

MICHIGAN BULB CO.®

Planting Guide

Thank you for choosing Michigan Bulb for your newest additions to the garden. With just a bit of planning and preparation, your plants will perform beautifully. Plan to plant as soon as possible.

For your guaranteed success, we've included this growing guide. Planting information can also be found at www.MichiganBulb.com. If you have any questions, please email us at service@MichiganBulb.com. You may also call us at (812) 260-2148 or write to us at Michigan Bulb, Customer Service, P.O. Box 4180, Lawrenceburg, IN 47025-4180.



What To Do When Your Plants Arrive

Open your carton as quickly as possible and check each item against the packing slip or shipping label to make sure you've received everything you ordered. The packing slip or shipping label will also indicate if multiple shipments are being made.

The best insurance for success is immediate planting. If planting must be delayed, please take these precautions.

POTTED PLANTS: Potted plants may be kept for a short time outdoors in a sheltered, but bright location. If cold temperatures are forecast, protect your plants from freezing. Water the plants when the soil begins to dry on top.



DORMANT WOODY PLANTS: These leafless, soilless plants will keep for a few days in their plastic bags in a cool (34° to 40°F is recommended) and dark location with their roots covered with damp newspaper. Lightly mist the roots and newspapers as necessary to keep them damp. Protect them from direct sunlight and wind.

Some bareroot trees and shrubs are more sensitive to drying out and will arrive with their roots wrapped with moisture retentive material and plastic in order to maintain moisture during transit.

Maintain moisture around the roots until you can get the plant in the ground. Upon receipt, unwrap the plastic and check to make sure the roots and packing material are still moist. Add water as necessary and rewrap the roots until planting. Store in a cool location. If dry, soak the roots in a bucket of water for up to 12 hours then re-

wrap until planting. Check root moisture as needed to make sure roots stay moist.



DORMANT PERENNIAL ROOTS: Keep roots in their original bags at about 40°F for no longer than three weeks. Despite their appearance, the roots are dormant and will sprout into life after planting.



BULBS: Open bags to allow air to circulate and store bulbs in a cool, well-ventilated location. Protect them from any danger of freezing.

FALL SHIPPED ITEMS: Items may be in a dormant or semi-dormant condition with the leaves falling off or yellowing. This is their normal cycle to prepare for a winter resting state. The root systems are fully developed, and prompt planting will allow the roots to grow throughout the fall. Most bulbs will not show any signs of growth until spring.

Dormant plants and bulbs may show signs of gray mold, or botrytis, also known as "storage mold." This is not a problem as long as the division or bulb is firm and not mushy. The mold exists as a saprophyte,

an organism that lives on dead organic matter. Molds such as botrytis are a natural part of healthy soil. A little botrytis

growing on your dormant plants and bulbs can be expected and will not harm them.

Site Preparation

LOCATION: Select a site that suits your plants' light requirements. Plants labeled as "full sun" require at least 4 to 6 hours of sun daily. Those labeled as "partial sun" do well in dappled sunlight. Plants that prefer "full shade" perform best in locations that receive very little direct sunlight.

DRAINAGE: Plants appreciate moist, not soggy, soil. If your soil is heavy or clay-like, improve it by mixing in organic matter such as peat moss, dehydrated manure or sand.

SOIL ACIDITY: Plants can't absorb the

nutrients they need if the soil does not have the proper pH level. While most plants prefer a neutral soil (pH 6.5-7.0), plants such as azaleas and blueberries require an acidic soil (pH 5.5-6.0). You can test your soil's pH yourself using a soil test kit or contact your county or state agriculture extension service.

LOOSENING THE SOIL: Loosen the soil before planting. For perennials and bulbs, loosen the soil 3 times the width and the height of the pot/root system and for trees and shrubs at least 1 ½-2 times.

Annuals and Perennials

NOTE: Check your plant's label for information on spacing and depth requirements.

