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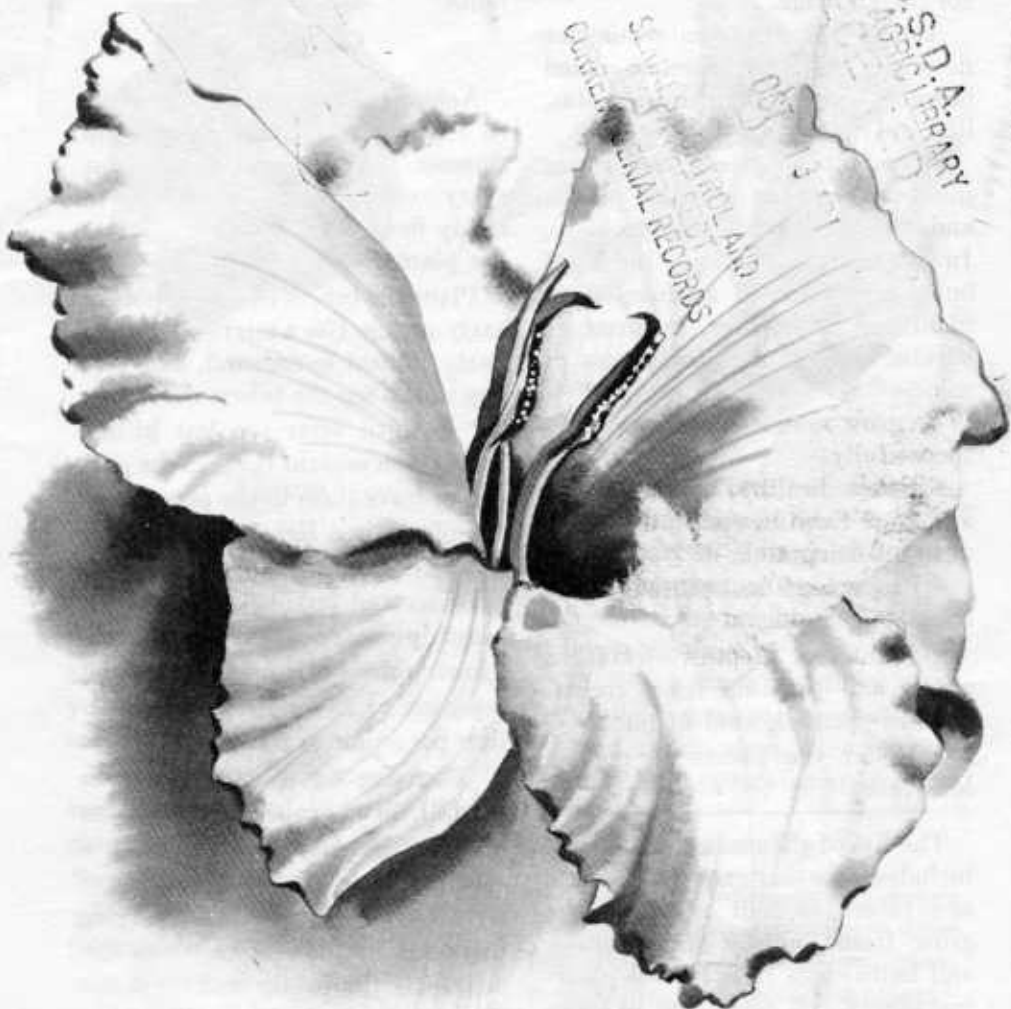
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Summer Flowering Bulbs

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SUMMER FLOWERING BULBS

By Henry M. Cathey, SEA *research horticulturist*¹

Summer flowering bulbs are easy to grow, and do well in all parts of the United States. Most of them are grown for their flowers, some for their foliage.

Among the more popular summer flowering bulbs are tuberous rooted begonia, canna, dahlia, gladiolus, lily, and caladium.

Some bulbs may be grown as pot plants, some as pot or garden plants, and others as garden plants only. In the garden, various kinds of bulbs may be used as foundation plantings, as borders, in front of shrubs, or in groups for masses of color.

To grow summer flowering bulbs successfully—

- Select healthy, mature bulbs and store them in a cool, dry place until planting time.
- Prepare the soil thoroughly in the planting site.
- Plant at depths, distances apart, and planting times recommended for each kind of bulb.
- Water the plants at regular intervals.

The list of plants in this bulletin includes some that grow from corms and tubers as well as those that grow from bulbs. [Corms, tubers, and bulbs] store food for the growing plants. All references to bulbs also include corms and tubers.

The following alphabetical list gives a brief description of how to plant and manage the more commonly grown summer flowering bulbs.

Achimenes

Achimenes (nut orchid) grows 8 to 12 inches high and blooms in summer. The flowers are almost every color. Use achimenes in shady flowerbeds, as borders, or as pot plants.

Plant the tubers in 4-inch pots in early spring. Use a mixture of equal parts of peat moss, sand, and garden soil. Keep the tubers indoors at 65° F until after the last killing frost; then replant them in the garden or leave them in the pots. Grow the plants in a lightly shaded area away from direct sunlight.

Water and fertilize the plants at monthly intervals throughout the growing season. Use a mixture of 1 teaspoon of 20-20-20 soluble fertilizer per gallon of water.

When the leaves turn yellow in the fall, dig the tubers in the garden and let them dry. Store them in a cool, dry area at a minimum of 50° F with the soil still clinging to them. In the spring, wash the soil from the tubers and start the growing cycle again.

