOTEE (Cottage)

duce the Breeders. Again there are many popular, much loved Cotttage varieties with many bright and light colors which provide a foil for the deeper shaded Breeders. They have long 24-30 inch strong stems which carry perfectly formed flowers. Incidentally, this group is the most hardy and pest-free of all tulips. Many well known and liked sorts include: Lily Flowered Cottage Tulips

SIRENE—Hour glass shape of rose pink with pale pink at petal edges. Pure white base. Beautiful in the garden and unsurpassed for cutting Exceptionally fine show specimen.



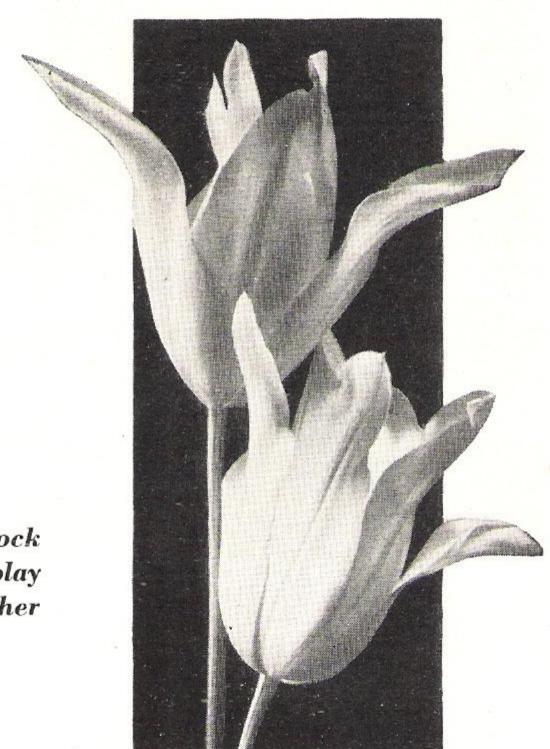
SIRENE (LILY-FLOWERED TULIP)

PICOTEE—Typical Cottage tulip. Creamy white, edges penciled with carmine and base of pure gold. Graceful, recurved petals.

MARTHA—Delicately curved petals of crimson-carmine with bluish margin. White base.

Cottage Tulips

MRS. MOON—Outstanding among yellow tulips. Vase shaped flowers with pointed petals are deep lemon-yellow in color. Medium tall tulip, beautiful for borders.



Mrs. Moon and Red Rock make a spectacular display when planted together

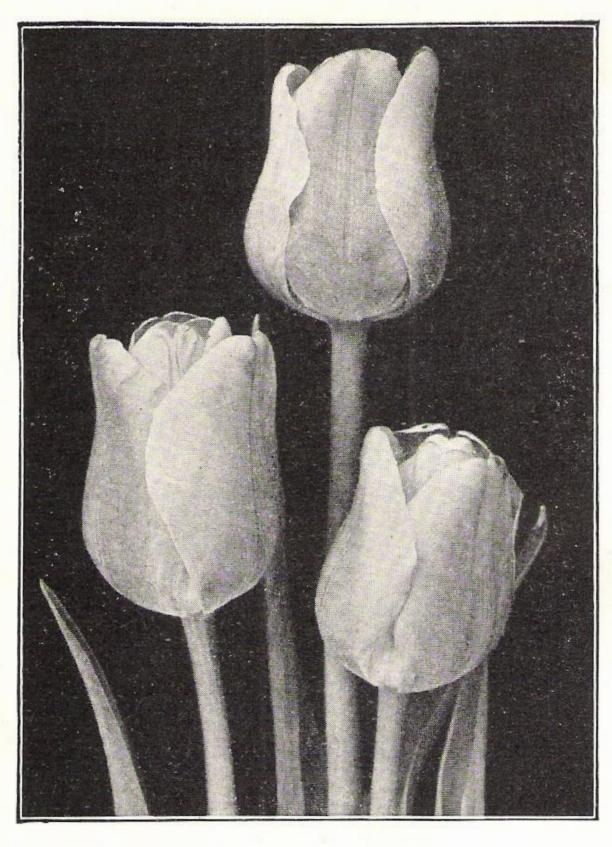
RED ROCK—A fitting companion for Mrs. Moon; same height and shape with a brilliant scarlet hue. A spectacular variety.

ORANGE KING — Brilliant orange-scarlet. Good substance, well formed flowers on strong stems. Most effective when grown in a planting apart from other colors in a scarlet blaze all its own.

The DARWIN varieties are the most popular nowadays. Well grown, they have 30-inch sturdy stems which stand stiffly upright and carry huge tulip-cups with short petals which appear to have been trimmed to produce the "cup" appearance. This Darwin group was practically the only sort used in most gardens during the past three decades.

Among the most popular of the several hundred DARWIN sorts are:-

WHITE GIANT is, as its name implies, one of the tallest and most stately of the pure white tulips to flower in May. Its flower is in the correct cup-shaped Darwin form. Stems are strong and stiff. Petals are large and



Erectly held flowers on long, strong stems characterize the Stately Darwins

thick. One of the best for planting with evergreen shrubs as a background. Fine cut flower. Keeps well indoors.

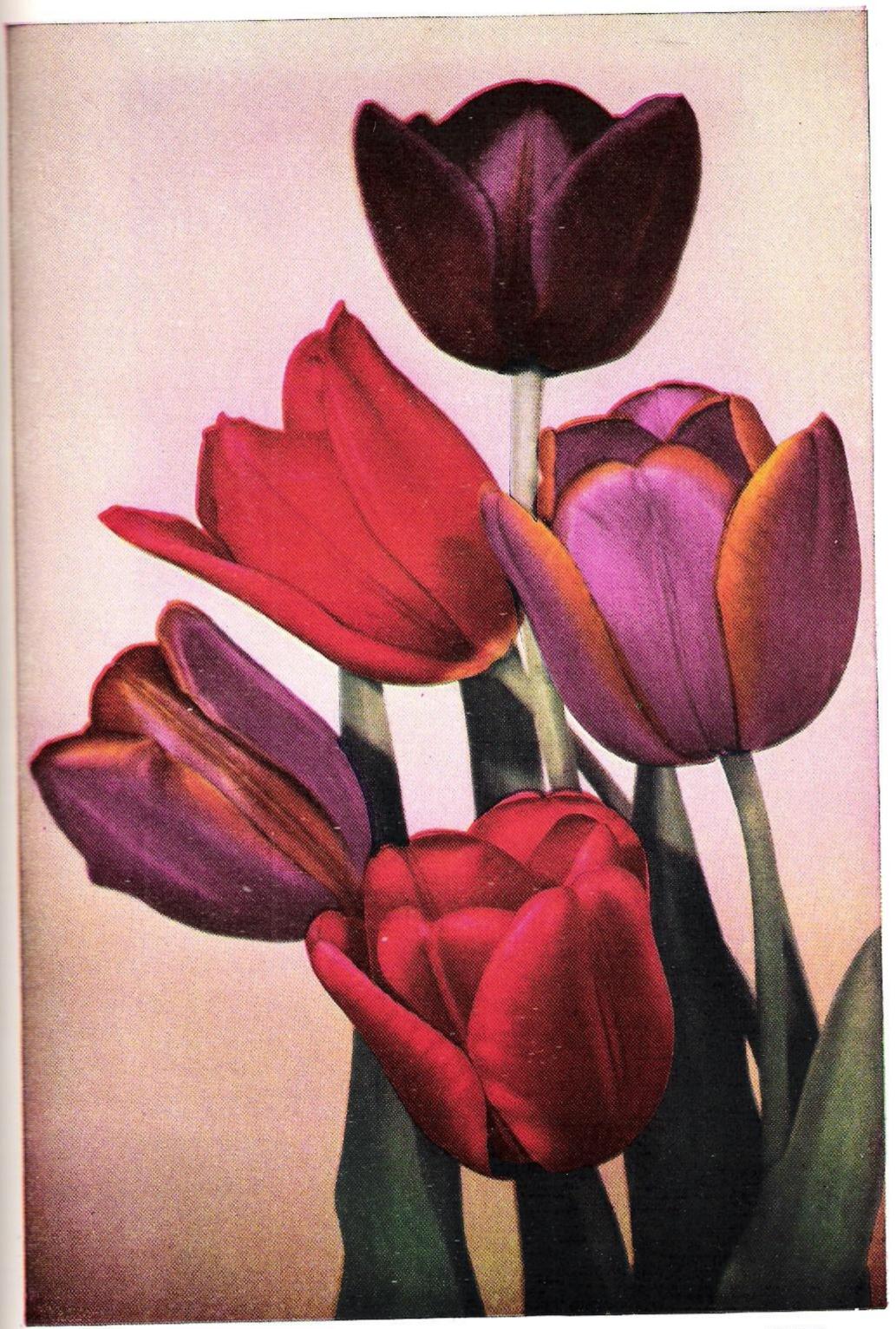
ZWANENBURG is another pure white with an immense flower, which has longer petals than the usual Darwin type. Stem is stiff and strong, but shorter than White Giant and therefore useful where too-tall flowers would be out of place. One of the earliest Darwins to flower.