BAREROOT PLANTS Many plants do best when shipped in a dormant or bareroot condition without any soil around the roots. Often plants shipped this way may appear to be dead. However, dormant or bareroot plants are living plant material even though they may be completely void of green buds or leaves. They've been conditioned for shipping and will be ready to grow after planting. It may take as long as 6-8 weeks before they sprout to the point where growth is obvious.

Before planting, make sure roots are moist and soak briefly. Follow the guidelines below for your perennial root type:

Fibrous roots (i.e. carnations, geraniums, phlox, etc.) need to be spread downward and not cramped. The crown (where roots meet stems) should be level with or slightly above the soil.

Long taproots (i.e. hollyhocks, hibiscus, columbine, poppies, etc.) should extend almost straight down. To avoid possible rotting conditions, place the crown just below the soil line.





Rhizomes (i.e. bearded, Japanese and Siberian irises) should be planted near the surface. A small portion of the rhizome, where the leaves connect, should be visible above the soil.

Roots with eyes (i.e. peonies) are placed in a hole on a cone of soil with the crown just below ground level. Spread roots around the cone. Lightly cover the crown with soil.

Fleshy roots (i.e. daylilies, hostas) should be planted in a hole twice as wide and twice as deep as the bareroots. Create a mound in the planting hole to hold the roots and the crown (where roots meet the stem) at ground level. Spread the roots over the mound. Fill the planting hole with soil and firm with both hands. Water thoroughly.

Bareroot perennials should not be planted too deep. The crown of the plant (where the roots meet the sprouts or stem) should be at ground level or just below it. If planted too deep, plants will not get enough air and growth and flowering will be poor.

POTTED PLANTS: When you receive your potted plants, you may find some leaves appear to be yellowing or even dead. That doesn't mean the plants are dead. As long as the root system is healthy, upper foliage will soon regenerate.

Your potted plants require little attention before transplanting:

- Make sure the planting medium is still moist and water if the top is dry.
- Groom the plant by pinching off any less-than-healthy leaves (for example, leaves that are yellowed or withered).
- Transplant potted plants to their new home as soon as possible after your shipment arrives.
- Remove plants from their shipping pots by lightly squeezing or tapping the sides of the container to loosen the planting medium in which the plant has been growing. Then, invert

the pot, gently shake the plant loose and proceed with planting.

Plants which seem to be tightly bound to their pots may be "root bound." However, they are easy to remove and prepare for planting:

- First, squeeze the container to loosen the compacted root ball inside.
- Invert the pot and shake the plant out of the container.
- If you find a mass of roots tightly woven into the planting medium, cut or tear off the bottom third of the root ball.
- Using a knife or trowel, score a vertical mark on all four sides of the root ball. Even though you will be cutting some roots, loose ends have a tendency to grow outward into the surrounding soil, while unscored roots grow in the root ball itself after planting and may cause decreased vigor.

- Some plants arrive in Ellepot® paper plant pots. These are our environmentally friendly, biodegradable paper pots. You can plant the whole root ball directly into the ground. There's no need to remove the paper covering the root system. For the first two weeks after planting, water regularly. The soil inside the Ellepot may be more porous than the surrounding soil and will dry out quicker. Once the roots take hold into the surrounding soil, less watering is necessary.

GROUND COVERS: Ground cover plants prefer deeply worked, properly fertilized soil which is free from weeds. Dig individual planting holes and plant each ground cover plant as outlined above for other potted plants. To create the most natural effect, stagger your planting. If your planting is on a slope, follow the contours with staggered spacing, leaving a depression around each plant to catch water.

Spread a 1-2" layer of mulch over the area surrounding the plants, being careful not to bury them. This helps retain moisture in the soil and retards weed growth. Maintain the mulch covering until your ground cover plants have spread to cover the entire planting site.