Store potted tubers in the pots in a cool, dry area at 50° F. Dig, wash, and replant them in the spring.

¹ Florist and Nursery Crops Laboratory, Beltsville Agricultural Research Center, Beltsville, Md. 20705.



ACHIMENES



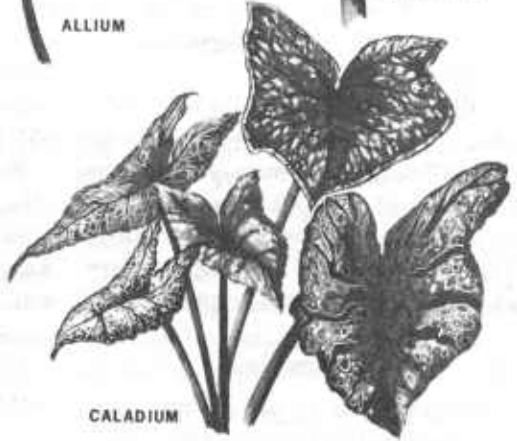
ALLIUM



AMARYLLIS



BEGONIA



CALADIUM

Allium

Allium (flowering onion) varies in height from 9 inches to 5 feet. Many varieties are grown. Summer flowering varieties bloom in June and July. Flowers are white, red, yellow, blue, or pink. Use allium in borders.

Some commonly grown kinds of summer flowering allium and their characteristics are as follows:

Azureum—Deep blue flowers; grows 2 feet tall; blooms in July.

Giganteum—Blue flowers, 9 inches in diameter; grows 5 feet tall; blooms in July.

Unifolium—Pink flowers; grows 15 inches tall; blooms in July.

Plant bulbs 2 or 3 inches deep in early spring. Space them 6 to 15 inches apart in clumps of 6 to 12 bulbs. The distance between bulbs depends on the height of the plant at flowering time.

The bulbs may be left in place for several years. Dig, separate, and replant them when they become crowded or produce small flowers.

Amaryllis

Amaryllis (hippeastrum) grows about 3 feet tall. It blooms in June and July. Flowers are red, pink, rose, white, or salmon. Use amaryllis in borders or as pot plants.

Plant the bulbs in May after the soil has warmed. Space them 12 to

18 inches apart in clumps of three to five bulbs. Plant only half of the bulb beneath the soil. Water thoroughly after planting and each time the soil becomes moderately dry.

When flowers begin to form, water and fertilize the plants every other week until late fall when the leaves turn yellow. Fertilize with a mixture of 1 teaspoon of 20-20-20 soluble fertilizer per gallon of water. Avoid getting fertilizer directly on the bulbs.

Dig and store the bulbs each fall. It is important to retain the roots on the bulbs from year to year. Keep roots moist by storing bulbs in moistened peat moss or vermiculite. They can be forced to flower indoors as a pot plant in the winter.

Begonia

Begonia that is grown for summer and fall flowering is tuberous rooted. It grows 1 to 2 feet tall. Flowers are red, pink, orange, salmon, yellow, or white and they grow up to 13 inches in diameter. Use begonia as a pot plant, for cut flowers, and in lightly shaded flowerbeds. It blooms throughout the summer.

Plant the tubers in February or March in flats (shallow boxes) indoors. Use a mixture of equal parts of peat moss and coarse sand. Press the tubers into the mixture; make sure the "growing eyes" are upward. Space them 2 to 3 inches apart.

Keep the flats in a dark room at 65° F. Water the tubers often, enough to keep the sand and peat-moss mixture damp. When pink shoots appear, add ½ inch of the mixture over the tubers and move

them to a lighted room that is kept at a minimum of 65° F.

In 6 weeks after you put the plants in a lighted room, transfer them to 5- to 6-inch pots or outdoors in the garden. Use a mixture of equal parts of garden soil, sand, and leafmold. Grow the plants in a cool, lightly shaded area.

If you put pot plants under fluorescent lamps for 16 hours a day, they will continue blooming throughout the winter. Keep the room temperature at a minimum of 65° F.

Fertilize begonias at least every other week after you replant them in pots or in the garden. Fertilize with a mixture of 1 teaspoon of 20-20-20 soluble fertilizer per gallon of water.

Water often enough to keep the soil moist. Water early in the day so the flowers and leaves will dry quickly; they rot easily.

When the leaves turn yellow in the late summer or early fall, dig the tubers in the garden. Store the potted tubers in the pots and the dug tubers with the dirt around them in a cool, dry place away from frost. Start the growing cycle again in February or March.

Caladium

Caladium is grown for its showy, colorful leaves. The flower buds should be removed as soon as they appear so the leaves can develop fully.

Many varieties of caladium are grown. Dwarf varieties grow up to 9 inches. Ordinary tall varieties grow up to 18 inches, and elephant's

ear grows up to 6 feet. Use caladium in front of shrubs, as foundation plantings around the home, and as pot plants.

Plant the tubers close together in a flat from January to mid-May. Use a mixture of peat moss and coarse sand. Cover the planted tubers with a 1-inch layer of peat moss.

