Novice gardeners should learn the lingo before ordering from seed catalogs

By Josh Fuder

The short, cold days of winter leave much to be desired for gardeners, but thoughts of a successful summer garden begin with the arrival of seed catalogs. Today’s seed catalogs are more than just a source for seeds. They provide stories, recipes, exquisite photos, advice, details on new and old plant varieties and lots of welcome inspiration for housebound gardeners.

Seed catalogs also introduce gardeners to new or different plants that they may not be able to find as seedlings at local garden centers. The information in catalogs can be a bit overwhelming to novice gardeners, so it is important to know how to interpret some of the technical information and abbreviations, much like learning the language of gardeners.

Hybrid seed, often abbreviated as “F1,” is a result of the pollination of one genetically uniform variety with pollen from another specific, genetically uniform variety. Hybrid seeds are produced in a very controlled manner, often by hand. As a result, they are usually more expensive.

The goal of hybrid seed is to produce more desired characteristics, like disease or drought resistance, uniformity and outstanding fruit or flower production. The only downside to hybrid seed is that the plants will not produce seed that is reliably similar to the parent plant.

Open-pollinated (OP), sometimes referred to as “heirloom” (H) or “standard” (S), seed has more stable characteristics from one generation to the next. Because open-pollinated plants were often chosen for one or two characteristics and adapted to different regions of the country, individual plants of these varieties may differ greatly in size, shape and other characteristics.

(Continued on page 5.)
Much of Georgia was much wetter than normal during November 2015, and with all that rain there’s a chance some runoff may have contaminated private wells around the state. For families who have seen their well water turn a bit cloudy or muddy over the last few weeks, it’s not a good idea to guess at the quality of water coming out of the tap. The Centers for Disease Control and Prevention and the University of Georgia recommend testing well water at least once each year. The recent rains may make this a good time to visit a local UGA Cooperative Extension office to have your well water tested.

Although well water in Georgia is generally safe to drink, it can become contaminated with excess minerals, chemicals and disease-causing bacteria. While water from public municipal sources is routinely monitored for safety, water from private wells isn’t unless homeowners take steps to ensure its safety.

Many problems with well water can be corrected, but homeowners can’t fix a problem if they don’t know it exists. Below are some things Georgians should think about when deciding whether to test well water.

How well water can become contaminated
The water that fills private wells comes from rainfall that filters through soil and collects in pores and cracks in rocks deep beneath the ground. This filtration process removes leaves, insects and other particles from the water. It doesn’t, however, filter out chemicals — pesticides, fertilizers and industrial waste — that rainwater picks up from soil and hard surfaces. Spills of chemicals or sewage within 100 feet of the well are cause for particular concern. Furthermore, as water moves through the ground, it can dissolve naturally occurring minerals and metals. It can also pick up microorganisms, especially during warm, rainy weather, like Georgia saw in November.

Shallow wells are more susceptible to contamination than deep wells are. Location is also a factor in well water contamination. Wells that are sited in low ground are more likely to collect pollutants carried in surface runoff. Contamination is also more likely if the well is located within:

- 50 feet of septic tanks, septic drain fields or livestock yards
- 100 feet of petroleum tanks, manure storage, or pesticide or fertilizer storage and handling areas

Additionally, some regions experience potentially toxic levels of naturally occurring contaminants, including arsenic, radon and uranium. Crystalline rock aquifers, like those found in the Piedmont region of Georgia, are more likely to contain radon.

Unprotected wellheads, flooding, poor well construction and damaged well structures can also allow contaminants to enter well water.

(Continued on page 7.)
A new year brings new opportunities. If one of your resolutions was to improve your lawn and garden, you may need to know where to start and what you can do in the winter.

At the top of the list is a soil test to determine your soil’s pH and fertility. This is a great winter chore to complete to make sure you provide a good soil base for everything you grow. You can follow the recommendations provided after a University of Georgia Cooperative Extension soil test to help your plants look better while preventing excessive nutrients from entering groundwater and streams.

