

Plant Wise

IOWA STATE UNIVERSITY
University Extension

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Pansies Bring Color to the Spring Garden

Cindy Haynes
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Pansies are a popular spring garden annual in the Midwest. Their cheerful flowers often remind us of “painted faces” and their bright colors remind us of spring. But did you know that there are almost 500 species of pansies or violas in the world? The amazing diversity of the genus *Viola* has given us today’s wonderful variety of pansies.



Pansies vs. Johnny Jump-Ups

Pansies are generally classified as *Viola xwittrockiana*, a complex hybrid of many *Viola* species. Pansies are available in every color of the rainbow and many colorful combinations. There are three basic color patterns in pansy flowers: the single, clear color types; the single color type with black penciling radiating from the center; and the common “face” type with the dark centers. Pansy flowers may be up to 3.5 to 4 inches in diameter with single, semi-double or double flower forms. The plants are compact, normally ranging from 6 inches to 12 inches in height with 6- to 9-inch spreads.

Johnny jump-ups can be thought of as petite cousins of the pansy. Johnny jump-ups are usually classified as *Viola cornuta* or *Viola tricolor*. Johnny jump-ups have smaller flowers that are available in fewer colors. Flowers are restricted to blues, violets, yellows, pinks and whites. Johnny jump-ups are more tolerant of warmer temperatures than pansies and will often bloom longer into the season.

Pansies and Johnny jump-ups are annuals. Neither will survive through the summer in the Midwest. If planted in

late summer, they usually will not survive the winter. However, Johnny jump-ups often come up freely from seeds the following spring. There are several perennial *Viola* species (*V. labradorica*, *V. papilionacea*, *V. pedata*) that are native, woodland wildflowers in parts of the Midwest.

Pansy History

Violas have been cultivated in Greece since the fourth century B.C. for herbal medicines and beautiful flowers. Pansies, however, didn’t appear until the early 1800s when William Thompson, an English gardener, bred several species of violas to create the start of the larger, brightly colored flowers we know today. He is credited with developing the “face” type pansies, and the first was named ‘Medora’ in 1839.

By the 1850’s many pansy strains were available and breeding efforts continued in England, Scotland and Switzerland. At the turn of the 20th century, Dr. Charles Stewart, a Scottish grower, introduced pansies with clear colors or no faces. In this century, pansy breeding efforts continue in the United States, Germany, Italy and Japan. Breeders continue to introduce pansies with novel colors and color combinations, larger flower sizes and durability.

Growing Pansies in the Garden

In Iowa, pansies can be planted as soon as the soil can be worked in April. They are quite tolerant of light frosts and freezing temperatures. Pansies are also occasionally planted in late August or early September for their fall flowers.

Pansies prefer moist, well-drained soils in sunny to partially shaded sites. Plants placed in partially shade, cooler locations will persist longer into the summer. Most cultivars will work well in containers and baskets.

Water plants as needed, especially as the weather warms up in late spring. Keep plants well watered during dry periods and frequently remove spent blooms to encourage additional flowers. Fertilize pansies lightly in spring, avoiding high nitrogen fertilizers — as this may prevent blooms.

Pansies are available in one of the widest ranges of flower colors of any garden annual. Black, orange, bronze and true blue are just a few of the unusual flower colors of pansies. Besides having flowers of many colors, pansy flowers are also noted for their colorful combinations.

There are hundreds of series of pansies available for your garden. A series is a collection of cultivars that varies in one trait; usually flower color. For example, Matrix is a series with many flower colors or color combinations. 'Matrix Citrus' is a collection of orange, yellow, gold and white flowering forms. Sorbet is a *Viola* hybrid series with specific cultivars called 'Lemon Chiffon' and 'Blueberry Cream'. Pansy series are often sold as mixes or individually by cultivar. Different series vary by flower color, height or habit.

Pansies have come a long way since the 1800s. Today, breeders are not only selecting and introducing new series with novel flower colors, but also are selecting for compact habits, free-flowering forms and increased adaptability to weather conditions. If you haven't tried pansies in the garden in the past few years, they might be worth a second try.

When to Start What: Vegetable Seed Calculators

By Margaret Roach
www.awaytogarden.com

Wonder what to sow when to get homegrown transplants ready for the vegetable garden? I've gathered links to some foolproof online seed-starting calculators and charts, and also summarized my very simple "lumping" method, where I group all my seeds into three groups rather than try to remember every last detail of what happens when.