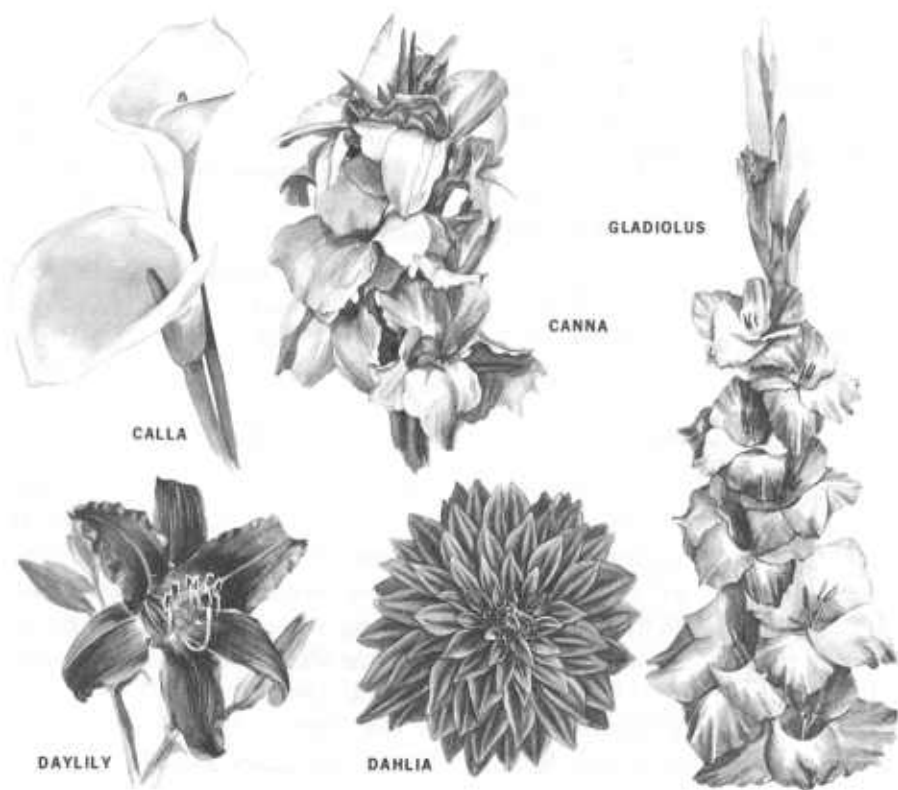
Water the tubers often enough to keep the soil mixture damp. Roots grow from the tops of the tubers; they must be kept moist and covered with peat moss. Keep the room temperature no lower than 70° F. Tubers often rot in cool soil.

As soon as roots develop, replant the tubers of elephant's ear outdoors

or in tubs or boxes; replant the tubers of other varieties outdoors or in 6-inch pots. Use a mixture of equal parts of garden soil and peat moss. Grow the plants in a lightly shaded area, never in direct sunlight. The leaves burn easily.

Try to balance the light and shade to get the most color in the leaves. When plants are grown in deep shade, the leaves will have more green coloring and less pink or red.

Water and fertilize caladium at least every other week. Do not allow the soil to become dry. Fertilize with a mixture of 1 teaspoon of 20-20-20 soluble fertilizer per gallon of water.



When the leaves turn yellow in the fall, dig the tubers from the garden and store them with the soil around them. Store potted tubers in the pots. Keep the storage area dry and at no less than 60° F. Start the growing cycle again the next year.

Calla

Calla is a large plant and may grow 4 to 5 feet tall. It blooms almost anytime. Flowers are white, red, pink, and yellow. Use calla as a pot plant.

Plant tubers in 6-inch clay pots in October. Use a mixture of equal parts of garden soil, peat moss, and sand. Barely cover the tubers with the mixture.

Grow the plants in a temperature of 50° to 60° F. Water heavily every day during the growing season. Reduce watering gradually in the spring and let the tubers dry.

Fertilize calla every other week. Use a mixture of 1 teaspoon of 20-20-20 soluble fertilizer per gallon of water.

Store the potted tubers in a cool, dry area in summer. Leave the tubers in the same pots for many years.

Canna

Many types of canna are grown. Tall types grow 5 to 7 feet high and dwarf types, 18 to 30 inches. Canna blooms for many weeks in summer. Flowers are red, pink, orange, yellow, and cream. Use canna in flowerbeds.

Plant rhizomes (underground stems) from March to May in flats

filled with peat moss. Cover the rhizomes with 1 inch of peat moss and water them often enough to keep the peat moss damp.

When shoots appear, replant the rhizomes in 4-inch pots. Use a mixture of equal parts of garden soil, peat moss, and sand. Leave the pot plants indoors until all danger of frost has passed. Then plant them outside in full sunshine.

Dig the planting site thoroughly and mix well-rotted cow manure into the soil. Plant the rhizomes just below the soil surface. Space them 12 to 18 inches apart.

Water and fertilize the plants at 2 week intervals throughout the growing season. Apply a light ring of 5-10-5 or 10-6-4 fertilizer around each plant. Stake the tall varieties; they fall over easily.

After the first light frost, cut off the stems of the plants. Then dig the rhizome clumps and let them dry. Store them with the soil around them away from frost. If your storage conditions are dry, embed the rhizomes in flats of dried peat moss for the winter. The next spring, clean the rhizomes and start the growing cycle again.

Dahlia

Dahlia varies in height from less than 1 foot to more than 6 feet. It blooms in summer and fall. The flowers are white, yellow, red, orange, or purple. Use dahlia in borders and flowerbeds, or as cut flowers.

