**Bulbs for Summer**

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**What are summer bulbs?:** summer-blooming plants that have some type of underground storage structure. Most of these plants need to be dug at the end of the season and the storage structure kept indoors until the following planting season.

**The Underground Structures:**

- **True bulbs** are comprised of a basal plate (from which the roots grow), fleshy scales (storage tissue), a shoot (flower and leaf buds), and side buds in a structure that is round on the lower end and pointed on top.

- **Corms** are swollen stem bases modified into a mass of storage tissue. When the corm is cut in half, the storage tissue appears solid. The corm is comprised of a basal plate, the storage tissue, a papery tunic and a growing point.

- **Tubers** are swollen stems that are modified into storage tissue. A tuber is distinguished by its nodes or ‘eyes’. Tubers do not have a basal plate like true bulbs.

- **Tuberous roots** are enlarged roots that serve as storage organs. Buds are found at the stem end and fibrous roots form at the opposite end.

- **Rhizomes** are swollen stems that grow horizontally under the surface of the soil or just at the surface level. Roots are produced on the lower side, shoots on the upper side.

**The Plants and Their Care**

**Acidanthera, Peacock Orchid (Acidanthera bicolor or Gladiolus callianthus)**

**Underground structure:** corm  
**Plant description:** 2-3’ tall; flowers are white with a maroon center; flowers are fragrant; foliage strap-like  
**Bloom time:** late summer into early autumn  
**Planting:** Plant 3-4” deep; space corms about 6” apart  
**Culture:** Full sun; evenly moist soil, but not wet; protect from wind; staking may be needed  
**Lifting and storing:** Dig corms after the first frost; cut the stems just above the corm; air dry the corms for a week or more; store in mesh bags or slotted trays with good air circulation; store at 55 degrees

**Begonia, Tuberous (Begonia x tuberhybrida)**

**Underground structure:** tuber  
**Plant description:** 12-18” tall; wide range of colors; several types, classified according to flower form; crisp, attractive foliage  
**Bloom time:** summer into autumn  
**Planting:** Plant about 1” deep, with the concave side facing up; space tubers about 9-12” apart; for earlier bloom, start tubers in pots indoors about 6-12 weeks before last frost  
**Culture:** Best in partial shade; keep soil evenly moist, but not wet; avoid wetting foliage  
**Lifting and storing:** Dig tubers after the first frost; dry the tubers in the open air for a few days; store tubers in dry peat moss, vermiculite, etc, at 35-40 degrees  
**Comments:** Diseases can be a problem (stem rots and leaf diseases)
Caladium, Angel’s Wings (*Caladium x hortulanum* or *Caladium bicolor*)

**Underground structure:** tuber

**Plant description:** 1-2’ tall; foliage colors are a mix of red, pink, green and white

**Bloom time:** grown for foliage, not flowers

**Planting:** Plant about 1” deep, with the knobby side facing up; space tubers about 8-12” apart; for earlier bloom, start tubers in pots indoors about 6 weeks before last frost; soil needs to be warm (60-70 degrees)

**Culture:** Best in partial shade; keep soil evenly moist, but not wet

**Lifting and storing:** Dig tubers in fall before leaves lose all their color; dry the tubers in the open air for a few days; store in dry peat, vermiculite, at 70-75 degrees

**Comments:** Tubers may rot if they are stored below 70 degrees; challenging to grow

Calla Lily (*Zantedeschia species and hybrids*)

**Underground structure:** rhizome (but looks somewhat like a tuber)

**Plant description:** 1-4’ tall; waxy, trumpet-like flowers in a wide range of colors

**Bloom time:** mid-late summer

**Planting:** Plant about 1” deep; space tubers about 1-2’ apart; for earlier bloom, start tubers in pots indoors a few weeks before last frost

**Culture:** Full sun; keep soil evenly moist; calla lilies can tolerate wet soils

**Lifting and storing:** Dig rhizomes in fall after foliage withers; allow rhizomes to dry; store at 50-60 degrees

Canna (*Canna hybrids*)

**Underground structure:** rhizome

**Plant description:** 2-7’ tall; grown for both flowers and foliage; wide range of flower colors; some cultivars have colored foliage

**Bloom time:** summer into autumn

**Planting:** Plant about 3-4” deep; plant rhizomes horizontally and space them about 18-24” apart; for earlier bloom, start rhizomes indoors about 3-4 weeks before last frost.