Charts and Calculators

- New! A Way to Garden's own vegetable, flower and herb-seed calculator
- All Things Plants' Calculator
- Johnny's Selected Seeds' Calculator

My 'lumping' method of when to sow

BY LUMPING THE CROPS I SOW INDOORS in spring into three simple groups with similar time needs, I streamline my seed-starting. You'll need to memorize only one fact to use my "lumped-together" countdown formula, and that's your local date of average final frost (mine isn't until close to June).

The brassicas, like broccoli, Brussels sprouts, cabbage, cauliflower and kohlrabi, all have the same requirements: a month to six weeks indoors under lights before they go outside, which is safe about a month before final frost. This group therefore gets its start between March 15 and April 1 in my household. (Note with Brussels sprouts: many resources say sow them later, like May 1 or so, so they stand well into frost, when they achieve their best flavor. Today there are varieties requiring as few as 82ish days to maturity and as many as 100-plus, so take into consideration which you're growing when you plan when to sow.)

Tomatoes, peppers and eggplants make up my second group, each getting six to eight weeks under lights before transplanting, when all frost danger is past. Early to mid-April is my target sowing date, therefore—a friend nearby makes it even simpler, and says to sow your tomatoes at tax time.

The last group: the big-seeded sorts like pumpkins, squash, melons and cucumbers, which only need a couple of weeks indoors (or if you think you can outsmart the chipmunks, who usually take the seeds at my place, just direct sow around your frost date). Inside, I start these in mid-May or so.

Speaking of what else to sow outdoors...everyone differs on that. Things I prefer to direct sow because it's so easy include salad greens (lettuce, arugula and such); peas (as soon as the soil can be worked, about mid-March here); and spinach (either late fall for an extra-early crop, or very early spring); chard; broccoli raab; beets and other root crops; kales and collards; dill, and beans.

With the greens, there's a tradeoff some years to direct-sowing, especially for me with the leafy brassicas (the kale and collards), which can coincide sometimes with an upsurge in flea beetles, who eat tiny holes in things (they love arugula, too). Sometimes starting the plants indoors can outsmart the flea beetles, but growing them under a floating row cover will help, too. I never start peas or beans indoors; the rest I sometimes do, again, to cope with pests.

I often buy my onions as plants, since they take 8-10 weeks indoors, but you can sow indoors, too (I would have done so in February for an April set-out). Basil and parsley, two other staples, fit into the system, parsley with the early stuff, basil with the later.

Experts who disagree and say eggplants actually need a week or two longer indoors (like eight) than tomatoes and go outdoors a week later, for instance. They're right, in the best of worlds. But lumping is simpler, and since no two weather years are alike—particularly no two

springs—I expect there's a kind of built-in balancing act going on outdoors, anyhow.

The Sandhill Crane Migration

National Audubon Society
www.audubon.com

Kearney, NE - Each spring over a half million sandhill cranes congregate on Nebraska's Platte River. Like the migration of wildebeest in Africa and the march of the penguins in Antarctica, the seasonal movement of these graceful birds is a spectacular nature show. Audubon's Rowe Sanctuary near Kearney helps people witness this phenomenon. From March 2-April 7, the Audubon Sanctuary has daily crane viewing trips hosted by expert guides. Avid photographers can book photography blinds for close-ups of the cranes.



David Yarnold, President and CEO of the National Audubon Society, said on his first visit to Kearney: "This is an amazing life experience. I think everyone comes away humbled. It really puts life into perspective, and helps people understand how important it is to protect natural places for generations to come."

"Though they face an increasing number of threats from human activities, their age-old migration continues to be a most amazing phenomenon, wrote Dr. Jane Goodall; "To ensure that sandhill cranes continue to thrive, we must work harder than ever to preserve the Platte River...."

The Platte River Valley is the most important stopover on the cranes' long migration north from Texas, Oklahoma or Mexico. The region is so vital it has been designated an Important Bird Area of global significance.

Beyond the photogenic spectacle, the sound of the crane inspired naturalist Aldo Leopold to write "We hear the trumpet in the orchestra of evolution." With a trachea shaped like a saxophone, sandhill cranes emit a fantastic melodic chorus that carries for over a mile. Their courtship display is a dance of hops, leaps and bows.