ALLARD PIERSON has flowers on 30-inch, strong stems. It is early to flower like Zwanenburg. A rich cardinal red which holds its form and color for a remarkably long time, either out doors or as a cut flower.

CITY OF HAARLEM has a dazzling pure scarlet flower with striking steel-blue and white center. Stems are long and strong. One of the most outstanding and reliable of all red Darwins.

FARNCOMBE SANDERS has a handsome, cup-shaped flower of beautiful geranium-scarlet, tinged rose with a white base. Handsome long, strong stems which stand stiffly, making it an ideal variety to plant against a green background, especially in masses.

PRIDE OF HAARLEM produces enormous well-formed flowers of a rich deep rose, shaded scarlet with blue base. Long sturdy stems. Ideal for cut flowers or garden display.



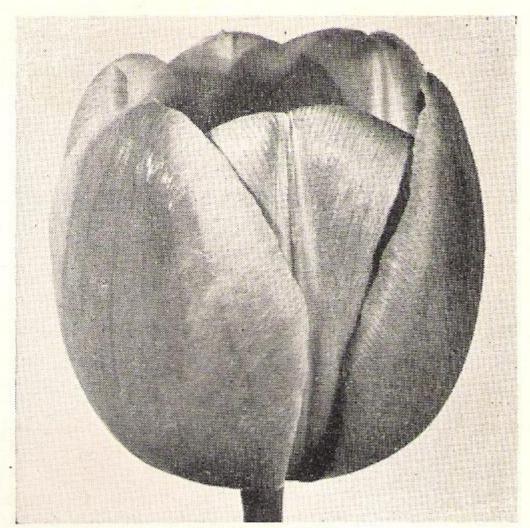
LA TULIPE NOIRE, SCARLET EMPEROR, LOUIS XIV, BACCHUS, KING HAROLD



HYACINTHS



CARPET OF MUSCARI
74



Clara Butt has been popular for nearly 50 years

CLARA BUTT

CLARA BUTT—The standard popular pink, with a true Darwin cupshaped flower. Blooms have a salmon tinge.

PRINCESS ELIZABETH is a very beautiful, clear pink with a lighter edge which gradually changes to a rose pink. Has a white base. Large flower is held up stiffly on strong stems. An outstanding variety to plant against dark backgrounds.

INSURPASSABLE is one of the newer sorts with a true lilac color. Gigantic flowers of great substance are carried on strong, tall stems.

SCOTCH LASSIE—One of the shorter types. Color is a deep lavender with a darker tone on the inside of the petals and a dark blue base. It flowers very early for Darwins. Flowers last three to four weeks. Petals reflex slightly as they open fully.

QUEEN OF THE NIGHT is considered to be the finest of all the BLACK TULIPS. Large, very dark flower on a strong, tall stem.

YELLOW GIANT— A regal, bright yellow, true Darwin-shaped flower with dark, almost black, colored base. Flowers early for a Darwin, yet one of the tallest. Flowers last long, either indoors or out.

NIPHETOS—An outstanding, brightly colored lemon-yellow flower with lighter base. A perfectly formed flower, carried on long strong stems. Its slightly reflexing petals have great lasting qualities.

MOUNT EREBUS—Outstanding white tulip with white anthers. A striking beauty with large blooms. One of the most popular of the newer, reasonably priced sorts.

ARISTOCRAT—Purplish rose blooms with edges and inside currantred. Truly an outstanding recent introduction. BREEDER TULIPS have much the same habit and growth as Darwins. They flower a little later and provide many of the lovely bronze, yellow, purple, brown and black colored varieties which are lacking in the Darwins. Breeder "cups" are longer and the petal points are closer together at the top, making a much more effective and charming flower.

Most of the popular sorts of Breeders have graced many gardens for the past 25 years and they are still new and intriguing as a pleasant variation from the Darwin group.

Among the still outstanding sorts are:

INDIAN CHIEF—A most artistic flower, carried on a very tall stiff stem, reddish purple flushed with coppery brown. Considered the finest and largest of all the best Breeder Tulips.

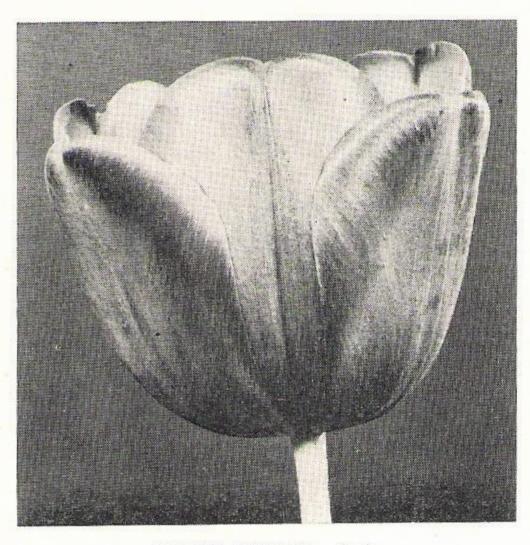
DOM PEDRO—Coffee brown on a cadmium yellow background; interior is dark reddish mahogany; yellowish base streaked olive; filaments, olive. A beautiful large fragrant flower. Combines wonderfully with the lighter varieties.

CARDINAL MANNING—One of the largest Breeders. In color it is a blend of wine red and rose bronze changing to an almost pure orange at the petal edges. Base is yellow.

PINK PEARL—Clear pink shading to brilliant rose with center of pure gold. Immense blooms and a marvelous keeper and show flower. No doubt the finest pink Breeder.

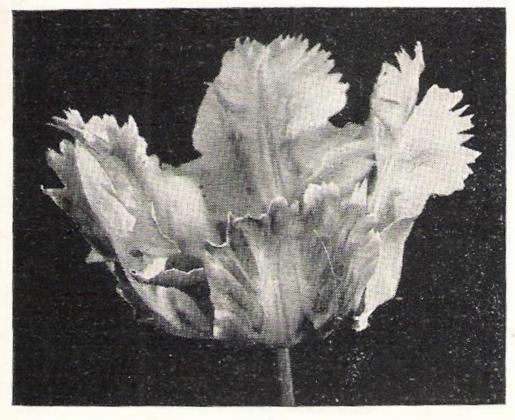
PRINCE OF ORANGE—Large, showy, well-formed globular flower of bronzy-rose shading to orange. Base is bright gold on brown. Is late, a good keeper, and has rich wall-flower fragrance.

LOUIS XIV—Very large, goblet-shaped flower. Magnificent color blending gives the bloom a color of dark bluish violet with golden brown tawny margin and dull blue base, starred yellow, with bronze lights.



LOUIS XIV (Breeder)

Louis XIV is gorgeous when the sun shines on it. Combines well with other colors



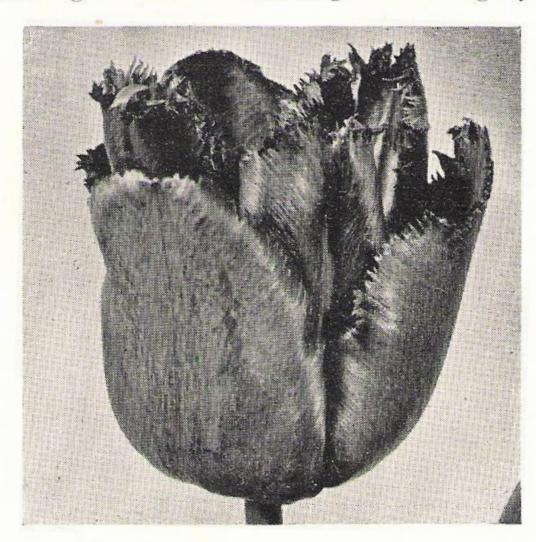
The new colors in Parrot Tulips are intensely popular, and spectacular

PARROT TULIPS are highly decorative with their large flowers of unusual form and brilliant coloring. The petals are deeply laciniated, giving a ruffled effect, and the interesting green markings on the backs of most petals add to the flower's exotic, artistic appearance. The new Parrot varieties, some of which are listed, all have heavy, firm stems to keep the flowers erect, unlike the older varieties. The Parrots are very suitable for cutting and they are so entirely different from all other flowers that they provoke the startled admiration of all who see them. A novelty in the garden.

Among the newer varieties are:

FANTASY—Good stem of medium length. Color based on the pure salmon pink Clara Butt (of which it is a sport) but with the fantastic shadings and the fringed and laciniated edges that distinguish all Parrot tulips. Its inner coloring is a deep soft rose, and the outside petals are curiously marbled with shades of tender green.

VIOLET QUEEN—One of the best of the new colors in Parrot tulips. A breathtaking violet-colored Fantasy type with same markings, height, habits, and time of blooming. Strong stem carries the large flower regally.