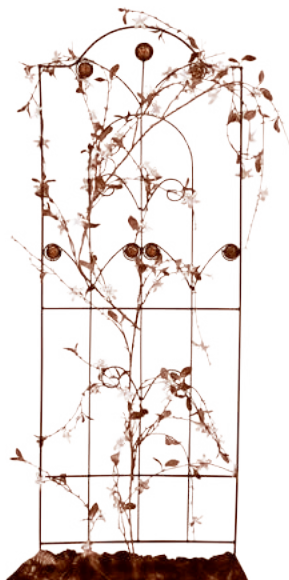
VINES: Most vines grow best when allowed to climb up a vertical support. When planting a climbing vine near a building, fence, wall or tree, set the plant at least 18" from the structure which will support it. Then gradually train it to grow over to the structure.

When using garden arbors, mesh-type fencing, trellises and similar supporting structures that are in the open, plant the vine close to the support.

Don't let your vines form into a tangle. They should be pruned frequently through the summer, spreading and tying the shoots to keep them to a single "layer" over the support.

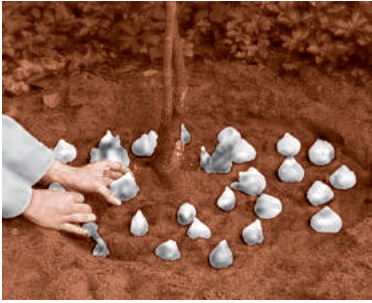
To establish your clematis vines, keep the root system cool. A sunny location where roots can grow under a cool covering, such as other perennials or mulch, is ideal. Deep planting—about a half inch deeper than it was grown in the nursery—encourages extra-strong root development, and frequent, thorough watering will encourage vigorous growth.

Plant your vine about 4-6" away from its trellis or support system. This gives its roots space to expand and grow. To get your vine going in the right vertical direction, use twine or tie-wraps to loosely attach the plant to the trellis. Vines with tendrils will twine around the support, while other vines may require you to loosely twine the vine around the trellis.



BULBS

NOTE: Check your plant's label for information on spacing and depth requirements.



There are two basic methods for planting bulbs. Using a garden trowel or bulb planter, dig individual holes for each bulb. Loosen the soil to a depth of 6-8" and add some bulb fertilizer. Most bulbs have a visible growing point, which should face upward. As a general rule, bulbs should be planted as deep as 2-3 times the height of the bulb. Place your bulb in position in the hole and cover it with loose soil.

If planting a quantity of bulbs in a single area, dig an entire bed to planting depth. Place the bulbs in position, cover with soil and water. Bulbs need plenty of water and good drainage. They require only minimal care during their blooming period. Like all garden plants, they appreciate a weed-free growing area and watering when nature doesn't supply enough rain to keep the soil moist. Do not let water stand around your bulbs.

Hardy bulbs, such as tulips and daffodils, that stay underground year round, should be protected by mulch in winter. After blooming season is over, do not cut back the leaves. Let the foliage yellow and die down naturally. The leaves provide nourishment to the bulb to produce next year's blooms.

TENDER BULBS: Summer-flowering bulbs such as dahlias, begonias, gladiolus, cannas and calla lilies are less hardy in colder climates and should be lifted each fall. Lift bulbs prior to a killing frost or as soon as the frost has blackened the foliage. Dig up the bulbs gently, being careful not to cut or damage them. Store them in a well-ventilated, frost-free area until the foliage has dried. Remove the foliage and place bulbs in an unsealed paper bag, old nylon stocking or a shallow, plastic-lined box with a blanket of peat moss or vermiculite.

