

Plant Wise

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Extension and Outreach

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How about those Blue Hydrangeas!

You may have heard that you can change the color of a hydrangea's flowers by adjusting soil pH. It's true but there's a little more to it than that.

First of all, not all hydrangeas produce blue flowers. Hydrangeas with white or cream flowers, such as Annabelle hydrangeas, Oakleaf hydrangeas and members of the PeeGee family, can only produce white or cream flowers. Sometimes their blooms take on a pink tinge at the end of the season, but that's about as colorful as they get.



Hydrangeas with bloom colors that range from pink through blue and purple usually belong to the hydrangea cultivars known as *mopheads* and *lacecaps*. These types of hydrangeas have the interesting ability to change the color of their blooms based on the chemistry of the soil. When grown in alkaline soil, the bloom colors are pinker. When grown in acidic soil, the bloom colors are bluer.

Because it's the soil chemistry that determines the bloom color, the variety names given to these types of hydrangeas means very little when it comes to bloom color. For instance, Nikko Blue, Pretty in Pink, Forever Pink and Blue Deckle, all have an almost equal chance of blooming pink or blue, depending on the soil they are planted in.

So remember that even if it's blue when you purchase a hydrangea, you cannot be sure the plant will produce the same color flowers once it's

growing in your garden soil.

To manipulate the color of a hydrangea's blooms, you need to manipulate your soil's pH level and mineral content. This is not something you do just once. In order to maintain growing conditions that result in a specific bloom color, you may need to apply special soil amendments several times during the growing season.



Start by testing the pH of your soil. This will give you an idea how much of an uphill battle you'll be waging. Be mindful that the health of the plant should be your first priority. It's quite difficult to make a dramatic change in soil pH, and doing so can adversely affect the overall health of the plant.

Conditions for Blue Hydrangeas

Blue hydrangeas like moist soil and some light shade during the hottest part of the day.

To encourage blue hydrangea flowers, grow the plant in soil that has a pH of 5.2 - 5.5. If your soil is more alkaline, you can lower the pH by applying *Soil Acidifier* at the rate specified on the package. One is Aluminum sulfate, available at most Garden Centers. Soil pH can also be lowered (more gradually) by applying an acidic organic mulch, such as pine needles or pine bark.

If the pH of your soil is naturally quite high (alkaline) it will be very difficult to get blue flowers — even if there's plenty of aluminum in the soil. Alkaline soil tends to "lock up" the aluminum, making it unavailable to the plant. (However, you can grow fabulous pink hydrangeas!)

Conditions for Pink Hydrangeas

If you prefer pink blooms, your hydrangea should be deprived of aluminum by growing it in an alkaline soil with a pH of 6.0-6.2. You can apply a high-phosphorus fertilizer to further discourage the uptake of aluminum. To raise the pH of a naturally acidic soil, apply Garden Lime at the rate specified on the package.

How to Adjust the pH of Your Soil

Once you've tested the pH level of the soil where you intend to plant your hydrangea using a pH test kit, pH meter, you'll have a baseline. If you are trying to maintain a certain pH level, you should test your soil each year. The effect of adding materials to raise or lower the pH may not be immediately apparent. You should also expect that over time, the pH will revert to its original level, which is dictated by the native soil conditions.



To Raise Soil pH

The most common way to raise the pH of your soil (make it more alkaline and less acidic) is to add powdered Garden Lime. Dolomitic limestone will also add magnesium to the soil. Apply it in the fall as it takes several months for the effects to be noticeable.

Wood ash will also raise soil pH. It works more quickly than limestone and adds potassium and trace elements to the soil. But use caution when applying wood ash. It is very concentrated, and applying too much of it can drastically alter the pH and cause nutrient imbalances. Wood ash can also "burn" foliage, so for best results, apply it directly to the soil in the winter. Apply no more than 2 pounds per 100 square feet, every two to three years, and test your soil each year to monitor the effects.

To Lower Soil pH

Soil can be made more acidic by adding Soil Acidifier, ammonium sulfate or aluminum sulfate. Follow application rates on the packaging. You can

also lower pH levels by incorporating naturally acidic organic materials such as conifer needles, sawdust, peat moss and oak leaves. Coffee grounds are also slightly acidic. Remember to retest your soil to monitor effects over time.