Sundew is not a real Parrot Tulip, but is most brilliant in color and form

BLUE PARROT—A glorious Parrot Tulip of bright violet shaded steel blue. This unusual flower is large and carried erect on a strong 30-inch stem. A rare novelty.

RED CHAMPION—A brilliant deep-red colored flower not quite so large as Fantasy. Borne on a strong stem. Elegant form.

SUNSHINE—Clear golden yellow, deeply laciniated and cut, sometimes a slight marking of green which enhances the beauty of this unusual flower.

THERESE—Bright carmine with green markings on outside. Inside of flower is a vivid cerise-scarlet with white center, tinted blue, and black anthers. Very frilled. A brilliant and artistic novelty.

ROCK GARDEN TULIPS are generally listed in catalogs as "SPECIES" tulips. They are suitable for any garden spot where dwarf, brilliantly-colored flowers are needed as "accents". They are particularly suited to rock garden pocket planting where, in clusters of 6 or 8, they provide a charming color "splash" before the green mat-like garden perennials begin to show their color carpets. Most of the flowers are unusually large for the short stubby stems. The flowers are generally long and pointed in bright colors, such as:



Actually looks like a baby Water Lily when used as a cut flower in a floating bowl

TULIP KAUFMANNIANA

KAUFMANNIANA—Exotic tulip from Central Asia called WATER LILY tulip. Large flowers of striking beauty. Broad and reflexing petals are creamy white with varying amounts of carmine red on the reverse and a golden yellow center. Earliest to flower of all tulips.

CLUSIANA (The Lady Tulip)—Small flower with cherry-red outer petals, white inner petals, violet center and dark blue base. April flowering.

EICHLERI—Splendid, large crimson-scarlet flowers, yellow and black center, glittering black base. Extremely early and showy. Light green attractive foliage; effective in the flower border or rock garden.

RED EMPEROR—Gigantic flower of dazzling scarlet is often five inches high and nine inches across when open. Carried on strong stem. Very early, blooming with many of the daffodils. A Hybrid from Tulipa Fosteriana. It is often found listed in catalogs under its other name of Madame Lefeber. Its flowers are about the same length as the stem making it an invaluable subject for bringing bright color to a Rock Garden in April. Its short stem also makes it excellent for growing indoors in pots.



Garden Lilies

FOR FLOWERS ALL SUMMER

THERE ARE SEVERAL kinds of lilies that grace our gardens with flowers as early as June 1-10. Others do not bloom until just before frost. During the whole of the summer season it is possible to have several sorts flowering and providing a continuous display each month, until frost.

FRAGRANCE

Indoors the odor of some lilies is somewhat overpowering, but in the garden their sweet perfume brings memories of Grandmother's garden.

Regale, Auratum and the Madonna are the most fragrant sorts but all are sweetly scented. All the kinds listed have been chosen for the reason that they are also deliciously fragrant.

Lilies are one of the few flowers that are found growing wild all over the world. Their distribution may well be accounted for by the fact that the bulbs are edible and have served as a source of food supply universally.

COPY NATURE'S WAY

The conditions and location in which the lilies are found growing wild here will show you exactly how they should be treated in your garden.

As long as the soil is fairly rich, the best place in the garden to grow lilies is in the perennial border, where the other flowers are growing quite closely together and are able to take the place of nature's protection.

Another highly successful and highly attractive way to use the lilies is in a bed of Azaleas or Rhododendrons. If several sorts are chosen and planted between these flowering shrubs they give a brilliant effect when the beauty of the shrub's flowers is over and their leaves form a fine setting for the lilies' stately flowers, which always stand well above the shrubs on their long strong stems.

Although it is often considered that Rhododendrons and other shrubs should have an acid soil and lilies should not, it is quite easy and possible to grow both lilies and shrubs in the same place providing the soil is deep and rich and that no lime has been used.



Cultural Hints

MOST LILIES are quite easy to grow. Many have the idea that they are hard. It is true that some of the rarer sorts need more than usual care and that some imported kinds seem to disappear after the first season.

Provided the selection is made from hardy varieties such as those listed and that the bulbs purchased have been acclimated by being grown locally, no trouble should be experienced in their culture.

American grown bulbs are far superior to imported ones; they are healthier and much more certain to give satisfactory results.

TIME TO PLANT

The very best time to plant lily bulbs is in October or November, at the same time as tulips. Their description is given to enable you to check them through the summer and have their places planned so that they are able to be used as fill-ins for the permanent flower border.

Planting

SINCE most lily bulbs naturally are found placed quite deeply in the soil, the bed should be prepared by digging a very deep hole. In the descriptive list that follows, the actual depth of the bulb below soil surface

is given. The hole should be dug much deeper than that, and the soil below the bulb, where the roots feed, should be rich, well-mixed and well drained, so there is ample room for a heavy root growth.

Unless lilies make a heavy root growth, the resultant flower display

cannot be anything but mediocre.

An ideal soil mixture is made by using two parts good garden soil, one part coarse sand, two parts Leaf mold or Peat moss.

The sand-charcoal combination is used to promote sweet, comparatively dry conditions in the immediate neighborhood of the basal plate.

The stem rooting sorts also need rich soil above them to provide for good stem-root growth too.

BULBS AND ROOTS

Most of the lily bulbs generally used, such as Auratum and Regale are nearly always purchased for the size and plumpness of the bulb. It is important, too, to see that there are plenty of long thick string-like roots attached to the bulb. These roots are of great importance. If they are missing, the bulb has to form fresh ones before it is able to give successful results. The more thick roots the better, and when planting see that they are carefully placed in the soil and that there are no air pockets below the bulb. If the roots are lacking, give the bulbs two seasons to grow new roots before they can be expected to produce the maximum flower display.

When you buy bulbs, handle them with great care. Their scales are

quite brittle and must never be broken off.

DEPTH TO PLANT

It is very important that lily bulbs are planted to exactly the correct depth. Failure is often traced to lack of sufficient care in measuring the proper depth. The measurements given are from the bulb to soil surface.

The lily family is divided into two main groups, stem rooting and base

rooting, each requiring a different planting depth.

A depth of 6-8 inches to the top of the bulb for the stem rooting

sorts and 3-4 inches for the base rooting varieties is recommended.

Base rooting lilies require a far greater amount of available plant humus in the soil under the bulb. Because of the fact that the root structure has been removed or destroyed the bulbs often are quite disappointing for the first season or two, or until they have built a new set of roots.

FERTILIZERS

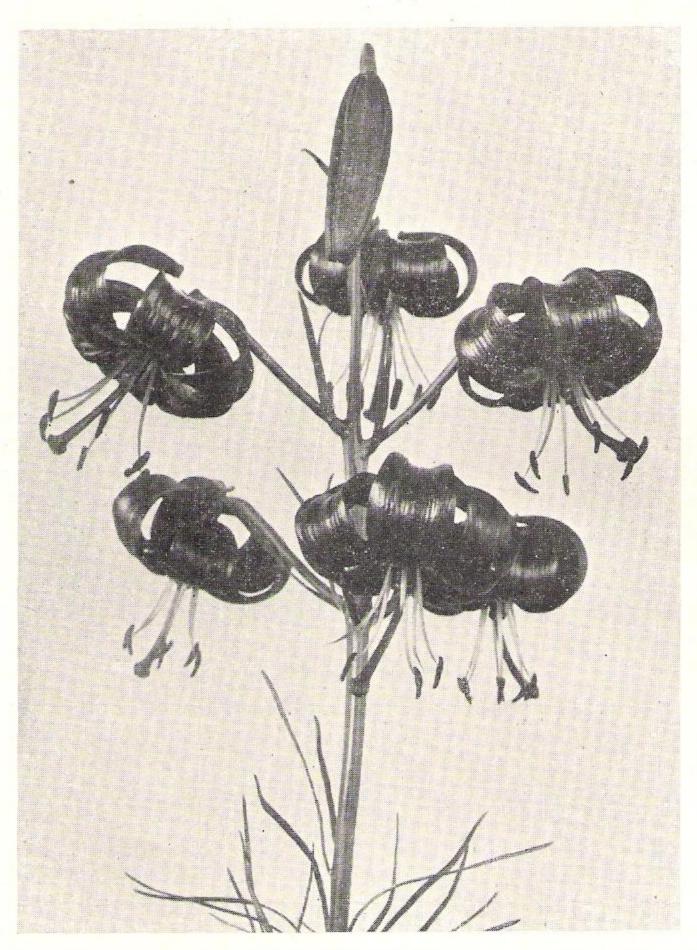
Never mix fresh manure into the soil where lilies are planted; for the soil's humus content, peat moss or leaf mold is best. Peat moss should also be used as a summer mulch to simulate the natural mulch which keeps the roots cool and protected all summer.

Mix a good commercial fertilizer into the soil around the bulbs when planting, especially under them, so that they will not lack for available

food when spring growth is being made.