Look around your garden and determine what projects you would like to tackle for the year. Are you interested in creating a pollinator garden? Is it time to add an additional raised bed vegetable garden? Do you want an outdoor entertaining space? Now is a good time to begin garden construction projects so they will be ready to put to use in the spring.

If your plants outgrew their space last year, now is the time to prune them back to the correct size. Shrubs that should be pruned at this time of year include: crape myrtle, beautyberry, Japanese barberry, boxwood, rose of Sharon, nandina, grandiflora roses and fragrant tea olive.

Exceptions to the late winter/early spring pruning rule are spring flowering shrubs whose flowers are set the summer before, such as azaleas, hydrangeas and forsythia. These should not be pruned until after they have flowered. So hold off on pruning the azaleas, unless you want to lose the spring flower buds.

Winter is also the perfect time to order seeds for your spring garden. Seed catalogs are available this time of year and you will find the best selection early. Choose seeds for plants you know will add color, texture and interest to your garden. You can (Continued on page 6.)
Welcome to our very first newsletter of 2016, and very happy New Year to you and your family! Another year is upon us, and it is a great time to make a difference. If this is your first time joining me, a very special welcome to you. The goal of this column is to share ideas about composting: the how to’s, the basics, golden nuggets of composting info, success stories and much more. I am thrilled that there are over 1,100 subscribers to this newsletter! I also would like to welcome back our faithful following.

One crucial philosophy that I always mention in these articles is that each small contribution does make a difference, and collectively, those contributions add up. For example, if each of our readers had a worm bin, we could potentially divert 15,400 pounds of food scraps per month from our landfills. Within a year, we could divert over 180,000 pounds of food scraps from our landfills! And that is just 1,100 households! In Atlanta alone, the population is over six million people. Now that would be a LOT of food scraps!

For the last two months, we have learned the basics of composting. We’ve reviewed the different types of composting and some general how to’s. We then looked at the types of worms that could be used in vermicomposting bins. We concluded that Red Wigglers are an ideal worm to use in a bin.

This month, we will explore what items should go into a worm bin and what items should be avoided. So without any further ado, let’s get started!

Once you have established your worm bin, you can begin to collect food scraps to sustain your worm bin, and of course, divert them from the landfill. I am always asked what items can be included in a bin and what items should be avoided. These are very valid and important questions. After all, just like with people, if we put the wrong food into our systems, it will not allow us to function at our optimum health. Similarly, if we put items in a bin that are not suitable for the worms, it can cause havoc among the worms.

(Continued on page 6.)
If you grow more than one variety of open-pollinated plants, you may have to separate them by a certain distance or use varying planting times in order to collect seed that is true to type.

“Pelleting” is a term used on many of the smaller seeded vegetables, like carrots, and flowers, like petunias. Pelleting is a coating, usually made of clay and other inert materials, that makes the seed more uniform in size and shape. Pelleting increases the efficiency of mechanical seeding and makes hand seeding easier.

When looking for tomato seeds in a catalog, you will find a veritable alphabet soup of acronyms like “TMV,” “Vt” and “EB.” These acronyms represent common tomato diseases. “TMV” refers to the tobacco mosaic virus; “Vt” refers to Verticillium wilt, a soil-borne disease; and “EB” refers to early blight, a leaf disease. Plant breeders breed in resistance or tolerance to these common diseases.

Tomato seeds may also be categorized as “determinate” or “indeterminate.” Determinate varieties tend to be shorter, more compact plants. Determinate varieties are better for small gardens or container growing and are great for gardeners that don’t want to have to stake or support their plants. Indeterminate varieties grow tall and need caging or staking to keep them off the ground. They also tend to produce more fruit over a longer period.

Shopping for seeds is a great pastime for gardeners to use to make it through the dreary winter months, but it can be a bit like going grocery shopping when you’re hungry, so don’t bite off more than you can chew.

Novice gardeners should learn the lingo before ordering from seed catalogs, continued...

