It may surprise you to know what plants are related in the family Oleaceae. The olive family contains a number of common and important plants. When looking at this family you may notice similar growth habits.

The 24 genera contained in this family include the lilac (Syringa), ash (Fraxinus), fringetree (Chionanthus), forsythia, privet (ligustrum), Jasmies (jasminum) and olive (Olea).

Most are woody and many are shrubs, in each case there are showy flowers and in many cases they are fragrant (lilac, privet and jasmine). Flowers are usually four sepals and four pedals that are often joined at the base as a tube. The shrubs are used as hedges or barriers in full sun. Caution should be taken when planting this family as plants are efficient at attracting bees. Keep them away from doors or walkways where people are expected to pass.

With the exception of the jasmine (zone 6-10) and the olive (zone 10) all of the above plants grow in zones 4-7. In our zone we can grow them all. Well drained soil is preferred and a location that allows for at least 6 foot of growth.

Of course the ash tree is susceptible to emerald ash borer so an alternative to this tree would be best.

The wood of lilac is close-grained, diffuse, porous, extremely hard and very dense as is that of the ash tree although it is also very flexible. Uses include musical instruments, knife handles, bows and bats.

The most recognized of the olive family would be the olive itself. Many of the cultivars used commercially...
A friend told me she was tired of all the brown and was ready for spring. This was around Thanksgiving! Others seem to find the beauty in the winter season. They, like me, enjoy this time of year. There is a gentleness and tranquility that comes with the sparseness of leaves and color. There is a beauty in seeing the “bones” of the trees and shrubs as the birds fly from one bare tree to the next. On a recent walk at the local community recreation center I challenged myself to see beyond the brown. It wasn’t hard; I saw the grayish white tones of the dusty miller, the blue greens of the yucca, the gray-green fuzzy lamb’s ears and the evergreen Lenten rose peeking out from the fallen leaves. The copper colors of the ornamental grasses were visible as was the dark rich reddish brown of the Kentucky coffee tree seed pods and the almost black daylily spent seed heads.

The rustle of the oak leaves that were hanging on brought my attention to the dull brown color my friend might be referring too. Why do certain deciduous trees hang on to their leaves during the winter? They are called marcescent leaves and the retention of old, dead leaves is known as marcescence. Simply put, it means to wither without falling off. In Missouri it is common among trees such as pin oaks, shingle oaks, young oaks of other species, and American beech in southeast Missouri.

There are different theories about the reason marcescence occurs and a common speculation includes the idea that marcescence may provide protection against animals browsing the winter buds. The leaves may hide the buds or make them harder to nip from the twig therefore protecting them. Other theories include smaller trees are over shaded and the reduction in sunlight delays the abscission process or it might relate to nutrient recycling. Still another explanation lends itself to tree species that are planted in one area but are programmed for a different latitude.

As with most things there is not one explanation for every situation; it could be a combination of factors that cause marcescence. One thing for sure is the growing buds will push the leaves off or the wind will take care of the dead leaves making room for the first signs of spring. I am going to continue to enjoy the season, and soon enough I will be ready to shed the old ways of winter and be ready for spring.
Ornamentals
- Inspect summer bulbs in storage to be sure none are drying out. Discard any that show signs of rot.
- Seeds of slow-growing annuals like ageratum, verbena, petunias, geraniums, coleus, impatiens and salvia may be started indoors now.
- Seeds of perennials may be sown during the month of February.
- Start planning new flower beds on paper now to get a head start for spring.

Vegetables
- Don’t work garden soils if they are wet. Squeeze a handful of soil. It should form a ball that will crumble easily. If it is sticky, allow the soil to dry further before tilling or spading.
- Season extending devices such as cold frames, hot beds, cloches and floating row covers will allow for an early start to the growing season.
- If soil conditions are right, take a chance sowing peas, lettuce, spinach and radish. If the weather allows, you will be rewarded with early harvests.
- Sow seeds of broccoli, cauliflower, brussels sprouts and cabbage indoors now for transplanting into the garden later this spring.
- After sowing seed and as soon as seeds sprout, provide ample light to encourage stocky growth.
- Consider soil testing before the vegetable garden season begins!

Fruits
- Check fruit trees for tent caterpillar egg masses. These are laid on twigs in tight clusters that resemble an oblong brown lump of gum wrapped around the stem. Prune off these twigs or destroy the eggs by scratching off the clusters with your thumbnail.
- Dormant sprays may be applied to trees now. Do this on a mild day while temperatures are above freezing

Houseplants
- Re-pot any root bound house plants now before vigorous growth occurs. Choose a new container that is only 1 or 2 inches larger in diameter than the old pot.
- Begin to fertilize house plants as they show signs of new growth. Plants that are still resting should receive no fertilizers yet.
- Take cuttings of wandering jew, spider plant and Swedish ivy hanging baskets to start new hanging baskets and to have them full to the brim with foliage by spring.