**Culture:** Full sun; best growth in a rich soil with a good supply of moisture

Dahlia (*Dahlia hybrids*)

**Underground structure:** tuberous root

**Plant description:** ranging from 12 inches to 8 feet tall; wide variety of flower types; also a wide range of flower sizes and colors

**Bloom time:** summer into fall

**Planting:** Plant with the crown just above soil level; spacing of the tuberous roots depends on the mature size of the plant; dahlias that will reach 3 feet or less should be spaced about 2 feet apart; larger plants should be spaced about 3 feet apart

**Culture:** Full sun; keep soil evenly moist, but not wet; to obtain larger flowers allow only one shoot to develop; disbudding will also lead to larger flowers

**Lifting and storing:** Dig tuberous roots after the first frost. Before digging, cut the tops off so that a 3 to 4-inch section of stem remains attached. Tuberous roots tend to spread, so dig away from the main stem. Remove the majority of the soil from the clump; let the remainder dry and remove it once dry. Store in dry peat or vermiculite at 35-50 degrees; packing material can be very slightly moist to reduce shrinkage.

**Comments:** Dahlias may be troubled by a variety of insects and viruses.

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Elephant Ears (*Colocasia* and *Alocasia*)

**Underground structure:** tuber  
**Plant description:** 3-3 ½’ tall; large tropical-looking leaves  
**Bloom time:** grown for foliage, not flowers  
**Planting:** Plant tuber 4-6” deep, with blunt end down; space tubers 2-3 feet apart  
**Culture:** Full sun to partial shade; moist to wet soil; protect the plant from wind which can damage the large leaves.  
**Lifting and storing:** Dig up in autumn after the first frost; allow tubers to air dry; store in dry peat, vermiculite, at 70-75 degrees

Gladiolus (*Gladiolus x hortulanus*)

**Underground structure:** corm  
**Plant description:** 1-5’ tall; wide range of flower colors  
**Bloom time:** mid-summer  
**Planting:** Plant 4-6” deep; space corms about 3-6” apart  
**Culture:** Full sun; evenly moist soil, but not wet; protect from wind; staking may be needed  
**Lifting and storing:** Dig corms after the first frost; cut the stems just above the corm; air dry the corms for a week or more; store in mesh bags or slotted trays with good circulation; store at 40-45 degrees

Pineapple Lily (*Eucomis autumnalis* and *Eucomis comosa*)

**Underground structure:** bulb  
**Plant description:** 1-2’ tall; low rosette of strap-like leaves; greenish flowers in spike-like clusters atop 1 to 2 foot stem; flower spike is topped with a cluster of leaf-like bracts, causing the flower cluster to resemble a pineapple.  
**Bloom time:** mid-late summer  
**Planting:** Plant 5-6” deep; space bulbs about 1’ apart  
**Culture:** Full sun to light shade; well drained soil  
**Lifting and storing:** Dig bulbs before first frost; store bulbs at 55-65 degrees

Ranunculus (*Ranunculus asiaticus*)

**Underground structure:** tuber (with an irregular claw-like shape)  
**Plant description:** 12-18” tall; large flowers with numerous petals  
**Bloom time:** late spring into early summer  
**Planting:** Soak tubers overnight prior to planting; plant 1-2 “deep with “claws” pointing down; space tubers 6-8” apart  
**Culture:** Full sun; very well drained soil (tubers are prone to rotting if soil is too wet)  
**Lifting and storing:** Dig tubers as foliage dies down; store in dry vermiculite or peat at 50-55 degrees.  
**Comments:** Prone to powdery mildew and crown rot.

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Tigridia, Peacock Flower, Tiger Flower (*Tigridia pavonia*)

**Underground structure:** corm

**Plant description:** 1-2’ tall; unique flower with three large outer petals and three smaller inner petals; flower color varies orange-red, white, pink and mauve; flowers are speckled in the center; foliage is strap-like

**Bloom time:** summer

**Planting:** Plant 3-4” deep and 6-9” apart

**Culture:** Full sun; well drained soil; may require some protection from wind

**Lifting and storing:** Dig corms as foliage dies down; store in vermiculite or peat at 35-40 degrees.

**Comments:** Each flower lasts only one day, but flowers are produced for several weeks.