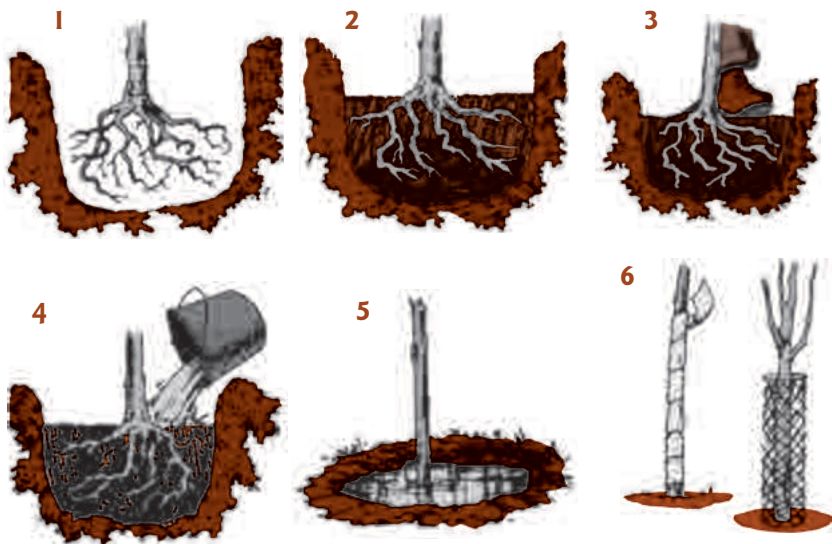
Summer-flowering bulbs require winter storage temperatures between 35-45°F. An ideal storage location would be an unheated garage or cellar-type basement. Most modern basements aren't cool enough for winter bulb storage.



Trees and Shrubs

NOTE: Check your plant's label for information on spacing and depth requirements.

BAREROOT TREES, SHRUBS AND HEDGES: Soak roots for 1-4 hours before planting. There are six basic steps for planting trees, shrubs and hedges:



1. Dig a hole large enough to give the roots plenty of room, with at least 2-3" of space beyond the root tips and the sides of the hole. Build a mound of soil in the bottom of the hole and spread roots in a natural position atop the mound.
2. Position the plant so the previous soil line will be even with ground level. (The stem/trunk will be darker in color below the original planting line and lighter in color above it.)
3. Once the plant is positioned at the proper planting depth, begin filling the hole with soil. Work the soil around the roots with your hands. When the hole is half filled, tamp the soil to remove any air pockets.
4. Fill the planting hole with water and let it soak in. Straighten the plant in the hole and finish filling with soil.
5. Form a "saucer" of soil around the edges of the planting hole and fill it with water. (To promote growth, dig four small holes, 4-6" deep, around the perimeter of the planting hole and drop a fertilizer tablet in each hole.)
6. The lower trunk of newly planted trees should be wrapped with heavy paper or special tree wrap. This will protect tender bark from sunscald and rodents. A cylinder of screen wire is useful to protect the trunk from destructive animals.

ROSES

NOTE: Check your plant's label for information on spacing and depth requirements.

GENERAL ROSE USES:

Hybrid Teas and Grandifloras are upright and well-branched, ideal for the back of mixed perennial beds

Floribundas are rounded and full, great for providing season-long color on an attractive landscape plant.

Climbers grow up to 20' tall and are ideal for adding height and dramatic interest to landscapes.

Shrubs are hardy, trouble-free roses, great in group plantings for providing easy landscape color.

Ground Covers can grow up to six feet in width, and are ideal for slopes, rock gardens, hanging baskets, and mixed containers.

Miniatures are usually less than three feet in height, and are great as a mini border, as accents or in containers.

PLANTING ROSES (IN THE GARDEN):

1. Choose a location that receives at least six hours of direct sunlight each day and ample space to allow plenty of air circulation. Any sun-loving perennials and annuals make great companions for roses, as they can complement the blossom color and plant shape, as well as extend the bloom season.
2. Before your roses arrive, prepare your site. Roses thrive in well-drained soil that is high in organic matter. To test the drainage, dig a hole about 12" deep and fill it with water. In well-drained soil, the water will drain out within 15 minutes. If the water drains more slowly, amend the soil with organic matter, such as pine bark, peat moss, or compost.