"It is an amazing sight to see and hear," said Bill Taddicken, Director of the Iain Nicolson Audubon Center at Rowe Sanctuary. "But the annual return of Sandhill cranes depends on all of us, protecting the environment we share with these great birds, up and down their flyway."

Wetlands along the Platte River have been adversely affected by dams and drought, but the Audubon team works year round to restore this key destination for 10 million migrating birds, which also includes snow geese, hooded mergansers and whooping cranes.

Crane Fact Sheet

Cranes are among the oldest living birds on the planet. Fossil records place cranes in Nebraska more than nine million years ago, long before there was a Platte River, which by comparison, is a youthful 10,000 years of age.

- Height: 3 to 4 feet
- Weight: 6 to 12 pounds
- Wingspan: 6 to 7 feet
- Lifespan: 20 to 40 years

Diet: Cranes are omnivorous and their diet varies depending on the season and where they are. The cranes that visit the Platte River valley feed primarily on grain left in corn fields, which makes up 90% of their diet while here. The other 10% comes from plant and animal foods found in wet meadows adjacent to the river. Seeds, fleshy tubers of plants, grubs, earth worms, snails, amphibians, small reptiles and rodents are all fair game.

Color: Adult is gray with a red crown (bald patch of skin); juvenile is browner overall and has a feathered crown.

Subspecies: There are at least five subspecies of sandhill cranes, possibly six depending on who you ask. Migratory subspecies include the lesser, greater, and according to some, the Canadian sandhill crane. Non-migratory subspecies are the Florida, Mississippi and Cuban sandhill crane.

Flight speed & distance: 25 - 35 mph; cranes typically travel 200 - 300 miles in a day, but can travel 500 miles with a good tail wind. When southerly winds start to blow in late March and early April along the Platte, you will see cranes testing these winds for flight conditions. Cranes ride thermals so efficiently that sandhill cranes have been seen over Mt. McKinley, and Siberian Cranes over Mt. Everest (~28,000 feet).

Nesting: For migratory populations, nesting begins early April to late May. Nests are usually low mounds of vegetation located in wetlands, but are occasionally located in uplands. The female typically lays two eggs, with incubation lasting 29 - 32 days.

Sandhill Cranes and the Platte River

Sandhill cranes have been found as far north as Alaska and Eastern Siberia. In order to reach these destinations, cranes must build up enough energy to complete their long journey, and to begin breeding. The Platte River provides the perfect spot to rest, and the nearby farmlands and wet meadows offer an abundance of food. Without the energy gained along the Platte, cranes might arrive at their breeding grounds in a weakened condition -- where food may be limited until the spring growing season begins.

The Platte River region has a variety of habitats that support cranes. The most important is the Platte River itself. The river is very shallow and sandbars dot the channels. It is here the

cranes rest at night, gaining protection from predators like coyotes.

In the morning, cranes shuffle up and down the river waiting for the sun to pop up over the horizon. As the sun rises, cranes head out to feed and loaf in the surrounding fields. During the day, cranes do their display "dance" to relieve the stress of migration and strengthen pair bonds. Cranes are very social birds and in the evening, congregate in wet meadows before heading back to the river for the night.

Adaptations

A crane's bill is very sharp and sturdy, useful when probing frozen soil. The edges are serrated to grasp slippery food. Not only is it used for preening, it is also used as a weapon. When a crane is threatened, it will use its wings to maintain its balance and then jump up and strike at the attacker with its feet.

Cranes can stay warm while standing in near-freezing water by constricting blood vessels in their feet. Arteries and vessels in their legs are right next to each other so the colder blood is warmed before it reaches the body.

Growing Fruit Trees

By Richard Jauron
Department of Horticulture
Iowa State University



With a little planning, homeowners who enjoy picking ripe, juicy fruit from their own trees can successfully grow fruit trees, such as apples, pears, plums and cherries – even homeowners with only small yard space. Iowa State University Extension and Outreach horticulture specialists share information about selecting pear, plum and apricot varieties. To have additional questions answered, contact the Hortline at 515-294-3108 or hortline@iastate.edu.

What would be a good planting site for fruit trees?