Shamrocks!

There really is no such thing as a shamrock plant. The name shamrock is just a corruption of an Irish word that means "little clover" and generally refers to white clover (*Trifolium repens*). The plants marketed for this holiday are actually species of **Oxalis**, also known as wood sorrels, and have clover-shaped leaves.

Oxalis or is a large genus of flowering plants in the wood-sorrel family *Oxalidaceae*, comprising about 570 species. The genus occurs throughout most of the world, except for the polar areas; species diversity is particularly rich in tropical Brazil, Mexico and South Africa.



These plants appears in flower shops around St. Patrick's Day. These plants have the nickname shamrock plant because of their three, thin, triangular leaflets that look like a lucky clover plant. There are several stories associated with the shamrock plant. One of the most popular is that St. Patrick, the saint who brought Christianity to Ireland, picked a shamrock plant from the grass to explain the Holy Trinity to his congregation. The three leaves, he said, represented the father, the son, and the Holy Spirit.



St. Patrick's Day is celebrated on the anniversary of his death. The shamrock plant is also credited with the arrival of spring and as a symbol for the "season of rebirth". **Oxalis regnelli**, the green leafed Shamrock plant, produces small delicate white flowers when placed in bright indirect light. This variety is also called "Lucky Shamrock".



Shamrock plants are very easy to grow. They need bright indirect light to grow well and produce flowers. They often bloom all winter if kept in a well-lit spot. Use a loose and sandy soil rather than a rich and organic soil. Keep the soil barely moist but never soggy and allow the top 2" of soil to dry out before watering. Keep them in small pots to help prevent over watering.

It's best to water a shamrock plant from the bottom so the thin fragile stems of the plant don't get water logged and the soil stays loose.

Feed monthly in the spring and summer when a shamrock plant is actively growing with a balanced fertilizer diluted to 1/2 the recommended strength. Never feed a shamrock plant when it is dormant and the bulbs are resting.

Shamrock plants grow best in cool temperatures between 60°-70°F during the day and 55°-65°F at night.

There are numerous varieties of oxalis plants.

The shamrock plant **Oxalis Triangularis** has purple leaves and delicate little lavender flowers.

Oxalis Iron Cross has a purple center and pink flowers and is known as the "Good Luck Plant".



A trait of the Oxalis plants is the folding closed of their leaves at night.

Shamrocks may attract Aphids, whiteflies, and spiders mites. Check them regularly when you

water. If you find your plant infected, use a mixture of ½ mild soapy water, ½ alcohol and a few tablespoons of mineral oil to get rid of the spider mites and Aphids. Yellow Sticky Insect cards is the best way to handle whiteflies.

Also check for fungal rust (brownish/orange discoloration on the backs of leaves) and chlorotic ring spot (yellow rings on the tops of leaves). These are two main diseases to watch out for. In both instances, take the plant out of the pot, scrub the pot with a mild bleach mixture, and then wash it well before repotting the plant in fresh soil. Spray the plant with Neem Oil.

If your shamrock plant gets thin and leggy, cut the plant back to an inch or two above the soil line and place it in very bright indirect light. Elongated stems occur because the plant is reaching for the light.

Just like most houseplants, shamrocks need a resting period. After a shamrock plant blooms, the leaves turn yellow, droop, and need to be removed; this usually occurs in the late fall. While it looks like the plant is dying, your shamrock plant is really starting its resting or dormant phase. After all of the leaves have died, stop watering and move your plant to a cool, low- light area. Green shamrock plants need to rest for 2-3 months while purple shamrock plants need only about a month. After your plant has rested for the appropriate amount of time, move it back into bright, indirect light and water as usual. Once new growth appears, fertilize with a balanced houseplant food diluted to ½ the recommended amount.



The tiny bulbs that are referred to as bulblets. The healthy bulblets are small and puffy. The best time to propagate is right after its dormant stage, by bulb division. Shamrock plants may go dormant several times a year.

These plants are considered slightly poisonous if eaten in large quantities and should be kept away from pets and children.



Those Beautiful Peonies!