Lawns
- To avoid injury to lawns, keep foot traffic to a minimum when soils are wet or frozen.
- Did your lawn perform poorly last year? Consider having a soil test done for your lawn.
Temperature can affect seed germination - how many as well as how fast the seeds germinate. Some seeds have a very specific temperature range for germination, while others will germinate over a broad range of temperatures.

Generally, cool season plants such as lettuce and cole crops want cooler soil temperatures (no higher than 55 to 65 F) to germinate whereas warm season plants such as tomatoes and peppers germinate best when the soil temperature is 70 to 75 F.

With varieties that need warmer soils to germinate, there are a couple of options for warming the soil. Electric heating cables or mats can be used to ensure consistently warm temperatures.

Heat mats come in various sizes. They are made to hold one, two or four of the 1020 size nursery flats. They are designed to raise the temperature of seedlings 10 to 20 degrees higher than the ambient air temperature. You can also add a thermostat controller for controlling the mat to the temperature that is required for germinating.

Heat cables come in various lengths. They are made to be coiled through gravel or sand for even heat distribution. The maximum temperature that the heat cables can maintain is dependent on the cable spacing, the medium, moisture level of the medium, and the air temperature. Optimum spacing for cables is 2-3 inches apart. Most cables will keep the seedling temperature around 70 F.

A trend that has caught on in gardening is miniature or fairy gardens. These small indoor or outdoor gardens are fashioned along the lines of model train landscapes and can be expensive when kits are purchased.

One option that reduces the cost and charges the imaginations is to really think outside of the box and recycle items from everyday use that could be transformed into miniature objects.

Examples include: wire coat hangers bent and fashioned into miniature chairs, fences, arches, tables or garden rakes. Old toys repurposed as miniature people, animals or houses. Fish tank parts (including charcoal filters) used as miniature rocks, pathways or driveways. A tree stump hollowed out as a miniature house. Bowls used as pools or ponds. Broken pottery can make a good path or stacked like an ancient ruin. Toothpicks and popsicles make great fences or path edges. Even old wood boxes can be used as pots for the gardens.

Got the idea? Now stretch your creativity and see what you can come up with that will reuse what may otherwise become trash in the landfill.
I can almost hear your groans as you read the title “Economics of Vegetable Gardening”, but I encourage you to read on!

Have you ever thought about the reasons why you grow a garden? Is it to save money or control how your food is produced? Or do you just do it for the enjoyment? No matter what your motivation, you are ultimately doing three things when you grow a produce garden:

1. You are saving money at the grocery store. It’s simple to figure your cost savings. I like to use spreadsheets and track all gardening input costs such as seed/plants, fertilizer, pesticides and tools, then track pounds or units harvested and do a monthly cost comparison at the grocery store. As long as input costs are kept low, many home gardeners will experience a grocery cost savings. Try to incorporate as many frugal gardening tips as possible to achieve the highest possible cost savings. Oregon State University Extension lists some good tips at [http://extension.oregonstate.edu/gardening/node/1089](http://extension.oregonstate.edu/gardening/node/1089).

2. You are living better for the environment. On a local level, your home garden is great for your backyard eco-system! Just think about how many pollinators are attracted to your garden, or how soil structure is improved through composting. The list of benefits goes on! On a large scale, manufacturing and transportation needs are reduced when you grow your own produce.

3. You are eating healthier. For those of us with vegetable gardens, fresh produce is highly available and accessible during the summer – maybe TOO available at times! (Katie Kammler always warns to lock your cars around Ste. Genevieve in the summer because you might end up with a bag of zucchini on your front seat!) Studies show that diets high in fresh fruits and vegetables help reduce heart disease and diabetes, saving health care costs in the long run. Let us also not forget the added benefit of physical activity from gardening!

It’s estimated that 43 million U.S. households have produce gardens, which is a 20% increase since the economic decline of 2008. If you think your little garden isn’t making a huge economic impact, think again! Home gardens are contributing to financial, environmental and health benefits across the nation. So why do you grow a garden? We’d love to hear your reasons at our Facebook page! Search and like Ste. Genevieve County University of Missouri Extension.

My daughters are my motivation for growing a garden. They enjoy helping me harvest. I can see their pride swell when they pick a tomato and eat it, and I know they’re learning where food comes from. They also love to pick flowers and look at the “fla-flies” (butterflies).
“Leaves of three, leave it be,” is the saying I always heard. Poison ivy (Toxicodendrons radicans) is easy to identify. It is a perennial that can be found as a low-growing shrub, trailing vine on the ground or vine that can climb to the top of the tallest tree. The leaves are readily identifiable, alternately compound with three leaflets. The leaflets may have smooth, scalloped or irregularly toothed margins. Leaflets emerge in the spring with a greenish-red cast and then turn dark green in the summer before turning red, orange or yellow in the fall. The fruit is greenish-white cluster of small current like berries. Wildlife eat and spread the berries. All parts of the plant, including stems and roots, contain and secrete a nonvolatile oil which affects the skin, often leaving a blotching and burning water blisters with intense itching. If you have contact with the plant and can wash off with soapy water or rubbing alcohol within an hour, it will remove the oil from the skin, preventing irritation.