Selecting the proper planting site is critical when planting fruit trees in the home landscape. While fruit trees can be grown on a wide variety of soils, good soil drainage is imperative. Apples and other fruit trees do not tolerate wet soils. Fruit trees planted in poorly drained soils often die within a few years of planting. Most fruit trees grow well in fertile soils with a pH of 6.0 to 7.5. Because of space restrictions, planting sites are often limited in the home landscape. Fruit trees require full sun. Select a site that receives at least six hours of direct sun each day. Avoid shady sites near large trees.

What are the advantages and disadvantages of dwarf and semi-dwarf fruit trees?

Dwarf and semi-dwarf fruit trees are produced by grafting or budding the desired variety (cultivar) onto a dwarfing rootstock. Most standard-size fruit trees eventually get 25 to 30 feet tall. Dwarf and semi-dwarf fruit trees are much smaller. Fruit trees grown on dwarfing rootstocks typically grow 10 to 15 feet tall.

Dwarf and semi-dwarf fruit trees are easier to maintain (prune, spray, harvest, etc.), fit better into small home landscapes and produce fruit sooner after planting than standard-size trees. However, some dwarf and semi-dwarf fruit trees have poor root anchorage, so they may need to be supported with a stake or trellis.

How soon will a newly planted fruit tree begin to bear fruit? Fruit trees purchased from nurseries and garden centers are usually 1- to 2-year-old plants. The length of time from planting to fruit bearing varies with the species of fruit, the cultivar and whether the tree is dwarf or standard.

Apple and pear trees grown on dwarf or semi-dwarf rootstocks will come into bearing at a much earlier age than trees grown on standard-size rootstocks. Rootstocks have little effect on the bearing age of other fruit trees.

The average bearing age of fruit trees is:

- Apple – 4 to 5 years
- Pear – 4 to 6 years
- Plum – 3 to 5 years
- Sour or tart cherry – 3 to 5 years

Which fruit trees can be successfully grown in the state?

Apples and pears possess excellent winter hardiness and can be successfully grown throughout Iowa. Hardy sour (tart) cherry, plum and apricot cultivars can be grown throughout the state. Sweet cherries and peaches perform best in southern Iowa as they are not reliably hardy in northern and central portions of the state. A publication listing recommended fruit cultivars for Iowa is available from the Extension Online Store or downloaded here, [Fruit Cultivars for Iowa](#).

When planting fruit trees do I need to plant more than one variety to obtain fruit?

In regards to fruit trees, there are two types of pollination. Self-pollination occurs when the pollen is transferred from the anther to the stigma on the same flower, from another flower on the same tree or from a flower on another tree of the same cultivar. Self-pollinated trees are said to be self-fruitful. Many trees cannot produce fruit from their own pollen and are considered self-unfruitful. These trees require cross-pollination for fruit set. Cross-pollination is the transfer of pollen from one tree to the flower of a genetically different tree or cultivar.

To ensure a good crop, two or more cultivars (of the same type of tree) must be planted when planting self-unfruitful trees. Only a single tree needs to be planted when planting self-fruitful fruit trees.

Apples and pears are self-unfruitful. Most European plums are self-fruitful. However, hybrid plums are self-unfruitful and require another hybrid cultivar for cross-pollination. Sour (tart) cherries are self-fruitful. Most sweet cherries are self-unfruitful. Peaches are self-fruitful. The apricot cultivars 'Moongold' and 'Sungold' are self-unfruitful. Plant at least one of each to ensure a good crop.

The Benefits of Growing Potatoes in Containers

By Chris McLaughlin
Vegetable Garden website
www.vegetablegarden.com

There's any number of reasons that we gardeners might prefer to grow things up as opposed to out.



At the expense of sounding as if I like to do everything the easy way (wait, I do like to do everything the easy way), here it is: yet another incredibly simple method to growing potatoes. This time, we're planting them above the ground.

Here in suburbia, we simply don't have whole lot of land to work with. On average, we have a relatively small plot surrounding our homes and we have to make do with what the big housing developer in the sky gave us. Sometimes what we have is land with extremely rocky soil or land that is predominately concrete.

Want another good reason to grow potatoes in containers? Just when you are plumb proud of yourself and your green thumb, potatoes can succumb to a fungus called "blight" (*Phytophthora infestans*). Its usual place of attack on innocent potatoes is in their garden beds. So, planting potatoes in containers can also help protect your harvest.