For further information about dahlias see Home and Garden Bul-

letin 131, "Growing Dahlias." Ask your county agricultural agent for a free copy or write to the Office of Governmental and Public Affairs, U.S. Department of Agriculture, Washington, D.C. 20250. Send your request on a post card. Include your ZIP code.

Daylily

Daylily (*hemerocallis*) varies in height from 6 inches to 6 feet. By selecting varieties that bloom at different times, you can have flowers all summer. The flowers are red, pink, orange, yellow, or cream. Use daylily in borders and flowerbeds, or as foundation plants.

Plant tubers just below the surface of the soil, preferably in early spring or late summer, but they may be planted at almost any time of year. Space the plants 18 to 24 inches apart.

Apply a light ring of 10-6-4 fertilizer around each plant three or four times during the growing season. Water often enough to keep the soil moist.

Remove seed pods when they appear; they use food needed by the plant. You may leave the tubers in the ground until they become crowded, usually 3 or 4 years.

Gladiolus

Gladiolus grows 2 to 4 feet high. It blooms in summer and fall and produces flowers of all colors. The kinds of gladiolus that are commonly grown are *grandiflora*, *primulinus*, *primulinus hybrids*, and *colvilleii*. Use gladiolus for cut flowers or in flowerbeds.

Plant gladiolus bulbs in rows 36 inches wide or in flowerbeds. Prepare the beds the year before you plant, applying 1 pound of 10-6-4 fertilizer for each 100 square feet of planting space. Thoroughly mix the fertilizer with the soil.

Start planting as soon as the soil is dry enough to work in the spring. Plant the bulbs 4 to 7 inches deep and 6 to 8 inches apart. Continue planting every 7 to 10 days until early July; this assures a continuous supply of flowers.

When shoots are 6 to 10 inches tall, fertilize the plants with 1 pound of 10-6-4 fertilizer per 100 square feet of space. Water the soil around the plants every 10 days in dry weather.

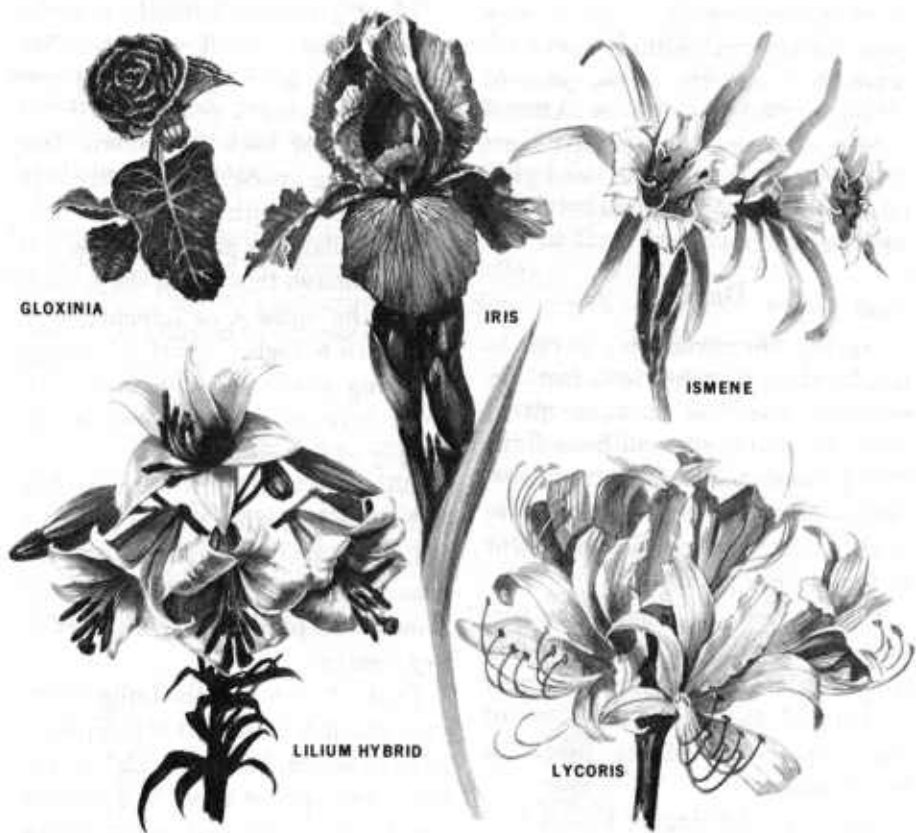
In the North, dig the bulbs every year about 6 weeks after the plants have bloomed. Wash the soil off the bulbs and spread them in a shaded area to dry for several weeks. In the South, gladiolus may be left in the ground for several years before they are dug.

When the bulbs are dry, separate them by size and keep only those that are more than 1 inch in diameter. Store them in a well ventilated area at 35° to 45° F.

Gloxinia

Gloxinia grows 12 inches tall. It produces both single and double flowers in many colors. Use gloxinia as a pot plant.

Plant the bulbs in 5- to 6-inch pots in late winter or spring. Use a mixture of equal parts of peat moss, sand, and garden soil. Keep the



bulbs indoors at 65° F. until after the last killing frost; grow the plants in a lightly shaded area away from direct sunlight.

Water often enough to keep the soil mixture damp throughout the growing season. Fertilize every other week with a mixture of 1 teaspoon of 20-20-20 soluble fertilizer per gallon of water.

When the leaves turn yellow in the fall, gradually withhold water and allow the bulbs to dry. Store the potted bulbs in a cool, dry area at 50° F. Repot the bulbs in the spring and start the growing cycle again.