Peonies are one of the best-known and most dearly loved perennials. This is hardly surprising considering their sumptuous beauty and fragrance, trouble-free nature and longevity. Peonies also thrive almost anywhere in the country. All they need is at least 6 hours of daily sunlight. If a peony is well situated and happy, it may bloom for 100 years or more with little or no attention. This means it's worth spending some time up front, choosing the right planting location and preparing the soil. But like all plants, peonies will be healthier, more vigorous and more floriferous if they have ideal growing conditions.



When choosing peonies, give special consideration to the "singles", which are fragrant and gorgeous, but don't require as much staking. Peonies prefer a sunny location with well-drained soil. Good air circulation around the plant is also important. These growing conditions help peonies avoid their only serious disease problem: **botrytis**. Like other fungal diseases, botrytis is present in most soils. It usually only becomes a problem if the plant is weak and the weather is unusually cool and wet. Signs of botrytis are blackened buds and stems, and sometimes rotting at the base of the plant. Cut off and dispose of any affected areas. Make sure you have a good air flow where you plant the peonies. This can reduce fungal diseases in your plants.



Supporting Your Peonies

Depending on the variety and the growing conditions, you'll probably want to provide your peonies with some support when the flowers are in bloom. This is especially true for the double or "bomb"-style blossoms, which can become waterlogged and very heavy. The supports should be positioned early in the growing season, before

the plants get more than a few inches high. Let the plants grow up through their new support system. Peonies rarely bloom the first year after planting. It often takes three years before you see an abundant display of flowers. But once the plants do start blooming, you can look forward to a lifetime of beautiful flowers. Peony plants rarely need dividing. Plants that have been divided in the fall may not bloom the following spring, but will return to normal the next season.



A yearly application of organic, all-purpose fertilizer and a top-dressing of compost is all a peony requires for good health. If you mulch your flower beds, be sure to keep the mulch away from the base your peonies. If the base is covered with mulch, the plant reacts as if it has been planted too deep, and will produce few, if any, flowers.

So Many To Choose From!

There are hundreds of peony varieties on the market today, from heirloom favorites that have been enjoyed for centuries, to exciting new colors (peach, coral, yellow), interesting flower forms (spiders, singles and semi-doubles), and different heights and bloom times. You might also want to try your hand at growing tree peonies, which bloom earlier than herbaceous peonies, have larger blossoms and can grow up to 6 feet tall.



The Old Ant Myth! True or False?

Are ants needed for the blooms to open? This is False! These insects are merely enjoying the sugary syrup produced by the buds and are doing no harm to the plant. They do not have anything to do with the bloom opening.





Irish Stew

YIELD: Serves 6 to 8 PREP TIME: 25 minutes
COOK TIME: 6-8 hours Crockpot

Ingredients:

2 lb. lamb **or** beef roast cut into 1-inch cubes
1/4 cup flour
1 tsp. salt
1/2 tsp. black pepper
2 tbsp. olive oil
1 onion finely chopped
1/2 cup beef broth
1 bay leaf
2 cup baby carrots
5 russet potatoes peeled, cut into 1-inch chunks

Instructions:

Place the meat cubes, flour, and salt and pepper in a large zip-top bag. Seal and shake to coat all cubes with flour.

In a large skillet, heat olive oil. Add the meat cubes and brown on all sides. Do this in batches. As the meat browns, remove it to crockpot.

Add the onions to the drippings in skillet and sauté until tender. Add the onions to the crockpot.

Stir in the beef broth and bay leaf. Cover and cook on LOW for four hours.

Add the carrots and potatoes and stir gently to combine. Cook on LOW for another two to four hours or until meat and vegetables are tender.

Adjust the seasonings with salt and pepper to taste.

To freeze: cool the stew completely. Wrap, label, and freeze in an airtight container. Reheat on the stovetop or in the microwave before serving.

Note: the stew can also be cooked on the stovetop. Simmer on low for 2 to 3 hours until the meat is tender, adding the vegetables in the last 30 minutes of cooking. Promptly store leftovers in an airtight container in the refrigerator, for up to 3 days.

Do You Remember When?

It was all about wearing Green on March 17th! If you were caught without green on, you were fair game! The chase was on to pinch anyone who dared to come to school without wearing something GREEN! Then there was always that one kid who claimed “I have green eyes!” Of course it was all in fun, right! Now that we are older, for many it’s the tradition of parades, drinking green beer and eating corn-beef and cabbage!