Lilies are much heavier feeders than is usually supposed. Besides the initial feeding, it is strongly recommended that the gardener apply a good complete commercial fertilizer two or three times during the growing season, as a top dressing. Stop feeding by Labor Day.

A Baker's Dozen Hardy Lilies



L. TENUIFOLIUM

A RRANGED IN ORDER of season of bloom—heights indicated vary a little, depending on location and soil conditions.

LILIUM TENUIFOLIUM (Coral Lily). This is one of the prettiest little lilies in cultivation. It has lovely nodding deep coral-red flowers with reflexed petals.

This variety should have full sun to prevent "legginess". The colors will not fade in the sun. The varieties Golden Gleam and Red Star are good variations and are usually available. The correct botanical name for this species is now Lilium pumilum. Stem rooting.

Location—Half shade. Soil—Any well-drained garden soil. Height—18 to 24 inches. Season of Bloom—June. Depth to Plant—4 to 5 inches.

LILIUM WASHINGTONIANUM (Mount Hood Lily or Shasta Lily). This lily is a native of Oregon, and is one of the finest lilies. The flowers are white, flushing to light purple after they open up. It generally takes two years after planting before it shows its real quality. It is really easy to grow, but don't get impatient if it does not make any showing the first year. Stem rooting.

Location—Half shade. Soil—Very deep, well-drained sandy loam. Height—4 to 5 feet. Season of Bloom—June. Depth to Plant—8 inches.

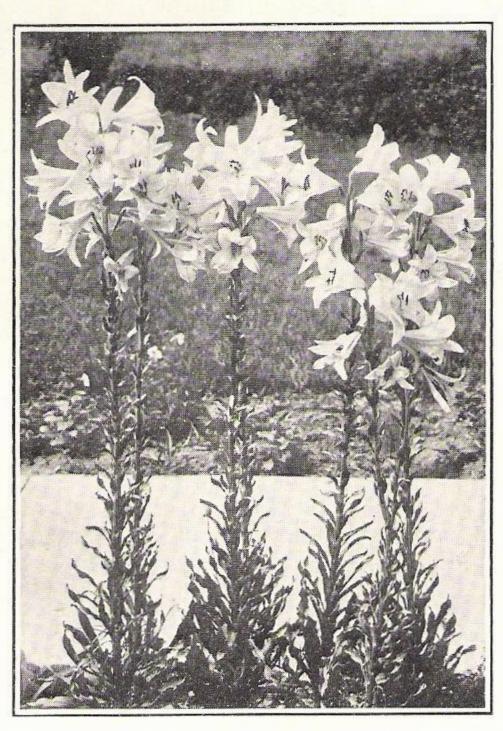
LILIUM ELEGANS (Dwarf Russian Lily) and L. DAURICUM (Candlestick Lily) belong to a group of short stemmed lilies which carry their flowers clustered and facing upwards atop the stem.

This group is one of the easiest to grow and makes a fine early show in

garden or rock garden.

There are many new hybrids and seedlings now available that are far superior to the older sorts. Flowers vary from deep crimson to pale yellow—mostly spotted. Stem rooting.

Location—Sun. Soil—Well-drained garden soil. Height—2 feet. Season of Bloom—June to July. Depth to Plant—8 inches.



L. CANDIDUM (Madonna Lily)

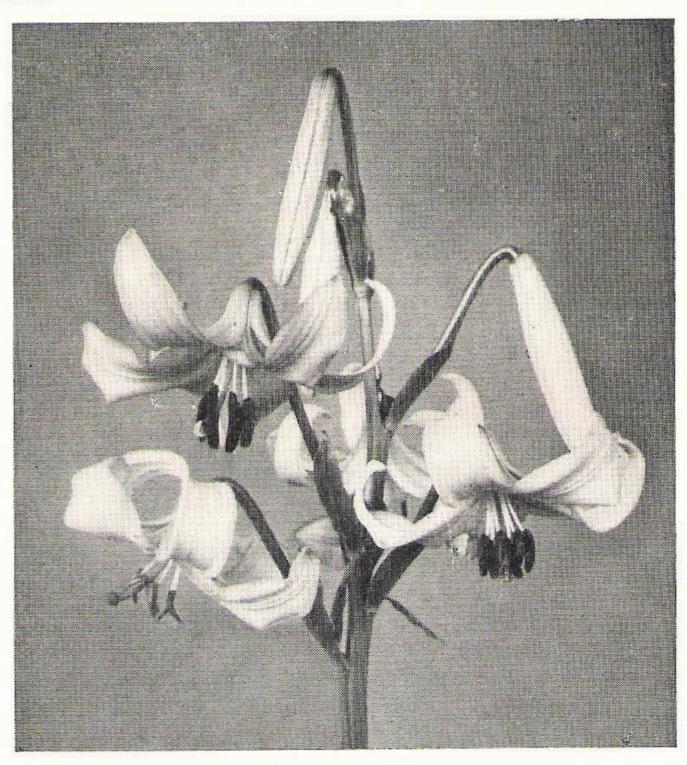
LILIUM CANDIDUM (Madonna Lily). This is one of the oldest species found in gardens, and has pure white fragrant flowers with golden stamens. This lily must be planted in August, as it starts its growth in the fall.

It is dvised that, in areas where the Botrytis (Fire Blight) disease is

prevalent, this variety should be planted right out in the open. This will

lessen the trouble as much as possible. Base rooting.

Location—Sun. Likes feet shaded. Soil—Any well-drained, rich, sandy garden loam. Height—4 to 5 feet. Season of bloom—June. Depth of Plant—3-4 inches.



L. TESTACEUM

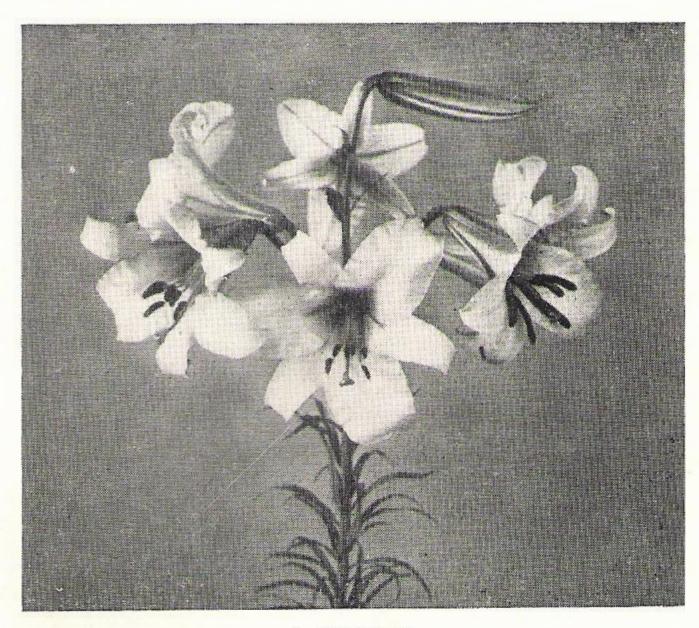
LILIUM TESTACEUM (The Nankeen Lily). This lovely early lily has the form and style of one of its parents, the "Madonna". Delicate buff, flushed pink flowers on tall graceful stems. Base rooting.

Location—Sun. Soil—Well-drained, rich, sandy loam. Height—4 to 5 feet. Season of Bloom—June-July. Depth to Plant—3 to 4 inches.

LILIUM PARDALINUM (Leopard or Sunset Lily). This lily is a native of Oregon and California, and is very easy to grow. It produces many beautiful recurved flowers of orange, spotted darker, and getting red towards the tips of the petals.

The SUNSET Lily is L. pardalinum giganteum and it is always preferred because of its greater vigor, size of plant and much larger flower. Base rooting.

Location—Half shade. Soil—Moist, well-drained, sandy loam. Dislikes lime. Height—4 to 6 feet. Season of Bloom—June. Depth to Plant—6 to 8 inches.



L. REGALE

LILIUM REGALE (Regal Lily). This lily was discovered in Western China only a short time ago, and yet today is found in most gardens. It is absolutely hardy and very easy to grow. Its trumpet-shaped flowers are white, suffused with pink, with canary-yellow center. It has a delightful perfume like Jasmine, and lacks the oppressive odor of most lilies.

White trumpet regales are now available; they are superior to the old "Regal" and extend the season for three to four weeks. These new strains include the regale-Sargentiae-leucanthum-centifolium species in their parentage. Improved flower form, placement, color and vigor of the plant make them desirable additions to the regale group. Stem rooting.

Location—Sun. Soil—Any well-drained rich sandy garden loam. Height—5 to 6 feet. Season of Bloom—July. Depth to Plant—8 inches.

LILIUM AURATUM (Golden Japanese Lily). Is undoubtedly the most stately and aristocratic of all garden lilies.