Gloxinia also may be grown from seed, but this is not recommended because it requires at least 6 months to grow a flowering plant.

Iris

Iris grows in both tall and dwarf forms. Some kinds of tall iris are summer flowering; they grow 2 to 2½ feet high and have white, blue, purple, orange, or yellow flowers. Dwarf iris blooms in early spring.

For further information about iris see Home and Garden Bulletin 66, "Growing Iris in the Home Garden." Ask your county agri-

cultural agent for a free copy or write to the Office of Governmental and Public Affairs, U.S. Department of Agriculture, Washington, D.C. 20250. Include your ZIP code in your return address.

Ismene

Ismene (Peruvian daffodil) grows 2 feet high and produces large, funnel-shaped, white flowers that have green stripes down the funnel. Use ismene in front of shrubs, as foundation plantings around the home, and as pot plants.

Plant the tubers close together in a flat from January to mid-May. Use a mixture of peat moss and coarse sand. Cover the planted tubers with a 1-inch layer of peat moss.

Water the tubers often enough to keep the soil mixture damp. Roots grow from the tops of the tubers; they must be kept moist and covered with peat moss. Keep the room temperature no lower than 70° F. Tubers often rot in cool soil.

As soon as roots develop, replant the tubers in 6-inch pots or outdoors. Use a mixture of equal parts of garden soil and peat moss. Grow the plants in a lightly shaded area, never in direct sunlight.

Water and fertilize ismene at 2 week intervals. Do not allow the soil to become dry. Fertilize with a mixture of 1 teaspoon of 20-20-20 soluble fertilizer per gallon of water.

When the leaves turn yellow in the fall, dig the tubers from the garden and store them with dirt around them. Store potted tubers in

the pots. Keep the storage area dry and at no less than 60° F. Start the growing cycle again the next year.

Lilium Hybrid

Lilium hybrids are among the most beautiful plants grown from bulbs. They have many forms, heights, flowering times, and colors.

The most common types of lilium hybrids and some of their characteristics are as follows:

Lilium candidum (white madonna lily)—Blooms in June; grows 3 to 4 feet tall; fragrant flowers; plant in September.

Lilium excelsum (testaceum)—Blooms in June; grows 5 to 6 feet tall; apricot flowers; plant in light shade.

Lilium regale—Blooms in July; grows 3 to 5 feet tall; white or yellow flowers.

Lilium speciosum and *auratum*—Blooms in August and September; grows 4 to 6 feet tall; many hybrids between these two types.

Upright lily—Blooms in June; grows 2½ feet tall; many hybrids in this group.

Except as shown in the descriptions of the types, plant the bulbs in October and November in a sunny, well-drained area. Plant them at a depth that is three times the height of the bulb. Space the bulbs 6 to 18 inches apart according to the height of the plants.

Water and fertilize the plants at frequent intervals during the growing season. Use a light ring of 5-10-5 or 10-6-4 fertilizer around each plant. Do not use high rates of high nitrogen fertilizers.

Remove the seed pods when they appear on the plants in the fall; seeds use up plant food needed for growth the next year. When the leaves turn yellow, cut and destroy the stems and foliage.

Leave the bulbs in place for 2 to 4 years. Dig the bulbs in late summer or fall and replant them as soon as possible; they will not grow successfully if allowed to dry out excessively in storage.

Lycoris

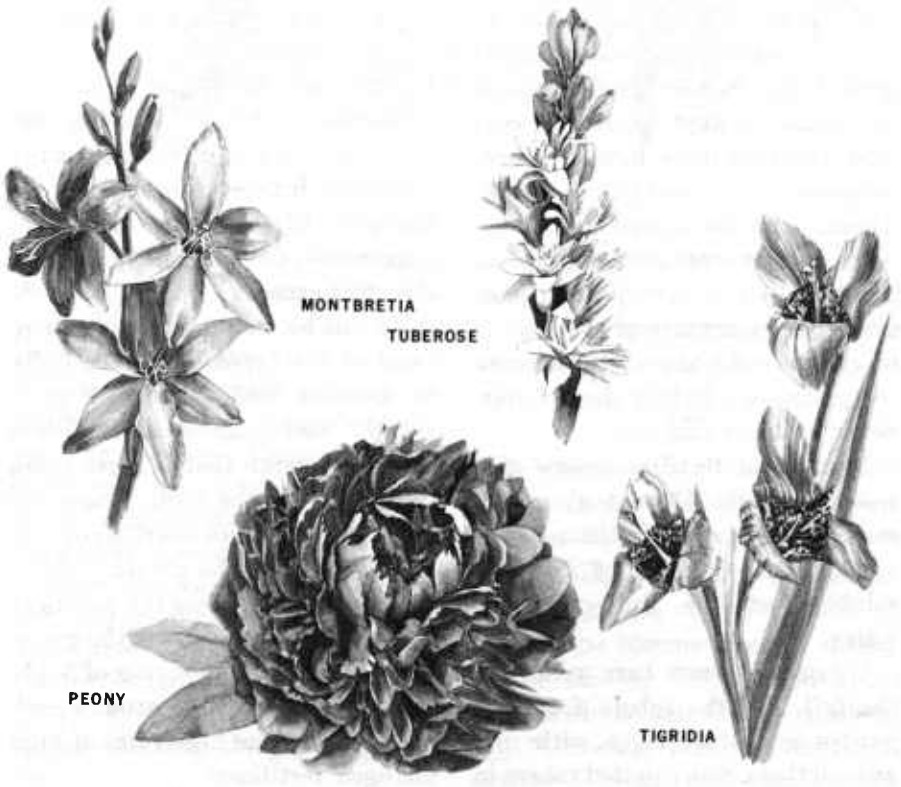
Lycoris (spider lily) grows 15 to 18 inches tall. It blooms from late July to October, depending on sea-

son and variety. Flowers are creamy white or red. Use lycoris as a pot plant in areas where the ground freezes in winter. In warm areas, it may be grown in the garden and used in flowerbeds in light shade.

