

Zone: Name:	
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11 Herbaceous ID

Group #1

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Common Name	Scientific Name	Notes/Location
Begonia	Begonia semperflorens	
Impatiens	Impatiens wallerana	
Petunia	Petunia x hybrida	
Marigold	Tagetes erecta	
Salvia	Salvia sylvestris 'May Night'	
Coleus	Coleus x hybridus	
Liriope, Lily-turf	Liriope muscari	
Pansy	Viola x Wittrockiana	
Mums	Chrysanthemum x morifolium	
Snapdragon	Antirrhinum majus	
Dieffenbachia, Dumbcane	Dieffenbachia amoena	

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Begoniaceae



Begonias of the semperflorens group are frequently grown as bedding plants outdoors.

Foliage: It has evergreen leaves which are round, fleshy and waxy in appearance. Leaves may be green, bronze or red.

Light: The plant grows best in semi shaded conditions.

Soil: The potting medium could be peat or compost or a mixture of peat or compost with sand or other ingredients.

Watering: The soil needs to be kept moist at all times but not soggy. Avoid excess watering.

Pest and Problems: Begonia relatively pest free. Watch out for mealy bugs.

Growth habit: It is a low growing plant, growing to about 6 to 12 inches.

Fertilizing: Ground cover, hanging basket, perennial, potted plant

Propagation: Propagation is done through seed and cuttings.

Landscaping Utility: It is a compact, bushy plant ideal for beds, low borders and edging. The distance of planting should be 6 in. cc. The plant looks excellent when grown as a mass plantation.

Uses: Plants should be fertilized every other week all year long with a fertilizer having adequate amounts of nitrogen, phosphorus and potassium.

Impatiens Impatiens wallerana

Balsaminaceae



Impatiens tend to attract hummingbirds as well as butterflies and other pollinators.

Foliage: Alternative, upper leaves sometimes opposite; lanceolate-ovate; green or reddish green on both surfaces.

Soil: Slightly acid to neutral, good garden loam rich in organic matter with liberal amounts of coarse sand for good drainage.

Watering: Keep moist but not wet.

Pest and Problems: Scale, spider mites, aphids; damping off.

Fertilizing: fertilize every two weeks with a general fertilizer; plant out-of-doors after danger of frost has passed.

Propagation: Seed sown indoors 6 to 8 weeks before last occurrence of frost. Cuttings, anytime, place in sand and mist or enclose in a polyethylene plastic bag.

Landscaping Utility: Many varieties and series introduced each year with varying colors and sizes.

Flowers: Early summer to fall.

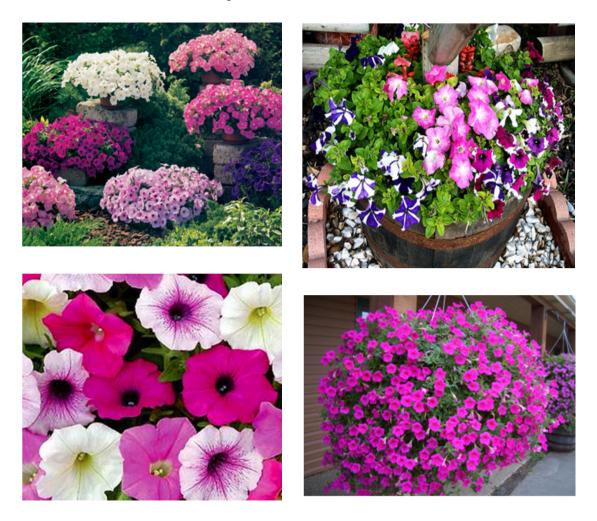
Growth rate: Rapid.

Form: Spreading, rounded, flat topped



Solanaceae

Petunia Petunia x hybrida



Foliage: alternate, sometimes opposite on upper leaves, broad-ovate to cordate shaped, 1 1/2" to 3" long, covered with a viscid-pubescence, sticky.

Flower: funnel-shaped corolla tube with a very broad limb, 2 to 5" across, color and form, single or double, solid or bicolor, fragrant, diversity of colors, multiflora or grandiflora.

Soil: light, well-drained soils.

Pest and Problems: Botrytis, tobacco mosaic, stem rot, aphids, and flea beetle.

Light Requirements: Sun to partial shade

Propagation: seed, cultivar selection important for heat tolerance

Landscaping Utility: Annual, moderate drought tolerant, multifloras appear more heat tolerant than grandifloras or doubles. Prune in summer 2 to 3 times to encourage continued flowering

Seasonality: Provides excellent color until first freeze in late fall. Spring to fall with decline in summer, frost tolerant; may consider using for an early spring flowering show (February to May) as it is frost tolerant.