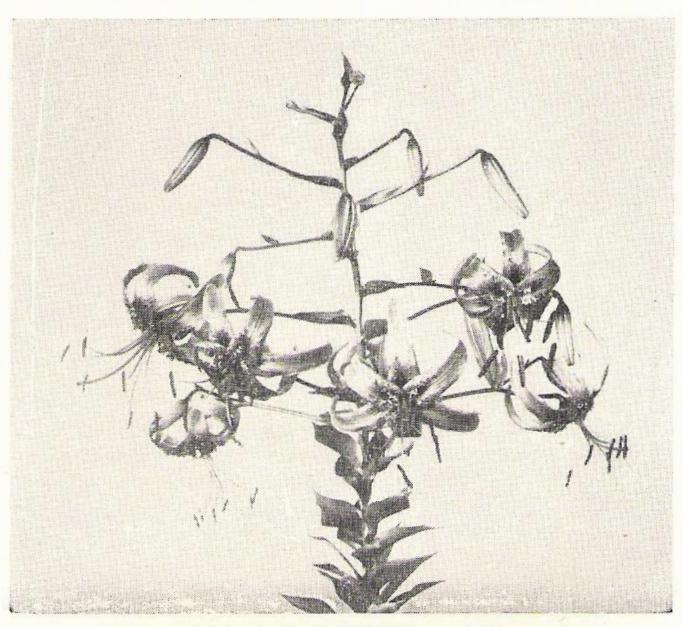
Its large, graceful flowers are composed of six petals of a delicate ivorywhite color, thickly studded with chocolate-crimson spots and striped through the center a golden yellow. Flowers are intensely and beautifully fragrant.

Recently several growers on the Pacific Coast in British Columbia, Washington and Oregon have produced a strain of this erstwhile Japanese Lily which does not suffer the "rot" which was the general cause of garden failures after the first year.

The "Esperanza" type originated by Alwyne Buckley at Langley Prairie on the Fraser River in British Columbia is one of the most outstanding.

Stem rooting.

Location—Open, but shaded from afternoon sun. Soil—Very deep, rich. and well-drained. Height—6 to 7 feet. Season of Bloom—July. Depth to Plant—10-12 inches.



L. HENRYI

LILIUM HENRYI. A Himalayan Lily, quite easy to grow. Once it is established it is quite permanent. Its form and appearance is the same as the Speciosum varieties, but the flowers are a bright orange-yellow or deep buff. Often termed the orange speciosum. Stem rooting.

Location—Half shade. Should get only the morning sun as the flowers burn if exposed too much. Soil—Deep well-drained soil. Height—5 to 6

feet. Season of Bloom-July to August. Depth to Plant-8 inches.

LILIUM WILMOTTIAE. A tall and graceful type with many spotted reddish-orange flowers on a stem. Particularly effective when planted among shrubs. Vigorous. Stem rooting.

Location—Sun. Likes feet shaded. Soil—Any well-drained garden soil. Height—5 to 6 feet. Season of Bloom—August. Depth to Plant—8 inches.

LILIUM LONGIFLORUM. The Easter Lily, one of the hardiest. Pure white flowers that need no description. Stem rooting. In this group should be mentioned the "CROFT" and the "CREOLE" varieties, which are grown in this country and have definitely taken the place of the imported Easter Lily bulbs. Some strains have shorter stems than others. All are perfectly hardy garden lilies.

Location—Sun. Soil—Any well-drained garden soil. Height—4 feet.

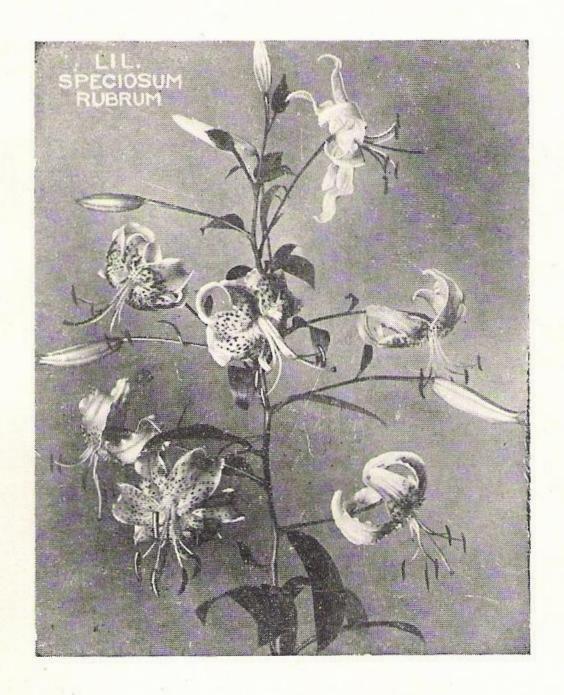
Season of Bloom—July. Depth to Plant—8 inches.

- LILIUM TIGRINUM. (Tiger Lily). The flowers are large with bright salmon-red blooms, spotted purplish-black. It is very hardy and very easy to grow, making a much finer display than the old-fashioned Tiger Lily.

There is also a startlingly attractive double form of the Tiger Lily

which will soon be available again. Base rooting.

Location—Sun. Soil—Any well-drained garden soil. Height—4 to 5 feet. Season of Bloom—September. Depth to Plant—8 inches.



LILIUM SPECIOSUM RUBRUM. A beautiful lily and easy to grow. The large white flowers are suffused with rose, pink, and spotted crimson, with a green band through the center of the petals. Stem rooting.

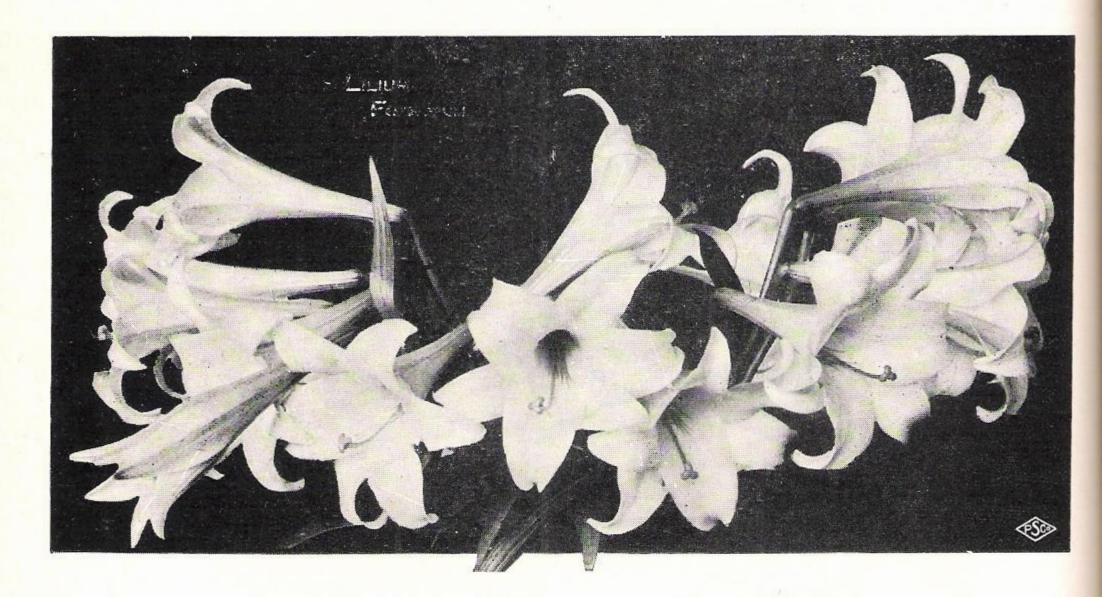
Location—Half shade. Soil—Deep, well-drained soil. Height—4 to 5 feet. Season of Bloom—September. Depth to Plant—7-8 inches.

There are several other fine hardy lilies which come in the class of easy culture. All are excellent subjects for the home garden.

They are:

- L. amabile
- L. amabile luteum
- L. concolor and its varieties
- L. martagon
- L. martagon album
- L. Shuksan and the Bellingham hybrids
- L. speciosum album
- L. Formosanum

Easter Lilies Are Garden Lilies



THE VARIOUS forms of the well-known Easter Lily are all developments of one outdoor Japanese species, L. Longiflorum. This variety and its subdivisions, the L. harrisi, L. formosum, and L. erabu, are those most generally used by the commercial growers in greenhouses.

Lately the "CROFT" lily in its many types has been greatly favored for greenhouse "Easter" planting.

It is quite often understood that the Easter Lily is able to be planted out of doors but is not generally known that all of the kinds used for forcing are outdoor garden varieties, that ordinarily flower in the summer brought into a greenhouse and forced for Easter.

There is always the sentimental reason for wishing to keep the Easter Lily after it has given us its beauty for the Easter season. Remembering that it is just an outdoor sort that has been forced we can easily understand the treatment which will enable us to enjoy its beauty for many years in its natural garden position.

The Easter Lily is a traditional American flower gift. In a few days after Easter, the flowers will all be browned and over and the pot will soon be relegated to the basement or garage.

