GROWING SHRUB ROSES IS EASIER THAN HYBRID TEAS

With Valentine’s Day being celebrated this month, I thought it might be appropriate to talk about roses. The red hybrid tea rose is the most popular flower given on Valentine’s Day. California produces about 60 percent of American roses, but the greater number sold on Valentine’s Day in the United States are imported, mostly from South American countries like Columbia and Venezuela.

Roses are one of the world's most popular flowers. Their beauty and delicate fragrance have universal appeal. Roses are well adapted to many different environmental conditions. They are useful for cut flowers and many landscape effects. Since they are the product of centuries of breeding and selection, many shapes, forms and colors provide endless types to select from and use. Many gardeners avoid roses because of the intense maintenance they require. But, roses are becoming easier to grow and more desirable in the landscape through efforts to create roses that are more carefree by improving their winter hardiness and disease resistance. At the same time, these roses are being bred to have improved flower quality, appealing growth habits, and attractive foliage that will complement just about any garden style. Few hardy garden shrubs can compare with roses for astonishing diversity of color and the continuous bloom throughout the summer. The majority of modern shrub roses are on their own rootstock; if they die back to the crown in the winter, they will recover vigorously each spring from the roots.

Two of my favorite shrub roses are ‘Carefree Beauty’ and ‘Knockout’. ‘Carefree Beauty’ is one of the best of the carefree shrub roses developed by Dr. Griffith Buck at Iowa State University to withstand the cold and long winters of the Midwest. ‘Carefree Beauty’ produces successive flushes of deep rich pink blossoms from spring until frost. The rich color of the shrub makes it a natural choice for uses in groupings of 3 to 5 plants in locations to which you want the viewer’s eye to be drawn. ‘Carefree Beauty’ has a form that creates an attractive accent for perennial borders and beds. This selection can be used in mass to create a breathtaking sea of color or as a specimen plant providing a focal emphasis in the garden. ‘Carefree Beauty’ also creates large hips which are an additional asset. It is hardy in zones 4-9 and can grow five feet tall and wide.

The ‘Knockout’ shrub rose was introduced in 2000. It was created by Wisconsin rose breeder William Radler to reduce the rose gardener’s to do list with a plant that was cold hardy, disease resistant and incredibly floriferous. It quickly became one of the best-selling landscape plants in the country. It can grow four feet tall and three
GOOD AGRICULTURAL PRACTICES (GAP) WORKSHOP TO BE HELD
FEBRUARY 20

What is GAP? You may have heard this term before. GAP stands for Good Agricultural Practices. The Food Safety Modernization Act (FSMA) was signed into law in 2011 as a response to food safety concerns. Provisions affecting produce growers are currently being revised. At this workshop learn about the current developments in the FSMA and what effect they could have on your operation. GAP certification will be the main focus, explaining what your farm would have to do to get GAP certified.

Take this opportunity to learn from MU Extension Specialist James Quinn and have your questions answered by a USDA GAP audit inspector. We will also highlight the marketing benefits GAP offers and get a buyer’s perspective from some large produce buyers in Kirksville. If you are a large producer who has been asked for certification from a buyer or a small time producer looking to familiarize yourself with the terms and main points of this topic, this one day workshop is meant for you. You also have the option to begin and leave with a farm safety plan for your specific operation.

The Spotted Wing Drosophila, a new, invasive pest, will also be discussed, along with steps on making traps and monitoring for this pest.

The workshop will be held **February 20 from 8-3**, with the afternoon being optional, at the Truman State University Farm on Boundary Street in Kirksville. There is a $10 charge for the workshop which includes lunch. More information and a registration form can be found at [http://extension.missouri.edu/adair/](http://extension.missouri.edu/adair/) or by calling the Adair County Extension Center at 660-665-9866. Pre-register by February 14 to receive lunch. In case of snow or bad weather the workshop will be held February 27. You must be pre-registered to receive notice of a cancellation.

**Directions to the farm:** Take Highway 63/Baltimore Street through Kirksville, do not take the by-pass. If coming from the south, turn left onto LaHarpe Street and it will dead end at the TSU farm driveway. When coming from the north, go through Kirksville to the south end of town and turn right onto LaHarpe Street and follow it to the farm.

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**PRUNING FRUIT TREES AND SMALL FRUITS**

Pruning time is almost upon us. In northern Missouri, mid-February through March, before bud break, is the ideal time to prune your fruit trees. Pruning at this time allows you to selectively prune out winter damaged fruiting wood and preserve healthy fruiting wood. Additionally, pruning at this time will allow for quicker healing of the wounds created during the pruning process. Whether you have a small orchard or a backyard tree or two, you need to prune your fruit trees annually to maintain good tree health and uniform fruit loads from year to year. From determining tree form to influencing crop load and crop quality, pruning has many direct effects on what a fruit tree can deliver over the short and long term.

The two primary goals of annual pruning are to maintain appropriate height and spread of the tree, and to ensure the adequate presence of fruiting wood. It is important to understand that most of the energy a fruit tree develops throughout the season will find its way into either this year’s fruit or next year’s flower buds. This emphasizes the importance of balancing these types of growth. The goal is to get plenty of fruit this year without sacrificing next year’s potential. Finding a balance between vegetative and reproductive growth can be difficult at first, especially if your fruit trees haven’t been pruned for a number of years. If you are renovating old, abandoned trees, striking this balance may take a few years because it is not recommended to remove more than 1/3 of a fruit tree’s growth in a single year. Ultimately, what you want to avoid is alternate cropping years where an abundant harvest is experienced every other year with little-to-no fruit in the off years.