There are a few other species that have similar characteristics to poison ivy. Fragrant sumac has three leaflets but has hairy fruit and leaves. Seedlings of box elder also have 3 leaves but opposite leaf arrangement. Virginia creeper has the same trailing, vining habit but has leaflets of 5. Poison ivy can be found growing almost anywhere from fencerows, roadsides, wooded areas, landscapes, etc. In this area we only have poison ivy. Poison oak is only found in a few extreme southern counties in Missouri and we don’t have poison sumac.

Most importantly, now that you know how to identify poison ivy, is how to get rid of it (unless you are one of those lucky people who have no reaction to it)! Cultural controls such as hand-pulling, grubbing, or hoe are difficult but can work with small infestations. Always remember to avoid contact with the plant by wearing disposable gloves and clothing that covers all bare skin. Chemical control is my preferred method because I don’t want to come into actual contact with the plant! There are a variety of herbicides on the market that are effective at controlling poison ivy but always remember to read the label to determine which option is right for your situation. Also keep in mind that poison ivy is a woody perennial so it may take several applications to achieve control.

Can you correctly identify these look-a-likes? Which one is poison ivy, box elder, fragrant sumac and Virginia creeper?

A. 

B. 

C. 

D. 

See if you answered correctly. Answers on the bottom of page 7.
Upcoming Events

The following Master Gardener Meetings are held each month. All are welcome to attend. Please contact the local extension office to confirm location if you did not attend the previous meeting.

Parkland MGs - 1st Monday at 6:30pm, Memorial United Methodist, Farmington, MO

Poplar Bluff MGs - 1st Tuesday at 6:00pm at First Episcopal Church in Poplar Bluff, MO (Do not meet in January)

Ste. Genevieve MGs - 2nd Thursday, at 6:30pm, Ste. Gen. County Extension Center

Cape Girardeau MGs - 3rd Thursday at 7:00pm, Cape County Extension Center

Perry MGs - 4th Monday at 6:30pm, Perry County Extension Center

February

4 - Pecan Pruning Workshop, 9:00 am at Jacob Pecan Orchard, 26133 CR 249, Puxico, Missouri. Bring your own pruners and dress according to weather.

7 - Beginning Beekeeping Workshop, 8:00 am to 4:00 pm at the Methodist Church Lower Level, 501 Main Street, Poplar Bluff, Missouri.

7 - Perry County Master Gardener’s Symposium at the Perryville Area Career and Technology Center on the Perry County School Dist. 32 Campus.

13 to 15 - Midwestern Herb and Garden Show at the Times Square Mall in Mt. Vernon Illinois

20 - Farmers Market Workshop, 9:00 am to 3:00 pm at North College Center in Park Hills, Missouri. To register call 573-883-3548.

24 - Master Gardener Core Training begins at Butler County Extension Center in Poplar Bluff, MO

March

5 - Seed Starting Workshop at the Madison County Extension Center in Fredericktown at 6:30 p.m.

7 - A Garden Symposium by the Parkland Master Gardeners at Mineral Area College, Technology Building from 8 a.m. to 3:30 p.m. For more information, contact 573-438-5103. Registration only - no walk ins.

12 - Beginning Gardening Seminar at the Madison County Extension Center in Fredericktown at 6:30 p.m.


17 - Garden Symposium, 8:00 am to 3:00 pm at the Bootheel Planning Building in Dexter, Missouri. To register call 573-568-3344.

April

16 to 19 - Dogwood Azalea Festival in Charleston, MO

If you have a horticultural related event for the calendar call 573-686-8064 or email it to Denklens@missouri.edu.

Answers from Identification on page 5: A. Box Elder; B. Poison Ivy; C. Virginia Creeper; D. Sumac

The Poplar Bluff Master Gardeners contributed to the success of the Ag Expo the last weekend of January. In addition to all the volunteer help provided they educated 248 children by providing small activities related to gardening.

Children made bird feeders, designed flowers, created sock caterpillars and sunflower terrariums. This annual event helps to educate between 250 and 400 children each year.

They will continue this garden education effort as they begin their second grade education in April by visiting each...
The Garden Spade is published monthly by University of Missouri Extension staff for individuals and families living in Southeast and East Central Missouri. This newsletter is provided by your local extension council.

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We welcome and encourage Master Gardener groups and individuals to submit items to the newsletter. We encourage the submission of any news such as upcoming volunteer opportunities, community events related to gardening, warm wishes or congratulations to fellow gardeners. We also encourage Master Gardeners sharing experiences and writing articles on timely topics.

All entries into the group news sections must be received by 4:30 on the 15th of each month for the following months news.

Email News to: kammlerk@missouri.edu, denklers@missouri.edu, or aufdenbergd@missouri.edu

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