3. When your roses arrive, remove them from their box and soak the roots in a bucket of water for a least an hour or two (but no more than 12 hours). If you will not be planting right away, cover the roots with damp newspaper to keep them moist and store them in a closed plastic bag in a cool, sheltered area.
4. To plant your roses, dig a hole at least 12" deep and twice as wide as the root ball. Build a small mound in the center of your hole and spread the roots out around it. The plant's crown (where the roots meet the canes) should be at ground level for mild climates and 2-3" below ground level for cold climates. Fill the hole with amended soil. Water again thoroughly.
5. Top dress your rose plants with mulch. This will help with water retention and weed control, while giving your roses a finished look.

WATERING: Most roses require about one inch of rainfall weekly during the growing season. If you need to provide supplemental irrigation, it is best to do so in the morning to give the sun a chance to dry out any moisture on the foliage. When possible, hand water or use drip irrigation to target the base of the plant. Do not overhead water, as this can encourage disease.

FERTILIZER: You can begin feeding your roses when new growth is about six inches in length. For best results, spread the fertilizer around the plant at the drip line.

DEADHEADING: If you wish to deadhead spent blooms to encourage quicker rebloom, cut at an angle just above the first five-leaflet stem.

WINTER PROTECTION: After the first killing frost trim tall canes and mound an 8" pile of loose soil around the base of the plant. Then cover remaining canes with hay, straw, compost, or other organic matter. Move container roses to an unheated garage or basement and provide only enough water to keep the soil slightly moist. Do not fertilize.

SPRING CARE AND PRUNING: After the danger of frost has passed, uncover your roses and look for any winter damage. Spring is the optimal time to prune your roses. Start by removing any dead or damaged canes. Next, cut back one-half to two-thirds of the previous year's growth. If possible, cut right above an outside eye, or bud. This will encourage your rose to grow in a rounded urn shape, which will help maintain good air circulation in the center of the plant, thereby promoting good health.

INDOOR/OUTDOOR PATIO PLANTS

NOTE: Check your plant's label for information on spacing and depth requirements.

POTTING: Place a curved pot shard or large rock over the bottom drainage hole of your pot so excess water drains out but the soil stays in place. Put the plant in the pot at the depth it was growing in the shipping pot. Fill with potting soil up to ½-1" below the container rim. Water generously. Press soil down to eliminate air pockets but avoid packing so tightly that drainage is blocked. Repot plants when roots poke through drainage holes.

WATERING: Each plant has different moisture requirements. Overwatering is the biggest mistake indoor gardeners make. As a general rule, water when soil is dry to the touch.

LIGHT: Most flowering plants need bright indirect light. A south or southeast window is usually a full-light location. Foliage plants require less light, especially those with dark green leaves.

FERTILIZER: Most houseplants and patio plants thrive on a monthly application of water-soluble plant food. Be sure to follow the feeding instructions on the package.

WINTERIZING CONTAINERS: For items such as Patio Blueberry, Patio Strawberry, Patio Apple, Elephant Ears, Bougainvillea and Angel Trumpet, providing winter protection is very important, especially when outdoor temperatures drop below 29°F. Before freezing weather arrives, move your containers to an unheated garage or cellar where temperatures stay above freezing. Withhold fertilizer and water just enough to keep the soil slightly moist. When the danger of frost has passed, bring the containers outdoors again and water thoroughly.

WINTERIZING TENDER PATIO FRUITS: In early fall, when night temperatures drop below 50°F, plants such as Citrus, Dwarf Banana, Dwarf Fig and Dwarf Pomegranate need to be moved indoors. Provide as much sun as possible; a south- or west-facing window is ideal. Avoid areas with hot, dry air, such as near heat registers. Growth will slow down in winter. Withhold fertilizer and only water as needed. Return to a patio setting once danger of frost has passed.