All that you have to do for its care then is to pick off the flowers, allowing the main stem and leaves to remain. Remove any wrappings from the pot. If any other plants were contained in the pot, those should be taken out, repotted and grown on indoors.

Then the pot should be placed in a cool basement or garage. Do not water or disturb it. The following November, the bulb should be shaken out of the dirt, the old stem removed, and planted out of doors in the perennial garden in the same manner as any other outdoor Lily.

Some gardeners like to plant their Easter Lily out doors in the garden as soon as it has died down sufficiently. If this is done, the plant makes a new growth during the same year, flowering in September or October. This is bad for the bulb as the forcing that it received has already weakened it somewhat. I strongly advise against this immediate planting out and believe that the rest, although in a pot, is very beneficial.



HYBRID STRAIN LILIES NEW BUT INEXPENSIVE

During the past several years, the well known bulb firm of De Graaff has been specializing in the production of new types of lilies. In doing so they have definitely proven that lilies are neither capricious nor difficult—nor the sole province of learned specialists. Thus far they have produced several strains of various types and parentages that are disease free, extremely vigorous and remarkably tolerant of neglect, drouth and indifferent treatment, and ones able to grow under most any conditions without special attention, care or coddling.

Before I describe the most promising of these new groups it would be well to explain the De Graaff policy of introducing *strains* of new types rather than *individual* named varieties. Well aware that this practice is open to severe criticism, it does have most important advantages to you, the

gardener, as well as to them, the commercial growers.

First and most important is the fact that by selecting all of the desirable individuals of a cross—or series of crosses—and introducing them as a single strain or series, they save precious years. Most crosses yield hundreds of beautiful plants with unimportant or minute variations of flower and foliage—in fact, the variations more often enhance, rather than detract from, the beauty of the plant. Such is the case in the Arctic strain of L. Candidum.

Were a single individual to be selected for propagation, naming and introduction, it would require several years to work up sufficient stock. By that time—5 years at the very least and more often 8 to 10 years—the accumulated costs would necessarily be reflected in premium prices for the "new" variety. Meanwhile, any number of seedlings that had shown up in new crosses, and were as good or better than the first selected individual, would have to be discarded in favor of the first chosen plant. However, by including all of the good forms resulting from a cross, they immediately have a new race or strain of hybrids, each of which is a wonderful addition to any garden, in sufficient numbers to enable them to introduce the strain at reasonable prices in one or two years.

Furthermore, constant selection, comparison and cross breeding within the strain can improve any given group from year to year, whereas a single named variety must be propagated vegetatively in order to keep the stock true to name. Improvement or introduction of new forms must of necessity soon make the original variety obsolete. A good strain, carefully grown and constantly improved, need never become obsolete.

The common practice of naming each individual usually leads to confusion, with a multitude of new names introduced each year only to be superseded the following season by a new set of varieties and all at premium

prices!

Of course, rare outstanding individual or totally new "breaks" are segregated for further observation and possible introduction as a named variety. However, by breeding on as large a scale as they practice, the individuals that surpass the average high quality of the best of each cross are few and far between. It is interesting to note that, although they have originated several new and improved strains thus far, only one named variety has been selected.

The following strains of hybrids respresent the best of the newer types—

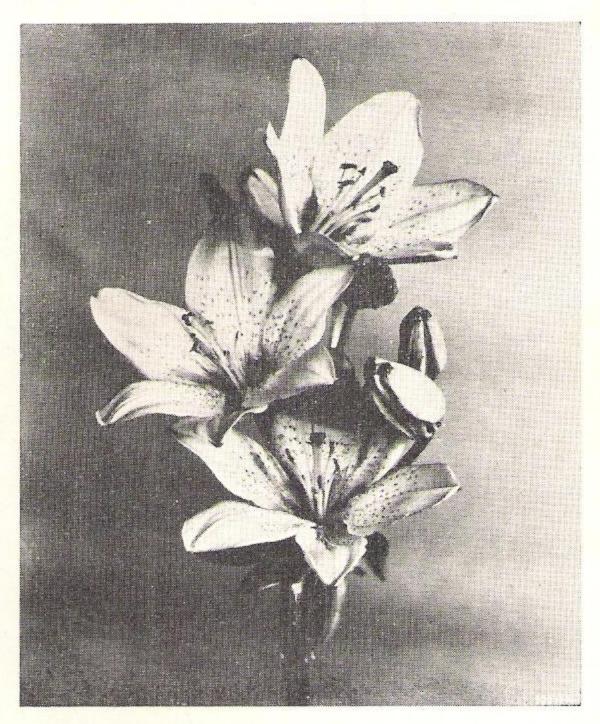


LILIUM PARDALINUM AND PARRYI



LILIUM SPECIOSUM RUBRUM

the pick of the tens of thousands of seedlings grown on from hundreds of crosses. Each group is far superior to the old parent types, not only in flower and form but also in vigor and ease of culture. Perhaps most important of all to the future of this magnificent family is that they are totally free from the dread mosaic and virus diseases.



GOLDEN CHALICE HYBRIDS

These are one of the most colorful of the new lily strains. Bright, cheerful hues range from gleaming yellow to rich mahogany, splashed into cup shaped flowers that look straight up to you from short, sturdy stems.

These hybrids are probably the most rapid growers of the lily family—a single bulb increasing into a clump of several bulbs in one year. Husky underground stem bulblets provide another quick and easy means of propagation. The *Golden Chalice* hybrids are of relatively short stature (18 to 30 inches) and lend themselves admirably to mass bedding and grouping in low borders. The plants come up very early in the spring with the beds already well formed and bloom in late spring (May-June). Heavily stem rooted, this class is most drouth and heat resistant. The earliest and most fool proof in the garden of all the new strains—an ideal novelty lily for the home gardener.

BELLINGHAM HYBRIDS

This is the only truly American strain, since it is bred from species native to the Pacific Northwest. Having fine form and color, tall stems and increased vigor, they form a new and well defined group. The colors vary from clear yellow through harmonizing shades of orange and red. Many are interestingly spotted in shades of brown. The free flowering spikes carry from 12 to 30 flowers.



L. PARDALINUM GIGANTEUM

This type can be left undisturbed year after year; in fact, they are best left alone and allowed to grow into large clumps. Partial shade will produce taller than the usual four to five foot stems and show off the flowers to better advantage, but full sun suits them well. They are best planted among low growing shrubs which will shade the lower portion of the stems.

CENTIFOLIUM HYBRIDS, OLYMPIC STRAIN

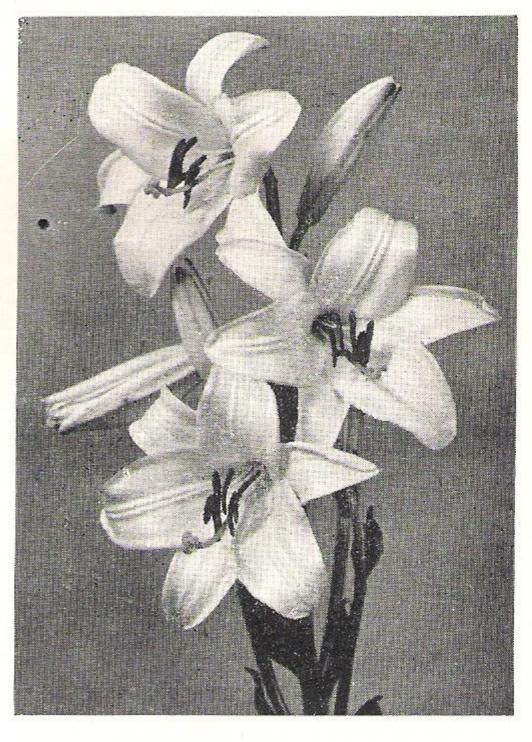
This group is undoubtedly one of the most exciting of all of the new strains since it comprises the types bearing the traditional lily flower—the white trumpet lilies. The parentage of this strain is most complex.

The mammoth flowers range from pure white to white suffused with warm yellow or hazy pink. The broad, heavy petals vary in form from the classic trumpet shape of the traditional Easter Lily to the open, bowl-shaped, informal type of flower such as that of L. auratum. This open bowl form is an entirely new break in the trumpet group and the flowers are most beautifully shaped with the petals interestingly twisted and curled. Good placement on strong stiff stems is another improvement over the old top heavy, bunchy inflorescence so common to L. Regale and its hybrids.

These centifolium hybrids are truly hardy in all sections but of even greater importance to many gardeners is their remarkable resistance to drouth. Full sun suits them well and the large flowers are well capable of holding their own against the hot summer sun. Flowering two to three weeks later than L. Regale, the Olympic hybrids are an outstanding advance in the trumpet lily group.