The two main types of lycoris and some of their characteristics are as follows:

Squamigera—Blooms from late July to October; foliage produced in early spring and dies in early summer.

Radiata—Blooms from late July to October; foliage produced in the fall, remains green all winter, and dies in the spring.



Outdoors, plant the bulbs 4 inches deep and 8 inches apart in August. Indoors, plant the bulbs in 5- to 6-inch pots in a mixture of equal parts of garden soil, peat moss, and sand.

Water and fertilize the plants at weekly intervals. Use a light ring of 5-10-5 or 10-6-4 fertilizer around each plant.

Leaves continue to grow on the plant after it flowers and stay green all winter. When the leaves turn yellow in spring, dig the bulbs and store them during the summer.

Montbretia

Montbretia grows 3 feet tall. It blooms in August and September and produces flowers 4 inches in diameter. Colors of the flowers are orange, gold, red, or yellow. Use montbretia in borders and as cut flowers.

Plant montbretia bulbs in rows 36 inches wide. Prepare the rows the year before you plant, applying 1 pound of 10-6-4 fertilizer for each 100 square feet of planting space. Thoroughly mix the fertilizer with the soil.

Start planting as soon as the soil is dry enough to work in the spring. Plant the bulbs 4 to 7 inches deep and 6 to 8 inches apart. Continue planting every 7 to 10 days until early July; this assures a continuous supply of flowers.

When shoots are 6 to 10 inches tall, fertilize the plants with 1 pound of 10-6-4 fertilizer per 100 square feet of space. Water the soil around the plants every 10 days in dry weather.

Weeds should be removed by

hand. Digging around the plants will injure the corms that are just below the surface of the soil.

In areas where the ground freezes in winter, dig the bulbs every year about 6 to 8 weeks after the plants have bloomed. Wash the soil off the bulbs and spread them in a shaded area to dry for several weeks.

When the bulbs are dry, separate them by size and keep only those that are more than 1 inch in diameter. Handle bulbs carefully to avoid damaging them. Store them in a well ventilated area at 35° to 45° F.

In areas where the ground does not freeze in winter, you may leave the bulbs in the ground for several years.

Peony

Peony grows 2 to 4 feet tall. It blooms in late spring and early summer. The flowers are white, yellow, cream, pink, and red. Use peony in borders and for cut flowers.

For further information about peonies see Home and Garden Bulletin 126, "Growing Peonies." Ask your county agricultural agent for a free copy or write to the Office of Governmental and Public Affairs, U.S. Department of Agriculture, Washington, D.C. 20250. Send your request on a post card. Include your ZIP code.

Tigridia

Tigridia (Mexican shell flower) grows 2 feet tall and blooms in mid-summer. The tripetaled flowers are a mixture of white, red, yellow, and rose colors.

Plant tigridia bulbs in rows 36 inches wide or in clumps of 12 bulbs 8 to 12 inches apart. Prepare the rows or beds the year before you plant, applying 1 pound of 10-6-4 fertilizer for each 100 square feet of planting space. Thoroughly mix the fertilizer with the soil.

Start planting as soon as the soil is dry enough to work in the spring. Plant the bulbs 3 inches deep and 4 to 8 inches apart. Continue planting every 7 to 10 days until early July; this assures a continuous supply of flowers.

Mulch the bulbs with 2 inches of pine bark, ground leaves, peat moss, or hay to keep the soil from drying. Remove the mulch in the fall.

When shoots are 6 to 10 inches tall, fertilize the plants with 1 pound of 10-6-4 fertilizer per 100 square feet of space. Water the soil around the plants every 10 days in dry weather.

Dig the bulbs every year about 6 to 8 weeks after the plants have bloomed. Wash the soil off the bulbs and spread them in a shaded area to dry for several weeks.

When the bulbs are dry, separate them by size and keep only those that are more than 1 inch in diameter. Handle bulbs carefully to avoid damaging them. Store them in a well ventilated area at 35° to 45° F.

Tuberose

Tuberose (polianthes) grows 2 feet high and blooms in late fall. Its waxy, white, double flowers are very fragrant. Use tuberose in flowerbeds and as cut flowers.

Plant the tubers 2 to 3 inches deep in a sunny, well drained area in

May. Space them 8 to 12 inches apart in clumps of 6 to 8 tubers.

You also may grow tuberose in pots. Use 5- to 6-inch pots and plant the tubers in a mixture of equal parts of garden soil, peat moss, and sand.

Water tuberose plants every day. Fertilize every other week with a mixture of 1 teaspoon of 20-20-20 soluble fertilizer per gallon of water.

Dig the tubers from the pots and those outdoors in the fall and store them; they will not overwinter in temperatures as low as 40° F.

SELECTING BULBS

Bulbs are sold in nurseries, drug and variety stores, garden shops, and through florist or nursery catalogs. Buy from a reputable dealer.