Soil Level



Hens & Chicks

2"



Cyclamen

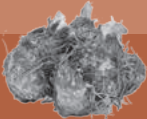


Hosta



Hibiscus

4"



Caladium

6"



Lily

Tips for Foolproof Gardening

Creating a beautiful garden doesn't require years of experience, constant care or a "green thumb." It's more a matter of careful planning and choosing proper planting material. To help you achieve outstanding results, our nursery professionals offer these basic guidelines:

- Select a location with good drainage and sufficient sun. Soil that already has plenty of organic matter, ample nutrients and a consistency that allows good air and moisture circulation, as well as good drainage, is a strong foundation for roots and requires little pre-planting attention.
- If your soil is claylike and heavy, spade or rototill it to a depth of 12". Then mix the soil with an equal amount of peat moss, compost, sand or other light material.
- Even if your garden has good soil with adequate drainage, the bed should be worked to a depth of at least 12" before you plant your new perennials.
- Cover your beds with a 2-4" layer of mulch so the soil will retain moisture and reduce weed growth. Be careful not to bury your plants.
- Don't try to fill every available spot at one time. Most perennials multiply and expand annually. Until then, use annuals to fill in around your perennials.
- The best effect comes from massing several similar plants together. Group a minimum of three plants of a single variety in one area.
- Think in terms of three growing heights—background, middle ground and foreground. Taller plants should



Daylily



Dahlia



Peony

Soil Level

2"

4"



Tulip



Daffodil

6"

go to the background, with lower-growing plants in the foreground.

- When mixing perennials, consider the types of foliage as well as the color and shape of the flowers. The most beautiful perennial beds contain a mixture of different foliage hues and textures.
- Consider seasons of blooming. Mix perennials with different blooming times in each bed so you'll have a continuous display of color for an extended period.
- All perennials look best when plants are staggered in an irregular pattern.
- Consider the amount of sun your garden will receive—not just in the spring, but during the summer and early fall when surrounding trees have their full foliage.

- Don't overlook the reflected light and heat that plants will receive. Perennials planted too close to the south or west sides of a building where heat and light are bouncing off the surfaces may deteriorate quickly.
- Choose planting locations with access to water.
- Be patient! It takes time for perennials to develop strong root systems and produce sizable top growth. Most of the illustrations in our catalogs show how perennials will look after they've had three years to mature in a garden. Much of the joy in creating a beautiful perennial garden is watching your plants grow. The years of charm and beauty they will bring to your garden are well worth the wait!

While every plant shipped by Michigan Bulb is fully guaranteed to grow regardless of your soil, gardening experts highly recommend adding select nutrients to promote more vigorous growth and longer-lasting, brighter blooms. We have developed special plant foods to make it easy for you to provide the proper nutrients for all types of plants. All of Michigan Bulb's scientifically compounded formulations are extremely easy to use and won't burn plants. Not available in local stores or garden centers, they're available exclusively from Michigan Bulb. Please visit our website at www.MichiganBulb.com for our complete line of plant foods, supplies and plants, as well as additional information on planting and caring for your plants.

Successful Gardens for Our Customers

Whether you're a new or experienced gardener, the key to your success is patience. Please note that some newly planted items take 30-60 days to get established before you will see vigorous growth. Michigan Bulb's service doesn't stop with the delivery of your order. We provide additional information at our website: www.MichiganBulb.com. Our Customer Service Representatives are available to answer any inquiries you may have. Email us at service@MichiganBulb.com. Call us at (812) 260-2148, 24 hours a day, 7 days a week. Or, if you prefer, you can write to us at Michigan Bulb, Customer Service, P.O. Box 4180, Lawrenceburg, IN 47025-4180. We will answer your questions promptly.

No-Risk Guarantee

Order with complete confidence. We select and ship only the finest quality bulbs, plants, and trees. We pack them carefully to ensure they arrive safely. If you are not pleased with your purchase, please call us at (812) 260-2148 or email at service@MichiganBulb.com and our Customer Service representatives will be happy to help you obtain a merchandise credit. Your order is important to us, and we want you, our customer, to be completely satisfied.



For questions, call or write:

Customer Service • Michigan Bulb Company
P.O. Box 4180 • Lawrenceburg, IN 47025-4180
(812) 260-2148 • 7 Days a Week, 24 Hours a Day
service@MichiganBulb.com