Q & A: Black and red bugs on maple trees
By Amanda Tedrow

I have little black and red bugs on both of my maple trees and on the ground and plants surrounding them. It doesn’t seem like they are hurting anything, but should I do something about them?

- Allison F., Athens

Based on your description you probably have boxelder bugs. These insects are harmless and are more of an eyesore due to the fact that they are usually found in large numbers. Box elder bugs are approximately 1/2-inch long and are black with three red stripes on the thorax and a diagonal red line on each wing. Their favorite food is the seeds from the female box elder tree, but they also may eat the seeds of other maples (and rarely other plants). You are finding these insects on your maple trees, but you also may have a box elder tree in the vicinity. Box elder trees are a type of maple with a compound leaf. These trees often are considered unattractive in the landscape, but are fast-growing native trees with seeds that easily germinate.

The most complaints concerning these insects usually come during cooler months when they often are found on the exterior of houses. These insects spend the winter as adults in trees and even indoors. When they are found indoors, it is best to use a vacuum to remove the pests rather than killing them or using an insecticide.

The easiest control option for boxelder bugs is removal of the female boxelder trees in the vicinity. By removing the host plant, future generations no longer will find your yard an appealing environment.

Chemical controls for boxelder bugs are not necessary in most situations.

For more information, on boxelder bugs including pictures of these insects visit the Clemson Cooperative Extension publication on boxelder bugs.

(Amanda Tedrow is the UGA Extension Agriculture & Natural Resources agent for Athens-Clarke County.)
Items to include:
I will say this: worms are not overly fussy when it comes to food. We will discuss later what items should not be placed into a bin. However, in general, they are fairly easy to please. A couple things to keep in mind: the smaller your food scraps are, the easier and more quickly the worms will be able to eat them. Also, because worms have gizzards like chickens, gritty material such as coffee grounds and crushed egg shells aid in their digestion. Here are some general items that can be included in a worm bin for composting:

**Fruit and vegetable scraps**
- Apples
- Watermelon
- Kale
- Spinach
- Banana peels

**Food wastes**
- Coffee grounds
- Tea bags
- Egg shells

**Newspapers and cardboards**

**NOTE:** When adding fruit and vegetable scraps, be mindful of adding high volumes of acidic products such as oranges, lemons and limes.

Items to avoid:
As I mentioned, worms are not very picky eaters. However, there are certain items that should be avoided in the worm bin:
- Meat
- Bones
- Fatty foods, such as cheese, butter, and grease

How to add food scraps:
It is important to add food scraps a little bit at a time. Adding too much food can cause odors and fruit flies. Your worms can always eat the bedding if they need more sustenance. Spread a thin layer of these food scraps on top of the bedding, and the worms will come to the surface to eat the scraps. Try to include a combination of vegetable matter and gritty material each time you add scraps to the bin.

Well, it has been a pleasure to have you along this month! I hope you have found value in this article. I will be back next month to share more exciting stories about worms! Once again, I wish you a very happy and safe New Year.

And in closing, remember that even on a small scale, you and your worm bin will make a difference and have an impact in your community. The fact that we each get to contribute and make a difference...that is very exciting!

(Lisa Sehannie is a Georgia Master Composter Extension Volunteer.)

Include a landscape makeover in your New Year’s resolutions, continued...

Even start many perennial plants from seed beginning in January in preparation for the warmer spring months.

Composting is also a great winter gardening activity. Many of the items you throw in the trash can be sorted out and composted. The benefits of composting go beyond just reducing waste. Compost can be used to improve garden soil and make the landscape and vegetable garden more productive. With a little organization and a designated space, you can make your own soil amendment through composting.

Finally, feed the birds. Winter is long and it’s not easy for feathered friends to find food in the cold. Consider hanging a suet feeder or seed feeder in your landscape. Don’t forget to provide birds with a nice clean supply of fresh water, too. Birds in winter are one of the most fantastic garden ornaments, and now is a great time to invite them to your garden.