How to Grow Potatoes in Containers

One of the coolest containers to use for growing potatoes is a bushel basket. It's a great size and the basket fits into the whole farm-look nicely. If you don't have a bushel basket or never could stand the farm-look, you can use a 5 gallon bucket or a garbage can, as long as you put holes in the bottom for drainage.

You'll want to plant only one seed potato in a 5 gallon bucket, but feel free to plant 2 or 3 in a bushel basket or garbage can. First, fill the container halfway up with compost. By the way, compost is also a disease suppressor, so you have extra good measure against blight or any other fungal enemy.

Set your seed potatoes on top of the compost in the container and add just enough compost on top of the seeds to cover them. As the plants grow, add more compost to cover the tubers – always make sure the potatoes are buried. Continue to cover tubers as the plants grow up above the top of your container.

During the summer (after flowering), just stick your hand in there and harvest the potatoes that you need for your favorite recipes for side dishes, BBQs or salads. You'll harvest for months! Another idea is to simply wait for the tops of the plants to die down and turn the entire container over for an instant fall harvest.

More Potato Container Ideas

How about a big cardboard box? That'll do just fine for the season and you can compost it later! Just fold the flaps down in the inside and plant. Remember to dig a bit into the ground like 5 or 6 inches and bury the bottom edge of the box so it doesn't blow away. You can always place some big rocks at the bottom instead.

Do you have any *old tires lying around? Plant one tire with a seed potato or two and as the plants grow up and out of the first tire, stack another tire on top and fill it up with more soil. These are extra nice ideas for people living in condos or apartments, as well. Even a laundry basket makes a great container for growing potatoes

**For the record, the jury is still out on whether or not tires leach chemicals into the soil (therefore, into the plants). So, do a little research and decide for yourself.*



Check out these nearby 2014 Garden Shows!

What: [West Pottawattamie MG Spring Conference](#)

When: Saturday, March 29 from 8:30am-4pm

Where: Council Bluffs Senior Center, 714 S. Main Street

Who: West Pottawattamie County Master Gardeners

Price: pre-registration: \$30; at the door: \$40 **Contact:**

Rachel Summy, 712-366-7070, rsummy@iastate.edu

What: [Siouxland Garden Show](#)

When: March 28-30

Where: Sioux City Convention Center, 801 4th Street, Sioux City, NE

Who: ISU and NE Extension

Price: \$5 for one day, \$9 for two, \$12 for three



Upcoming Horticulture Events of Interest:

Spring Into Spring!
2014 Seminar Series
Presented by the
Mills County Master Gardeners

Details for all Seminars:

Place: Glenwood Resource Center, Visitors Center,
2nd Floor Conference Room

Time: 7:00-8:00 PM

Cost: \$2.00

“Best Practices for Pollinator Habitats” by Dr. Thelma Heidel-Baker and Joe Wheelock, ISU

Date: Tuesday, March 25

Want to learn more about pollinator conservation and why bees and other pollinators are important to our economy and food supply? How can you help declining pollinator populations? Dr. Thelma Heidel-Baker and Joe Wheelock from Iowa State University will answer these questions and discuss their research. Participants will learn about native pollinators and best plant selections for pollinator gardens.

“Little Prairie by the House” by Jan Riggensch

Date: Tuesday, April 8

Jan Riggensch, syndicated garden columnist and author, has been providing garden advice for nearly four decades. Participants will learn about how native plants are the secret to attracting more of this region’s birds and butterflies to your garden. Jan will talk about selecting native plant varieties and planning for a succession of blooms from spring through fall. She will also be signing her new book, “Your Midwest Garden, An Owner’s Manual”.

“Bee Keeping Basics” by Clarence Seale

Date: Tuesday, April 15

Clarence Seale is local bee keeper and Master Gardener that is passionate about bees. After retiring from the Air Force, he started beekeeping as a hobby. His fascination with bees grew, and so did his Apiary that now includes an operation with over 30 hives. He is one of our local experts and not only teaches beekeeping but is also called upon to rescue bees that have swarmed from their hives. Attendees will be introduced to the basics of bee keeping.

Glenwood’s Giving Garden Kegs and Eggs!