GREEN MOUNTAIN HYBRIDS

A distinct type, this group may be regarded as the elite of the garden trumpets. With huge, well placed flowers of purest glistening white, free from all tints or stains, their long lasting, perfectly formed flowers closely approach the long-sought cool icy white coloring as contrasted to the distinct creamy-white tone of all the other trumpet lilies. A most beautiful garden plant possessing, in addition, the toughness and resistance of the Centifolium strain. A stately finished plant—an outstanding novelty.



This new strain of Madonna lilies is a fine tribute to plant breeding science.

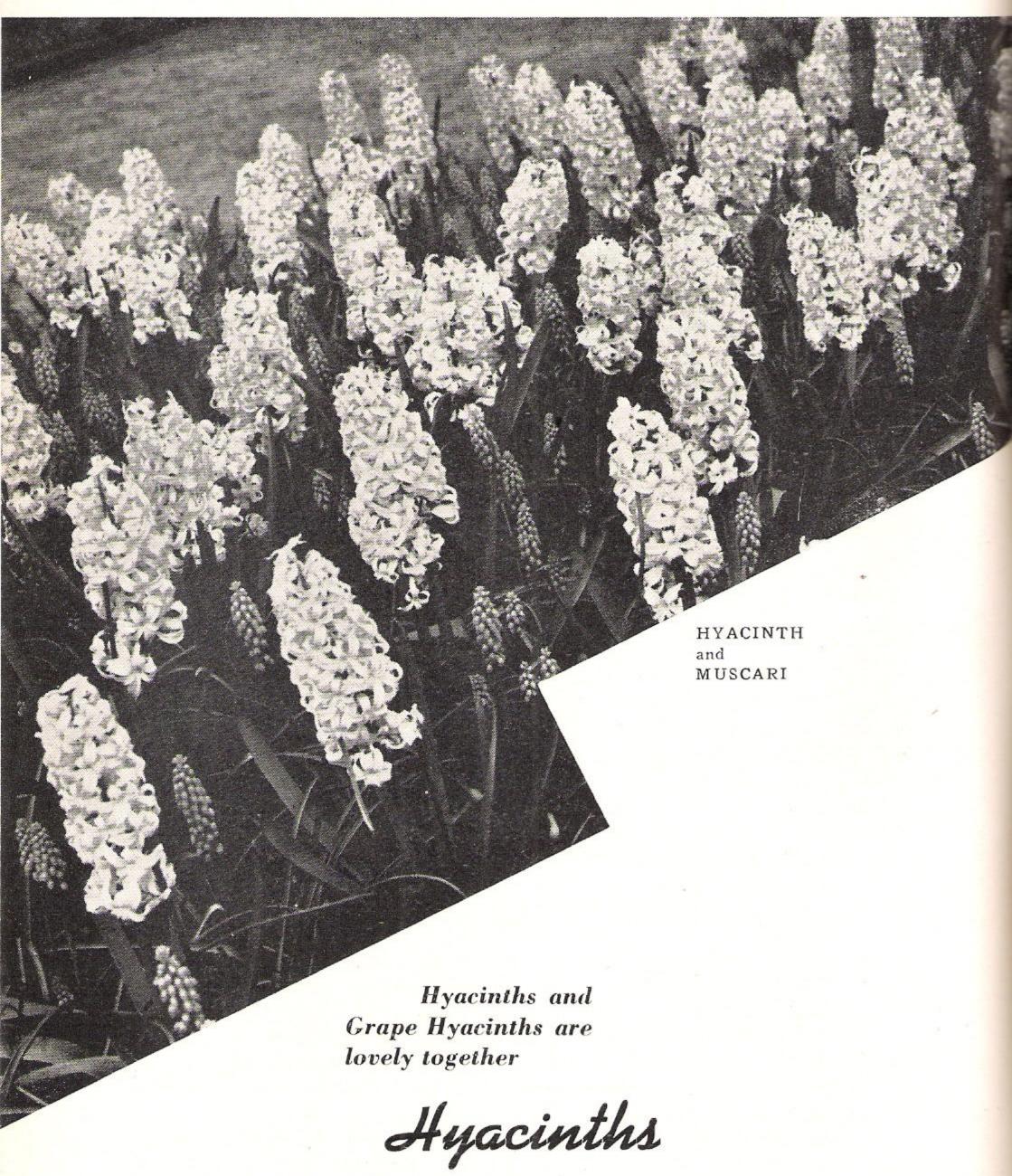
CANDIDUM — ARCTIC STRAIN

The familiar garden Madonna Lily has been grown for generations without any appreciable improvement. Growers have for years suffered heavy losses from bulb and scale rot as well as being highly susceptible to Botrytis or "fire blight."

The Arctic Strain is a magnificent example of the Madonna lily with larger, better placed flowers of heavy substance on strong sturdy stems. The plants themselves are vigorous and clean with an improved resistance

to Botrytis.

Enjoying full sun and almost any type of soil, the L. Candidum is especially suited to home gardens, since the plant produces a basal rosette of leaves in the fall which remain active until the new stem comes through the ground early in the following spring. The foliage ripens soon after flowering and the bulb is dormant during August, again starting new growth in early fall. This short dormant period is the proper time to move or divide the bulbs. If allowed to remain in the ground during this period, water and fertilizer should be withheld until the new leaves appear.



INDOORS AND OUT there is probably no bulb more widely used or more sure of good results than the Hyacinth.

The plant is actually a native of most of the countries bordering the Eastern Mediterranean.

They are generally called Dutch Hyacinths because about 80% of the world's supply had been grown in Holland for many years. Anyone who

has had the opportunity to visit the fields there in Spring can never forget their brilliant patches of color and the symmetry of planting for which the Dutch are renowned the world over.

Fortunately, there are many Hyacinths now being grown by bulb growers in this country to supplement the Dutch crop and although the supply is not large there will be a reasonable number on sale in the stores.

TIME TO PLANT—OUTDOORS

The best time to plant the bulbs is as early as they can be purchased from the store. The month of October is best because the perfection of flower depends largely on the size and strength of the root growth made before winter. Since the plants make practically all their root growth before starting top growth, the earlier they are planted the better.

In Spring, it is often found that the flower seems to refuse to grow upward and tries to open in-between short leaves at near soil level. This

stunted growth is always caused by lack of sufficient root growth.

Quite often in a small garden it is necessary to wait until the summer flowers are cut down by frost before the Hyacinth bulbs are set out. If this delay occurs the bulbs may wait until the garden position is prepared, but it must be remembered that this delay will seriously shorten the fall root growth, which will produce correspondingly poor results for both the first and second years bloom.

Should the summer flowers appear to be going to last after September it would be advisable to set the Hyacinth bulbs in between the flowers by

planting them singly with a trowel.

SOIL IMPORTANT

Since there are only three places in the world where good Hyacinth bulbs are grown it is evident that they have definite needs where soil conditions are concerned. Comparatively light soil such as the sandy soils in Holland is best. For ordinary gardens, the "silt" valley soils of this area are ideal. In Europe they plow much seaweed into Hyacinth fields. Here the best substitute is compost, leaf mold or peat moss with the addition of a good commercial fertilizer.

Experience has shown that of all the manures, only cow manure and sheep manure are really effective. All other kinds should be avoided for

Hyacinths.

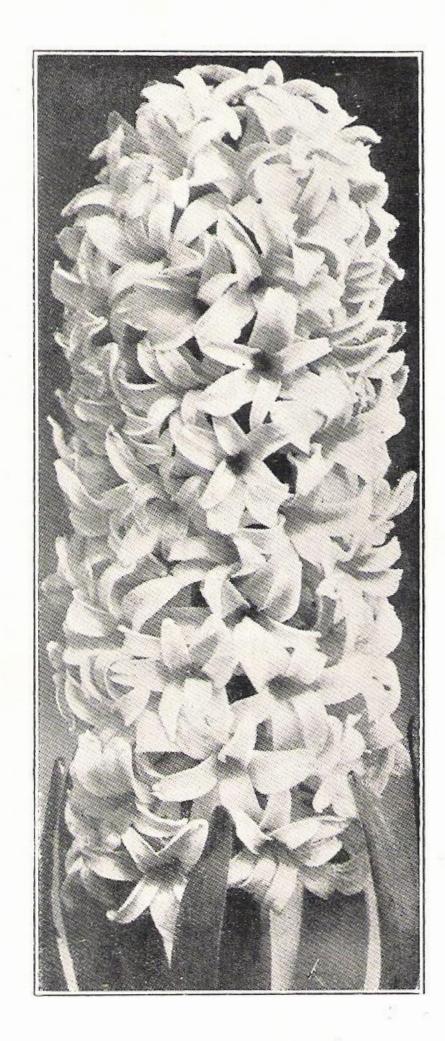
In spite of its legendary origin, this flower is not a water-loving plant. It certainly likes plenty of moisture, but Hyacinths are not waterside plants, and do like well drained soil in which to grow. This may seem surprising to many who have seen the Hyacinths growing in glasses of water indoors, but it must be remembered that in this method of cultivation the bulb itself does not come in contact with the water. It is only the fine roots which penetrate down into the water.