(Mary Carol Sheffield is the UGA Extension Agriculture & Natural Resources agent in Paulding County.)
Hazards of contaminated well water
Primary contaminants in well water can cause both acute and chronic illness. High levels of dissolved metals, such as copper or cadmium for example, cause liver and kidney damage and anemia. Bacteria, viruses and parasites may cause dysentery and several infectious diseases. Chemical contaminants can cause a host of illnesses.

In addition to health risks, some contaminants cause economic or aesthetic damage. Excess chloride in well water deteriorates plumbing and water heaters. Excess copper leaves blue-green stains in sinks and toilets. Concentrations of iron and manganese stain laundry brown. High levels of chloride, iron and zinc can make water taste bad.

While an odd taste, corrosion and staining are signs of water contamination, most contaminants aren’t readily detectible. Ensuring the safety and quality of your well water requires laboratory testing.

Recommended tests for well water
Because one single test can’t detect all the possible contaminants of well water, UGA Agricultural and Environmental Services Laboratories offer over 30 different water tests. Under most conditions, however, UGA recommends annual testing in just four areas: water chemistry, bacteria, nitrates, and turbidity and color.

The basic water chemistry test performed at the UGA Soil, Plant and Water Analysis Laboratory can determine hardness, pH and concentrations of 16 minerals and metals. If your well water hasn’t been tested in three or more years, start with a comprehensive water chemistry analysis. In addition, UGA recommends that well owners in the Piedmont and Blue Ridge regions consider annual testing for uranium. Well owners in the state’s Southern Coastal Plain below the Fall Line should test their water for arsenic.

Beyond these recommended annual tests, you may need to have your well water tested for safety if you experience flooding; suspect contamination; notice changes in color, odor or taste; or have problems with the well structure.

For information on collecting and submitting well water for laboratory testing, contact your local UGA Extension office at 1-800-ASK-UGA1. Your Extension agent can also recommend treatments for correcting well water issues.

(Heather Kolich is the UGA Extension Agriculture & Natural Resources agent in the Forsyth County.)

Amanda’s Slice—Congrats to the Master Gardener Class of 2015!

I would like to congratulate the Athens Area Master Gardener Class of 2015! We held our annual “Green Up” graduation ceremony on January 19 at the State Botanical Garden and honored our 32 new Master Gardeners. These individuals completed the 50-hour training course and each performed 50 hours of volunteer service in the community last year. They volunteered at community gardens and farmers markets, taught classes, answered gardening questions at farmers markets and local events, and more. We also honored 22 veteran Master Gardeners for achieving 5, 10, 15 and even 25 years of service as Master Gardeners! 2015 proved to be a strong year for our program, with over 150 Master Gardeners reporting 13,770 volunteer hours. Our Athens Area Master Gardener program ranked fourth for the most hours recorded of the many other county programs across the state. Well done, everyone! Thank you for your hard work! If you would like information regarding the Master Gardener program, please visit www.ugaextension.com/clarke/anr or email me at atedrow@uga.edu. - Amanda Tedrow

Thirty-two new Master Gardeners received their certification earlier this month at the State Botanical Garden.
Gardening Events in Our Area

The Seniors Garden Club hosted by the Athens Community Council on Aging meets on the first and third Thursday of the month from 10-11 a.m. Meetings are FREE. Contact 706-549-4850 for more information.

The Ladies Homestead Gathering of Athens meets the third Tuesday of each month from 6:30 p.m. at the Athens-Clarke County Extension office. Meeting topics range from gardening and composting to making bread and preparing herbal medicines. No experience necessary. For more information, contact lhgathensclarke@gmail.com.

On Thursdays, UGarden holds its weekly produce stand from 4:30-6 p.m. The student-run stand is located at 2500 S. Milledge Avenue by the big tan barn. Offerings include vegetables, shiitake mushrooms (in season), herbs and mixed herb teas. For more information, visit www.ugarden.uga.edu.