For those of you who wonder where all these traditions came from, here is the explanation. The truth is that St. Paddy's Day started as a religious celebration in the 17th century to commemorate the life of Saint Patrick and the arrival of Christianity in Ireland. This “Feast Day” always took place on the anniversary of Saint Patrick's death, which was believed to be March 17, 461 AD. Thus, the feast of corn-beef and cabbage, which is an old Irish staple. It wasn't until 1798, the year of the Irish Rebellion, that the color green became officially associated with the day. People soon began wearing and decorating with green on this special day. Eventually adding green coloring to beer, which is credited to Professor Thomas H. Curtin, a physician who made green beer for his clubhouse in New York. Curtin's green beer was around as early as 1914. It was probably made in the same way as today, a mixture of natural yellow beer and blue food coloring to make green beer. Why do we pinch anyone not wearing Green? The tradition is tied to folklore that says wearing green makes you *invisible* to “**leprechauns**”, which like to pinch anyone they **can** see. Some people also think sporting the color will bring them good luck, and others wear it to honor their Irish ancestry. Whatever your belief or tradition you have, it is general looked upon as a very happy celebration!

Wishing all of you a Happy St Patrick's Day!!



March UP COMMING EVENTS



- March 1, 2021 Master Gardener Training applications open. Classes will be virtual. Application deadline is July 1, 2021. Follow the link below to apply. <https://www.extension.iastate.edu/mastergardener/application-opens-2021-master-gardener-training>
- Friday, March 5, 2021 – 10 am and 3 pm Siouxland Garden Show (Free Webinar Series) Please join us for 12 virtual sessions that will be held at 10 a.m. and 3 p.m. on Friday's in March. Register with the link below. It's free. <https://www.siouxlandgardenshow.org/>
- International Master Gardener Conference will be virtual this year. It will be held September 12-17, 2021 Follow these two links for more information. [About](#) | [Registration opens April 5](#)
- May 8, 2021 – 8:30 to 11:00 am. Master Gardener Plant sale, Glenwood Iowa. Rain or Shine.



March GARDENING TO DO LIST



- If you have been storing bulbs, corms, or tubers, check them to make sure that they are neither rotting nor totally drying out.
- There is still time to pruning fruit trees while still dormant. Now is also the time to do any grafting.
- Carefully check your house plants for scale, aphids and spider mites. If found they can be controlled with an application of insecticidal soap.
- Start making a list and gathering supplies for summer canning.
- Continue to care for your Poinsettias, Amaryllis and Holiday cacti. Remember not to over water them. You will be able to plant them outside during the summer months, and hopefully be able to make them re-bloom next Holiday season.



Resources for Horticulture information Iowa State University Publications

PM 874	Starting Garden Transplants at Home
PM 534	Planting and harvesting times for Garden vegetables
RG 307	Clematis
RG 215	Gardening in Iowa Zones
PM 1595	Houseplant Insect Control
PM 780	Pruning and Training Fruit Trees
RG 502	Pruning Grapevines
PM 0453	Fruit Cultivars for Iowa
PM 607	Suggested Vegetable Varieties for the Garden
PM 4709	Growing Peonies in Iowa
RG 328	Growing Amaryllis
RG 308	Growing Holiday Cacti

Horticulture Publications on-line

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



ISU Hotline Links and Numbers

Hotlines available for all

Iowa Concern 800-447-1985 Financial questions, legal education, stress counseling, crisis/disaster resources and referral (24 hrs - all days)

Beginning Farmer Center 877-BFC-1999 Program to match beginning and retiring farmers (8 a.m. to 5 p.m.)

Teen Line 800-443-8336 Personal and health-related information and referral (24 hrs - all days)

Iowa 2-1-1 211 Resource referral for housing, health, food, family, transportation, employment, education, and legal assistance (24 hrs - all days)

Hot lines available for Iowa Residents Only

AnswerLine Toll-free: 800-262-3804 Local: 515-296-5883 Questions relating to home and family (9 am-noon & 1-4 pm)

Iowa Healthy Families 800-369-2229 Health information and referral (24 hrs - all days)

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