Did you know that Glenwood’s Giving Garden donated over 6,700 lbs of fresh garden

produce in 2013 to local organizations and families in need in our community!



Come support Glenwood’s Giving Garden at the ***“Kegs and Eggs”*** breakfast event sponsored by the Glenwood Chamber of Commerce. Silent auction and freewill offering benefits the Garden.

When: Saturday, March 15 @ 7:00 – 11:00 AM

Where: Keg Creek Brewing Co., 111 Sharp Street, Glenwood, IA; phone: 712-520-9209

Grape Vine and Willow Propagation, Forcing Spring Blooms

By Richard Jauron and Willy Klein
Department of Horticulture
Iowa State University



AMES, Iowa – Creating new plants from old ones, and forcing spring flowering trees

and shrubs to bloom indoors is simple, according to horticulturists with Iowa State University Extension and Outreach. They share techniques suited for propagating grape vines and willow trees and forcing forsythia and pussywillow to bloom indoors. To have additional questions answered, contact the Iowa State University Hortline at hortline@iastate.edu or 515-294-3108.

How can I propagate a grapevine?

While grapevines can be propagated by several methods, they are most commonly propagated by hardwood cuttings. Hardwood cuttings are made from the dormant canes of the preceding year’s growth. Cutting material should be collected in late winter.

Home gardeners pruning their grapevines in late February or March can make cuttings from the pruned material. Grape cuttings should be approximately pencil-size in thickness and 12 inches long. When making the cuttings, the bottom cut should be just below the lowest bud, while the upper cut should be 1 to 2 inches above the top bud.

After making the cuttings, loosely tie them in a bundle. Place the cuttings in a plastic bag with some lightly moistened peat moss, then store in a cool location, such as a refrigerator or garage. As soon as the soil is workable in spring, remove the grape cuttings from cold storage. Set the cuttings in the ground vertically with only the top bud just above the soil surface.

How can I propagate a willow?

Willows (*Salix* species) are easily propagated by hardwood cuttings. Collect cutting material on a mild day (temperatures should be above freezing) in late winter. Prune off branches that are about one-half inch in diameter. Bring the branches indoors and cut the branches into 12- to 18-inch sections. Bundle the 12- to 18-inch-long cuttings together with string or twine. Place the bundled cuttings in a plastic bag that contains some lightly moistened peat moss. Place the plastic bag in the refrigerator.

As soon as the ground is workable in spring, remove the cuttings from the refrigerator and stick the cuttings into the ground. Place the bottom 6 to 8 inches of the cuttings in the soil. Willow cuttings root easily. The cuttings should begin to root and leaf out within a few weeks. An alternate rooting method is to place the cuttings in a container of water indoors. Regularly change the water. When the cuttings have developed good root systems, remove them from the water and pot them up or plant directly outdoors.

How do you force branches of spring-flowering trees and shrubs indoors?

Forcing can be done as soon as the buds start to swell in late winter. Forsythia and pussywillow can be forced as early as late February. It's best to wait until March for more difficult-to-force ornamentals, such as crabapples, magnolias and redbuds.



Select branches containing round, plump buds. (Narrow, pointed buds are usually leaf buds. Flower buds are generally larger and have a more rounded shape.) Make clean, slanting cuts 1 to 2 feet from the tips of branches with a sharp hand shears. Selectively remove branches that won't harm the appearance or shape of the plant. If pruning fruit trees in late winter, gather some of the pruned material for forcing indoors. If possible, collect branches when temperatures are above 32 degrees Fahrenheit. If the plant material is frozen when collected,

submerge the branches in a tub or pail of water for a few hours.

Later, set the branches in a tall container of water and place in a dimly lit, cool (60 to 65 degree Fahrenheit) location. Spray or mist the branches two or three times a day to prevent the buds from drying out. Also change the water in the container daily during the forcing period. Daily changes of water should inhibit the growth of bacteria and fungi which could interfere with the absorption of water by the branches. When the flower buds begin to open, move the branches into a bright room. Keep the flowering branches out of direct sunlight and in a cool location to prolong the bloom period.

The time period required to force branches into bloom depends upon the plant species and collection date. Forsythia and pussywillow generally take only one to three weeks to force. Apple and crabapple branches may take two to four weeks. The forcing period for magnolias is three to five weeks. The closer it is to the plant's normal outdoor flowering period, the less time it takes to force the cut branches indoors.