Considering earning your Certificate in Native Plants? The State Botanical Garden of Georgia is holding the Certificate in Native Plants: Orientation for New Participants info session about the program on Wednesday, January 27 from 9-10:30 a.m. Free and open to the public, this session will introduce the Certificate program, volunteer opportunities, CNP projects and more.

Monday, February 1 is the registration deadline for the 2016 Georgia Master Composter Program. This adult education program is an in-depth course in composting microbiology and methods. Any adult with an interest in composting and community outreach is welcome to participate. To download an application, visit www.ugaextension.com/clarke/anr or call the Athens-Clarke County Extension office at 706-613-3640.

On Wednesday, February 10, Athens-Clarke County Extension is holding the gardening class “Blueberries and Figs” from 6-7:30 p.m. at the Athens-Clarke County Library. This class is free, open to the public, and will introduce the basics of growing these two fruit-producing favorites. To register, please call 706-613-3640 or email atedrow@uga.edu.

Orchid Madness at the State Botanical Garden is back! During the month of February, the Garden is holding four separate orchid events, including an Orchid Repotting class on February 13 and an Orchid care class on February 20. For the full schedule and details, please visit the Orchid Madness event page.

The days are short
The sun a spark
Hung thin between
The dark and dark.
Non-Drought Outdoor Water Use Schedule*
Effective August 8, 2013

allowed daily
Between 4:00 pm and 10:00 am
- Automated irrigation systems
- Hand watering (without a shut-off nozzle)
- Lawn sprinklers

odd/even schedule
No hourly restrictions
Even: Mon • Wed • Sat
Odd: Tues • Thurs • Sun
- Car washing at home
- Charity car washes
- Hosing driveways
- Outdoor cleaning
- Pressure washing by homeowner
- Topping-off pools

allowed anytime
By anyone
- Commercial pressure washing
- Drip irrigation or soaker hose
- Watering of food gardens
- Hand watering (with a shut-off nozzle)
- Hydroseeding
- Installation and maintenance of an irrigation system
- Irrigation of newly installed turf (for the first 30 days)
- Irrigation of public recreational turf areas
- Irrigation of plants for sale
- Irrigation of sports fields
- Water from a private well
- Water from an alternate source
  • grey water, rain water, condensate

Please note: The odd/even schedule still applies to non-landscape outdoor water use.

*This Non-Drought Outdoor Water Use Schedule is consistent with the Outdoor Water Use Rules set forth in the Georgia Water Stewardship Act that went into effect statewide on June 2, 2010.

Athens-Clarke County Water Conservation Office
706-613-3724 / savewater@athensclarkecounty.com
Outdoor Water Restrictions:
Barrow, Oconee & Jackson Counties

Outdoor water use for Barrow, Oconee, and Jackson Counties is now limited to three days per week with even number addresses allowed to water on Saturday, Monday, and Wednesday and odd number addresses allowed to water on Sunday, Tuesday, and Thursday. The ban on watering between 10:00 AM and 4:00 PM remains in effect for all scheduled watering days. No outdoor watering is allowed on Fridays other than exemptions below.

THE FOLLOWING USES ARE EXEMPT FROM ALL HOURLY/DAY OF THE WEEK RESTRICTIONS:

- Drip Irrigation
- Soaker Hoses
- Hand Watering
- Food Gardens
- New installations of plants and turf (with a permit)
- Grey Water, Rainwater and AC Condensation Reuse
- Golf Course - Tee and Green Irrigation
- Plants for sale, resale, or installation

Please be aware that water restrictions are subject to change.

For more information and additional exemptions please contact your county’s water conservation department.

Visit us online:
Athens-Clarke County
Agriculture & Natural Resources

Like us on Facebook:
Athens-Clarke Agriculture & Natural Resources

Mission Statement
The UGA Athens-Clarke County Extension’s mission is to respond to the people’s needs and interest in Agriculture, the Environment, Families, and 4-H/Youth in Athens-Clarke County with unbiased, research-based education and information.