Form: Height: 6 to 18 inches. Spacing: 12 to 14 inches.



Asteraceae

Marigold Tagetes erecta









Flower: Marigold has a long blooming period that makes it one of the most popular annuals. It is often used in nursery plantings to control nematodes, or in gardens for companion planting strategies to repel insects. Odorless varieties are available though and Marigolds are seen as cut flowers, in bedding, or as a border plant.

Soil: Marigold enjoys moist, fertile, well-drained soil

Pest and Problems: The American Marigold is prone to botrytis blight, leaf spot, wilt and stem rot, spider mites, and Japanese beetles.

Light Requirements: A spot in the full sun.

Propagation: They should be spaced 12" apart. Remember to remove the old flower heads. Seeds should be sown indoors 4-6 weeks before the last frost or outside after the last frost.

Landscaping Utility: Marigolds have oil glands in their leaves that release a distinctive odor when crushed. This odor also repels insects which makes Marigold a popular garden plant.

Seasonality: Provides excellent color until first freeze in late fall. Spring to fall with decline in summer, frost tolerant; may consider using for an early spring flowering show (February to May) as it is frost tolerant.

Form: The American Marigold grows up to 36" and has large (2-4) solitary heads of orange or yellow.



Salvia Salvia x sylvestris 'May Night'

Lamiaceae







Flower: Salvia sylvestris 'May Night' (Meadow Sage) blooms prolifically with deep purple-blue flowers. It is an outstanding perennial with excellent cold hardiness, vigor, and tolerance of heavy clay soils. Blooming in late spring with a profusion of flower spikes, it reblooms later in the summer when deadheaded.

Soil: Moist, fertile, well-drained soil.

Pest and Problems: Sage seems to have a problem with keeping a continuous color. Be on the look-out for slugs which will eat holes in the leaves.

Light Requirements: In the full sun.

Propagation: Sow the seeds indoors 4-6 weeks before the last frost Maintain a 65-70-degree temperature until germination, 55 degree after germination, or sow outdoors when the night temperature are still above 50

Landscaping Utility: Salvia is commonly used as a bedding or a border plant. Its bright colors do not always combine well with other plants. Salvias looks especially splendid with white flowers and silvery-gray foliage. Remember to remove the faded flower spikes.

Form: Plant scarlet sage 12 inches apart





Foliage: It has oppositely arranged, toothed and variegated leaves. Coleus is grown primarily for its foliage. The multi-colored varieties do well as bedding or border plants, in window boxes and containers, and as a house plant. It is easily grown and propagated.

Flower: Flowers are dark blue or white with a lower lip longer than the upper lip.

Soil: Coleus enjoys a moist, fertile, well-drained soil.

Pest and Problems: Coleus is prone to mealybugs, and slugs.

Light Requirements: Most types of coleus are very light sensitive and will easily sunburn

Propagation: Sow the seeds indoors 10 weeks before the last frost. Coleus will germinate in 10 days. Remember to pinch regularly to promote branching. Coleus cuttings can be overwintered as house plants.

Landscaping Utility: Coleus is a member of the Labitae or Mint family. It is a large family of over 150 species of shrubs and herbs thriving in various climates around the globe. Mints may be either annuals or perennials but always have a square shaped stem.

Seasonality: Coleus are also sensitive to the cold; do not plant until all danger of frosting has past. When it is warm enough to plant, remember that Coleus needs room to grow and place them 12" apart. Remove the flower "spikes" as they form

Form: Coleus is a horticultural annual that will grow 2-3 Feet.



Liriope, Lily-turf Liriope muscari









Foliage: The plant itself is similar in appearance and landscape use to mondo grass (<u>Ophiopogon japonicus</u>) which has finer textured foliage and bears its flowers within the clumps rather than above it like liriope. Liriope is available in several varieties including some with white and yellow variegation. 'Monroe White' has white flowers while 'Big Blue' has intense violet-blue blossoms.

Soil: Regular to moderate, ideally, keep moist but well drained.

Light Requirements: Light shade to shade, blooms better with some sun

Propagation: Division in early spring, seeds in the fall. The seeds might be inferior to their parents Liriope spreads quite fast in reasonable soil, creating a substantial tuberous root mass.

Landscaping Utility: The Liriope has leathery grass-like leaves that bend graciously, commonly called border grass is not actually a grass but a member of the lily family, a fact that inspires another of its common names, lilyturf. The flowers come in summer and can be used as cut flowers. They are followed by blackish-blue berries. It makes a good border plant or ground cover in shady areas of the garden.

Form: Evergreen spreading perennial, up to 12 inches tall (30 cm), 18 inches spread (45 cm)



Violaceae

Pansy Viola x Wittrockiana



Foliage: The color is dark green, the texture is medium to fine with a fast growth rate.