Ask the ISU Extension Gardening Expert



Should I test my garden soil before planting a home vegetable or flower garden?

A soil test can provide information on the proper amount of lime and fertilizer to apply to your lawn, garden and other areas of your landscape. When gardeners apply only as much lime and fertilizer as is necessary and at the appropriate time, nutrient runoff into surface or ground water is minimized, money is saved, and plant health is optimized. Soil testing can also be used to diagnose common nutrient deficiencies for plants that are growing poorly.

Soil sampling can be done through a home kit that is purchased at a garden center or through the Iowa State University Soil Plant Analysis Laboratory. The current fee for testing is \$8 per sample to test for lime requirement, phosphorous, and potash. Special bags for submitting soil samples can be obtained from your Iowa State University Extension County office.

When should I sow petunia seeds indoors?

Petunia seeds should be sown indoors 10 to 12 weeks before the last average frost date. In Iowa, late February or early March is an appropriate sowing date for petunias.

Will fluorescent light fixtures provide sufficient light for seedlings?

A standard fluorescent shop fixture containing two 40-watt tubes will provide sufficient light to grow seedling indoors. For best results, place one cool white and one warm white tube in each fixture. Place the fluorescent lights not more than four to six inches above the seedlings. The lights should be on for 12 to 14 hours each day.

When should I plant potatoes in the garden?

Potatoes should be planted in early spring. Appropriate planting times are late March or early April in southern Iowa. Since potatoes are susceptible to several diseases, but certified, disease-free potatoes at garden centers or mail-order nurseries. Gardeners can purchase seed pieces (tubers that have been cut into sections) or whole potatoes. Small potato tubers may be planted whole. Large potatoes should be cut into sections or pieces.

Each seed piece should have 1 or 2 "eyes" or buds and weigh approximately 1.5 to 2.0 ounces. After cutting the tubers into sections, place the freshly cut pieces in a humid 60 to 70° F location for 1 or 2 days.

A short "healing" period allows the cut surfaces to callus or heal over before the seed pieces are planted. Healing of the cut surfaces helps prevent the rotting of seed pieces when planted.

Plant seed pieces (cut side down) and small whole potatoes 3 to 4 inches deep and 1 foot apart in the row. Rows should be spaced 2.5 to 3 feet apart.

MARCH GARDENING TO DO LIST



- Prune, Prune, Prune! March is the best month for pruning many plants in our area. See the resource list for several publications to help you know how to prune correctly.
- Sow seeds of broccoli, cabbage, and cauliflower indoors early in the month for April planting. Sow seeds of tomato and pepper later in the month for May planting. Check exact dates on the seed packet.

- Rake leaves, twigs, and trash from the lawn after the last snow has melted and the soil has thawed and firmed up.
- Clean out bird houses before new tenants arrive.
- Leave mulch on strawberries and perennials until new growth begins. Be ready to reapply mulch if hard frost threatens.
- Don't till your garden when it is too wet. Soil should crumble when squeezed in your hand if it's ready to work. If soil forms a solid ball, it's still too wet.
- Pot up dahlias, cannas, tuberous begonias, and calla lilies indoors, for earlier blooms once you transplant them to their outdoor locations.
- Now is a good time to get your lawn mower ready for the season ahead. Take it to a repair shop or get out the owner's manual and do it yourself. You should sharpen blades, clean or replace the spark plug and air filter, change the oil, and check the tires for wear.
- Remove the dead plant material from your asparagus patch.

Resources for Horticulture information

ISU's Hortline at (515) 294-3108

(Monday-Friday, 10 a.m.-noon, 1-4:30 p.m)

Iowa State University Publications

PM 874	Starting Garden Transplants at Home (free)
RG 501	Pruning Raspberries (free)
RG 502	Pruning Grapevines (free)
RG 318	Early Spring Blooming Perennials
SUL 5	Pruning Trees: Shade, Flowering, & Conifer
PM 780	Pruning and Training Fruit Trees
PM 874	Starting Garden Transplants at Home
RG 323	Cannas for the Home Landscape

Horticulture Publications on-line

<https://www.extension.iastate.edu/store/ListCategories>

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