Make sure bulbs are not diseased. Diseased bulbs look moldy, discolored, or soft and rotted. Bulbs should be firm and have an unblemished skin.

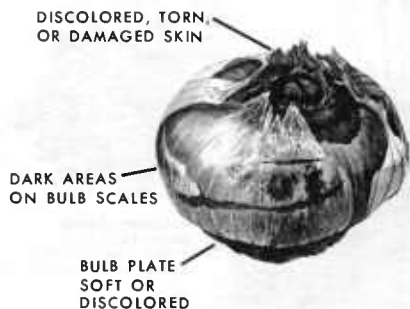
Buy bulbs of varieties that flower together and grow to about the same height. Be sure to buy enough of each color and type for a good display in your garden.

If you buy bulbs before planting time, keep them in a cool, dry area. A temperature of 60° to 65° F is cool enough to prevent most bulbs from drying out until you plant them.

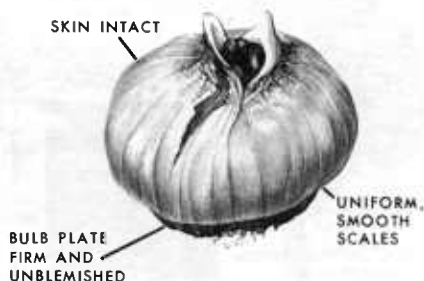
PLANTING

Some kinds of summer flowering bulbs are grown in the garden outdoors and others in pots indoors. You can start many bulbs in flats or

SELECTING BULBS



UNHEALTHY



HEALTHY

pots indoors in winter or early spring and replant them outdoors when the danger of frost has passed in the spring. Specific planting times are given in the list of bulbs.

Most bulbs need full sunshine. Try to select a planting site that will provide at least 6 to 10 hours of direct sunlight a day. Bulbs planted in a southern exposure near a building or wall bloom earlier than bulbs planted in a northern exposure.

Before preparing new flowerbeds, test the drainage of the soil. Dig a hole about a foot deep and fill it with water. The next day, fill the hole with water again and see how long it remains. If the water drains away in 8 to 10 hours, the soil is sufficiently well drained.

If water remains in the hole after 10 hours, it will be necessary to improve the drainage of the planting site. Dig furrows along the sides of the bed and add soil from the furrows to the bed. This raises the level of the bed above the level of the ground.

Dig and plant your flowerbeds when the soil is fairly dry. Wet

soil packs tightly and retards plant growth. If you can crumble the soil between your fingers, it is dry enough for digging and planting.

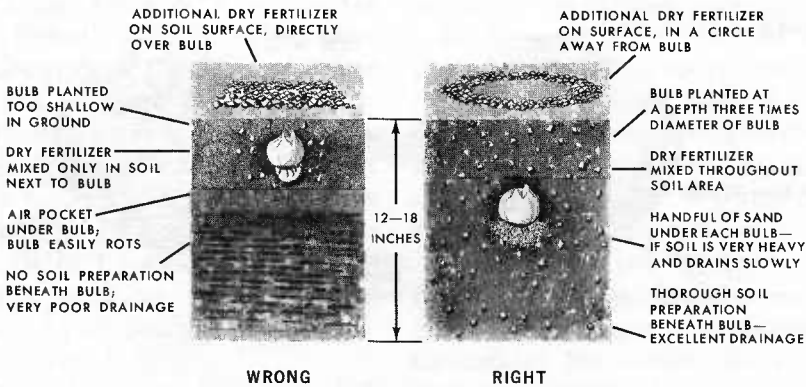
Spade the soil 8 to 12 inches deep. As you dig, remove large stones and building trash, but turn under all leaves, grass, stems, roots, and anything else that will decay easily.

Add fertilizer, sand, and coarse peat moss to the soil. Use $\frac{1}{2}$ pound (1 rounded cup) of 10-6-4 fertilizer for a 5- by 10-foot area, or a small handful for a cluster of bulbs. Place a 1-inch layer of sand and a 1- to 2-inch layer of peat moss over the bed. Thoroughly mix the fertilizer, sand, and peat moss with the soil.

Use a small handful of 10-6-4 fertilizer and equal parts of garden soil, peat moss, and sand for each pot plant. All bulbs require low levels of fertilizer. Avoid frequent applications of high nitrogen fertilizers; this will promote rotting in the bulbs.

Plant bulbs upright, and press the soil firmly over them to prevent air pockets underneath. Water the planted beds thoroughly to help settle the bulbs in the soil.

PLANTING BULBS



In loose, sandy soil, plant bulbs 3 to 4 inches deeper than the depths recommended in the list of bulbs.

Be sure to plant bulbs at recommended distances apart because many of them need room to develop new offshoots.

You may allow space for over-plantings of dwarf marigold, petunia, ageratum, alyssum, coleus, or verbena. These annuals provide excellent color contrast and flower display with your bulbs.

Instructions on how to grow annuals are given in Home and Garden Bulletin 91, "Growing Flowering Annuals." For a free copy, ask your county agricultural agent or write the Office of Governmental and Public Affairs, U.S. Department of Agriculture, Washington, D.C. 20250. Send your request on a post card. Include your ZIP code.

CARE OF PLANTS

If weeds grow in your flowerbeds, you can usually pull them by hand. Be careful when you use a

hoe or other weeding tool; these implements may injure plant stems and surface roots.