Flower: Appear in spring and fall when night temperatures are 40oF and day temperatures are 60oF. Available in solid colors of white, yellow, rich gold, bronze, and deep rose, violets, and maroons or combination of colors.

Soil: Will grow in a wide variety of soils but grows best in a good garden loam, rich in organic matter & well drained.

Pest and Problems: Leafhoppers, aphids, violet sawfly, slugs; anthracnose, crown rot, leaf spots.

Light Requirements: Full sun - if too much shade, flower size and numbers are reduced and plant becomes spindly.

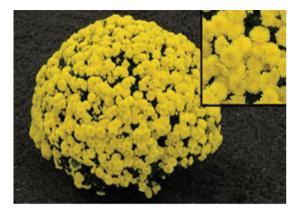
Landscaping Utility: Prepare beds well in advance incorporating a 2 inch layer of organic matter (decomposed manure is recommended). Sand may be added to improve drainage.

Seasonality: Though a biennial pansy is grown as an annual, when plants begin to fade, discard and get ready for new plants or other annuals. Do not plant pansies in the same location for any more than three consecutive years.

Form: Spreading, with flowers borne on upright nodding stems.



Asteraceae







Propogation: Chrysanthemums can be propagated by division, cuttings, or seeds.

Flower: Yellow and bronze are the most popular colors although white and reddish-pink varieties are available.

Soil: Chrysanthemum needs a well-drained soil, especially for overwintering. Planting in a soil with high organic matter will encourage stolon formation and deeper rooting. Do not plant until the danger of frost has passed.

Pest and Problems: Chrysanthemums are susceptible to aphids and plant bugs, leafspot and stunt, and foliar nematodes. However, they will benefit from winter protection, (i.e., mulching). Chrysanthemums may "frost heave" in early spring.

Light Requirements: Chrysanthemums need full sun and should have 18-24 inches between them. Pinch the new growth back until mid-July and provide plenty of water if the season is dry. Staking may be necessary to provide support

Propagation: seed, cultivar selection important for heat tolerance

Landscaping Utility: The garden chrysanthemum is very popular; it is a perennial used as a border or an edge plant, in a container or a pot, or for cut flowers.

Seasonality: It flowers around September.

Form: The garden chrysanthemum will grow between 1 and 2 feet tall.



Scrophulariaceae

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Snapdragon Antirrhinum majus







Foliage: Untoothed lance-shaped leaves that will grow up to 3" long.

Flower: The Snapdragon is a showy plant with lavender, red, yellow, violet, or white flowers.

Soil: The snapdragon likes moist, fertile, well-drained soil

Pest and Problems: Snapdragons are plagued by snapdragon rust, an orange fungus found on the underside of its leaves. Rust resistant strains are available. Spider mites can also be a problem.

Light Requirements: It needs full sun and good air circulation at the base of the plant

Propagation: Sow the seeds indoors, 6-8 weeks before the last frost of the season. The Snapdragons will germinate in 7-14 days and will need to be pinched to promote branching when they reach 2-4 inches.

Landscaping Utility: Small types can be spaced 6" apart; larger varieties should be staked 12" apart. Remove the faded flower spikes.

Seasonality: Bloom throughout the summer.

Form: It grows from 1-3 feet tall. The shorter mound-type varieties are used as bedding plants, intermediates (15-24") require no stakes and therefore make good border plants, and the tall columnar snapdragons are best for cuttings.

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Foliage: Its leaves often have narrow white or yellow stripes on either side of the midrib. There are also Spotted Dumb Cane varieties, D. maculata and D. picta, with yellow markings and a "Rudolph Roehrs" variety (D. roehrsii) with pale chartreuse and ivory coloration.

Pest and Problems: Dumb canes typically have problems with red spider mites and mealy bugs. They also tend to become 'leggy" meaning that they lose their lower leaves.

Soil: Soil should be kept on the dry side. Use sphagnum moss if available.

Toxic Principles: Insoluble calcium oxalates, proteolytic enzyme.

Light Requirements: It likes medium sunlight and warmer temperatures.

Propagation: Propagation through air layering, cane cuttings, and terminal cuttings will be successful.

Seasonality: Dumb cane is an attractive indoor plant or patio plant during the summer months.

Form: Depending on the species, dumb cane will grow up to 6 feet tall and can have leaves as long as 18 inches.

Landscaping Utility: The word "dumb" is drived from the extremely unpleasant sensation this plant can give the mouth if consumed. It contains irritants. Intense burning and irritation of the mouth and tongue. Death can occur if base of the tongue swells enough to block the air passage of the throat. Handling the plant may cause skin irritation. It should not be grown near small children!