If the soil of a garden is naturally somewhat low and wet, it is best to raise the flower-beds above the general level when preparing for Hyacinths. Or it may be possible to use the Hyacinths on a sloping bank, where they

will be particularly effective.

PLANTING

To have first class flowers year after year is quite simple, provided the deep-rooting peculiarity of the bulb is attended to. Hyacinth roots



Perfect blooms are easily assured provided a good crop of roots is grown by correct soil preparation under the bulb

average from 12-16 inches and should grow straight down. Since the bulb must be set 6-8 inches below the surface, it is necessary to prepare an unusually deep hole.

The preparation of the soil UNDER the bulb is of much greater importance than that on top. It should be made of equal parts of coarse sand, humus and good garden soil. Any coarse sand will do but be sure to use one third or more in the soil mixture.

Since the roots go down to feed, a generous supply of a good commercial fertilizer should be thoroughly mixed with the prepared soil beneath the bulb.

In addition to the sand that is mixed with the soil, the bulb should be placed in a sand jacket. An inch or more coarse sand should be put in the bottom of the hole for the bulb to rest on and then, when bulb is set, more sand should be poured all around it so that no garden soil touches it.

To ensure that all of the bulbs flower at exactly the same time, care should be taken to see that they are set at a uniform depth.

Once planted correctly, many gardeners here find that the bulbs may be left for several years before there is any need to disturb or replant them. In fact the only reason for lifting established successful bulbs is when they show any signs of deterioration or multiplication.

WATCH FOR PUDDLES

During winter the spots where Hyacinths have been planted should be carefully watched, to see that no puddles collect there. It is even worth the effort to feel the soil with the hands several times to be quite certain that there is no muddiness or over-abundance of water.

If this watching for "wet feet" is remembered for the first year, the

bulbs will take care of themselves for many years after.

CHARCOAL

Charcoal is a very valuable addition to any soil, but is of highest benefit if about a quart of pea-sized pieces are mixed in the soil under and around the bulbs when they are first set out. Charcoal is capable of keeping the soil in condition for many years, thus avoiding the necessity of transplanting. It also makes the commercial fertilizer used of much greater value and effect.

HOW TO CHOOSE BULBS

When buying Hyacinths one should note that the best bulbs are not necessarily the largest bulbs. A solid bulb, firm and of heavy weight, and particularly firm on the underneath side, is better than a larger soft bulb.

HYACINTHS AS GARDEN FLOWERS

As garden flowers, Hyacinths are generally grown in large beds and

masses. A more brilliant and effective color display is hard to find.

Because the plants and flowers are so even and certain in their display, they are often used to line or border a bed. They may also be used to assist in the perennial flower garden's early spring display by setting them in groups of six or eight. A few groups of twos or threes are a fine addition to the rock garden's early display.

FOR WINTER WINDOW BOXES

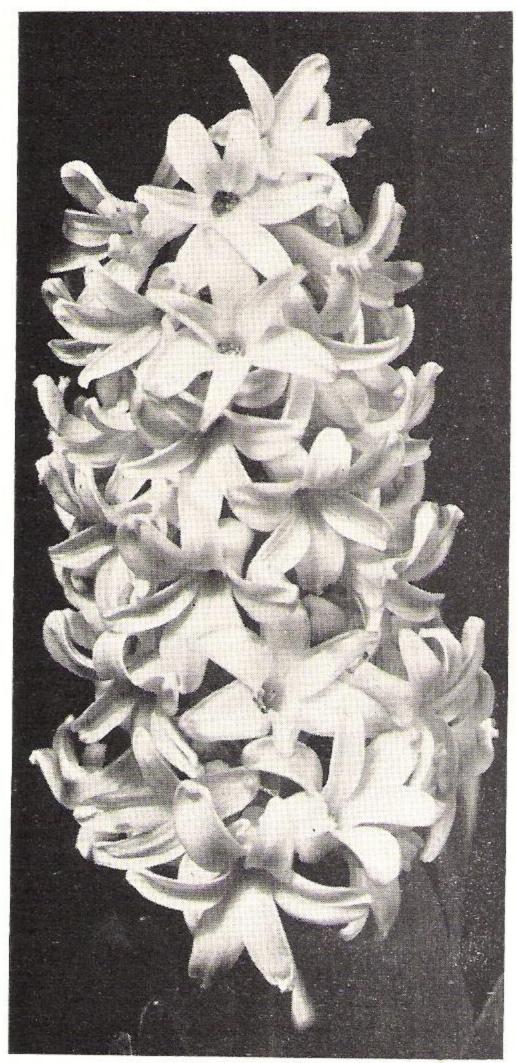
After the summer flowers in window boxes are over, many gardeners provide a winter display in the same boxes by removing plants and soil in October. Fresh soil is immediately placed in the window box and tiny evergreen shrubs, winter blooming heather and winter flowering or "ice" pansies are planted. For a bright neat and attractive display of spring flowers Hyacinths and other short spring bulbs are set under or in between the pansies.

Hyacinths are just the right height for window boxes. Their attractiveness is greatly enhanced by their lovely perfume, which may be brought into the house by leaving the window open a few inches during flowering

period.

INDOORS TOO

HYACINTHS IN POTS—Similar soil to that already advised for outdoors is suitable as a medium for pot culture of Hyacinths. Ample drainage should be provided in the bottom of the pot and the soil used should be rich and sandy. It is best not to cover the bulbs too deeply in the pots: in fact, the neck of the bulb may protrude above the soil. The bulbs may be as close together as desired so long as they are not actually touching each other. During the first weeks after planting, they should



Pot-grown Hyacinths are the simplest of all indoor bulb flowers to grow

HYACINTH

be stood in a cool dark airy place at a temperature of 50°. If available, a cold frame is very suitable for the pots, and a thick layer of sand over the tops of the bulbs will exclude light and help to maintain an even temperature. As soon as the tops begin to grow, this layer of sand can be removed, and the pots may be brought into the house.

A useful practice when bringing the bulbs indoors is to replace the sand with a light surface dressing of pebbles. This helps to conserve moisture in the pots and also makes them more pleasing than if the surface

of the soil is left exposed.

For the best results during the growing period, the room temperature should be even, day and night, at about 65°-70°. The pots should be placed in a bright window where they get as much sunshine as possible. This will keep the plants short and stocky.

Under some house conditions, the stems are liable to get long. When they do, they are generally soft and rather weak. Then the flower spikes will need some support, particularly if the bulbs are large and the flower heads *inclined* to be heavy. The best way to support them is to split a

bamboo cane lengthwise into three or four pieces.

Press one of these pieces into the soil close to the bulb. The end of the "cane" should reach the bottom of the pot, to give the best support. Some gardeners sharpen the tip of the cane and press it into the bulb for perfect support. This treatment does not harm the bulb. If several bulbs are being grown in one pot, it may be possible to arrange the sticks around the outer rim of the pot and to run a string around to support all the flowers. These supports should be placed as unobtrusively as possible. If preferred, special bulb supports can be obtained from florists, which are easily placed in position, adjustable to any sized bulb, and very inconspicuous.

HYACINTHS IN GLASSES

If Hyacinths are to be grown in special glasses sold for the purpose, only good top-size bulbs should be selected. The glasses should be filled with water and a few pieces of charcoal dropped into them to keep them

from becoming stale and unhealthy.

The water should nearly, but not quite, reach the base of the bulb and from time to time as the water evaporates or is used up by the growing plant, the supply should be kept up. When adding water, always try to give water of the same temperature as the room in which the plants are growing.

Water does not contain much food supply, and although the bulbs do have a stored supply, the results may be helped considerably if some liquid plant food is added to the water in correct amount. Do not overdo the food, however, or the roots, when they reach the water, are liable

to be harmed.

There are more than a hundred good varieties of hyacinths. To select a few outstanding sorts is, however, not hard. Some kinds are good for forcing only while others are suitable only for garden culture. Those listed here are especially fine, strong, sweetly-scented. They may be grown to perfection either outdoors or in pots.

GRAND MAITRE—One of the most striking and popular deep lavender varieties with slight blue tone. Has compact spikes of large

bells on dark, strong stem.

L'INNOCENCE—Pure white, compact spikes with large bells. Is best all around hyacinth for general purposes; forces well and is equally good for bedding. Very strong grower and is excellent for exhibition. Stands well without support.

PINK PEARL—Deep rose pink. A grand improvement over older pink sorts. As an indoor flower or in the garden it leaves nothing to

be desired. Extra early forcer.

JAN BOS—Single, dark-red hyacinth. Has a compact spike with clear bright red bells. Considered the best of all the reds for indoors or outdoors.

KING OF THE BLUES—Dark violet-blue. Splendid large com-

pact trusses. One of the best dark blue Hyacinths.

CITY OF HAARLEM—Finest of the yellows. Large, well-formed trusses of pale yellow bells. Fine for exhibition, an excellent variety.