Normal rainfall usually provides enough moisture for summer flowering bulbs. But during dry weather, you should water the plants at weekly intervals. When you water, soak the ground thoroughly.

When plants bloom, fertilize them lightly with 5-10-5 fertilizer. Use no more than $\frac{1}{2}$ pound for a 5- by 10-foot flowerbed or a light ring around each plant. Many flowerbeds will be fertile enough from fertilizer used on other plants grown in the bed. Avoid high nitrogen fertilizers.

Be sure to keep fertilizer off the leaves and away from bulbs and roots; it will burn them.

In addition to 5-10-5 fertilizer, you can use bonemeal as an extra source of nitrogen to promote plant growth for the next year. Bulbs decay when too much nitrogen is used at one time. But decay is unlikely when you use bonemeal because it releases nitrogen slowly.

Apply bonemeal at flowering time. Use no more than 3 pounds for a 5- by 10-foot bed. Mix it thoroughly into the soil. Do not use bonemeal on pot plants.

When flowers fade, cut them off to prevent seed formation. Seeds take stored food from the bulbs.

After the leaves turn yellow, dig the bulbs and store them for re-planting the next year. Destroy the dead stems and foliage of the plants. Foliage left on the ground may carry disease to new growth the next year. If disease is severe, plant bulbs in a new location.

Besides the general instructions given here for the care of plants, be sure to follow the special instructions given for each plant. If the general instructions conflict with the special instructions, follow the special instructions.

CARE OF BULBS

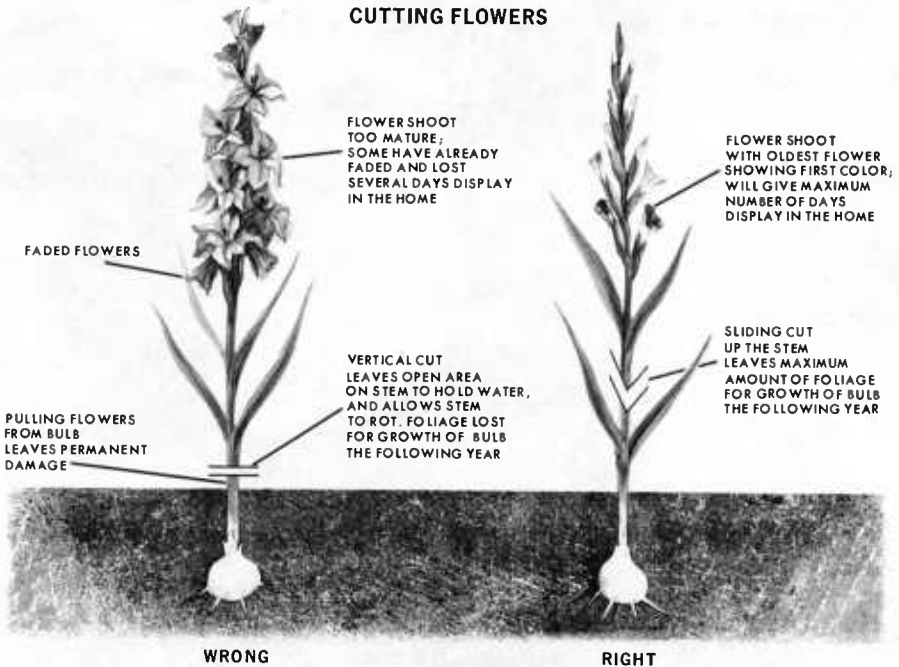
Although bulbs, corms, and tubers are all referred to as bulbs, they differ in appearance.

A true bulb is composed of layers of flesh, or scales, that overlap each other like the layers of an onion. A complete flowering plant develops inside the bulb. Each year, the growing plant replaces the bulb either partially or entirely.

A corm is a swollen underground stem that grows upright. Each year, the growing plant produces a new corm on top of the old one. The plant grows from the top of the corm.

A tuber is the swollen end of an underground side shoot that has eyes, or growing points. Each eye produces a separate plant.

CUTTING FLOWERS



Tubers multiply from year to year and may be cut apart, or divided, to increase the number of plants you can have in your garden. When tubers are divided for replanting, each division must have eyes on it. Tubers without eyes will not grow.

Most summer flowering bulbs should be dug and stored when the leaves on the plants turn yellow. Use a spading fork to lift the bulbs from the ground. Wash off any soil that clings to the bulbs, except for bulbs that are stored in pots or with the soil around them.

Leave the soil on achimenes, begonia, canna, caladium, dahlia, and ismene bulbs. Store these bulbs in clumps on a slightly moistened layer of peat moss or sawdust in a cool place. Wash and separate them just before planting.

Spread the washed bulbs in a shaded place to dry. When dry store them away from sunlight in a cool,

dry basement, cellar, garage, or shed at 60° to 65° F. Avoid temperatures below 50° or above 70° F unless different instructions are given for a particular bulb.

Inspect your bulbs for signs of disease. Keep only large healthy bulbs that are firm and free of spots. Discard undersized bulbs.

If you have only a few bulbs, you can keep them in paper bags hung by strings from the ceiling or wall. Store large numbers of bulbs on trays with screen bottoms. Separate your bulbs by species or variety before storing them.

Be sure that air can circulate around your stored bulbs. Never store bulbs more than two or three layers deep. Deep piles of bulbs generate heat and cause decay.

DISEASES AND INSECTS

See your county agricultural agent for information on control of diseases and insects.

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