A well-maintained tree that receives an appropriate annual pruning will be much easier to maintain than one that does not. This practice, along with good fertility management, pest control, and fruit thinning (where appropriate) will help ensure that the plants maintain an optimal level of productivity for you.

(Continued on page 3)
Small fruits such blueberries, blackberries, raspberries, gooseberries and grapes should also be pruned in late winter. Brambles are biennial plants with two types of canes: primocanes and floricanes. For fall-fruiting raspberries and blackberries, berries are harvested in August or September from 1-year-old canes called primocanes. For summer-fruiting brambles, primocanes are 1-year-old vegetative canes, and 2-year-old canes called floricanes produce the fruit. Canes that produce fruit die after the fruit matures and will need to be pruned. Various brambles are pruned differently, and some need to be tipped during the growing season. Pruning is one of the most important and most neglected practices in home plantings of grapes. Grapes need some form of support, and pruning (training) is necessary to develop the plant and to maintain it on the support provided. Regular, purposeful pruning is essential for controlling the number, position and vigor of fruiting canes and the yield and quality of the fruit. Since winter injury of fruiting canes will occur to some extent, late winter pruning generally is preferred. If pruning is delayed until near bud swell, the cuts commonly ooze sap abundantly. Though not desirable, "bleeding" seems to be of minor importance.

For information or diagrams on how to prune small fruits or fruit trees, contact your county extension center. There are also many excellent resources available online from various universities.

Source: Parts of this article were taken from an article written by Marlin Bates, former University of Missouri Extension horticulture specialist.

STARTING SEEDS INDOORS

The proper time for sowing seeds indoors depends on the amount of time required to develop a healthy transplant of appropriate size to be moved outdoors. This period may range from 3 to 15 weeks, depending on species and the cultural conditions in the home. The date at which a species may be transplanted into the garden must be considered when establishing a seeding date.

Steps in planting seeds:

♦ Moisten the germination medium to be used. Fill the container to within ¾ inch of the top with the medium. Make sure the container has adequate drainage. Use a clean, small board to level and gently firm the germination medium.

♦ Sow the seeds uniformly and thinly in the rows. Many small, round seeds may be slowly dropped in the rows by tapping the package as it is held over the rows. Label each row promptly with plant type, variety and date of planting.

♦ Plant large-seeded vegetables such as cucumber and watermelon directly into containers such as peat pots. Plant two seeds per pot and later thin to one plant.

♦ Cover the seeds with media. The depth of covering depends on the size of the seeds. As a general rule, seeds other than especially fine seeds should be covered to a depth about two times their diameter. Most fine seeds, such as petunia and lettuce, need light to germinate and should not be covered.

♦ Moisten the surface of the medium with a fine mist, or place the container in a pan of warm water to absorb it from the base. After hydrating the flats or containers, cover them with clear plastic. Large plastic bags work well. Because plastic retains moisture, no additional watering should be necessary until the seeds have germinated and the plastic has been removed.

♦ Place seeded container in a warm location for germination. Generally, a range from 65 to 75 degrees F is best. A few plants such as larkspur, snapdragon, sweet pea, cabbage, broccoli and cauliflower are best started at about 55 degrees F. Do not place covered containers in direct sunlight.

♦ Inspect daily for germination. Containers should be moved to bright light and the plastic cover should be removed as soon as germination is well under way. Watch closely for development of any disease and, if evident, take control measures promptly. After germination, plants listed as preferring cool temperatures should be placed in a cool location.

Newly emerged seedlings are delicate and quite vulnerable to a disease known as “damping off,” which is caused by the fungus Rhizoctonia solani. Symptoms include dark, sunken tissue at the base of the stem, where it enters the propagation medium. Toppling over at the ground line usually follows. Excess moisture, high temperature and poor light stimulate spread of the disease by weakening plants and making them more susceptible to it. Strict sanitation is helpful in the prevention of damping off. Use only sterile containers and germination media free from pathogens. However, if damping off should occur, drench the entire medium with a fungicide registered for the control of Rhizoctonia. Prompt action is needed to prevent the disease from spreading to previously healthy seedlings.

Source: Dr. David Trinklein, http://extension.missouri.edu/p/G6570.
GARDENING TIPS FOR FEBRUARY

Ornamentals
- Water evergreens if the soil is dry and unfrozen.
- Inspect summer bulbs in storage to be sure none are drying out. Discard any that show signs of rot.
- Winter aconite (Eranthis sp.) and snowdrops (Galanthus sp.) are hardy bulbs for shady gardens that frequently push up through snow to bloom now.
- Take geranium cuttings. Keep the foliage dry to avoid leaf and stem diseases.
- Sow seeds of larkspur, sweet peas, Shirley poppies and snapdragons where they are to grow outdoors now. To bloom best, these plants must sprout and begin growth well before warm weather arrives.
- Seeds of slow-growing annuals like ageratum, verbena, petunias, geraniums, coleus, impatiens and salvias may be started indoors now.
- Start tuberous begonias indoors. "Non-stop" varieties perform well in this climate.
- Dormant sprays can be applied to ornamental trees and shrubs now. Do this on a mild day while temperatures are above freezing.

Fruit
- Inspect fruit trees for tent caterpillar egg masses. Eggs appear as dark brown or gray collars that encircle small twigs. Destroy by pruning or scratching off with your thumbnail.
- Collect scion wood now for grafting of fruit trees later in spring. Wrap bundled scions with plastic and store them in the refrigerator.
- When pruning diseased branches, sterilize tools with a one part bleach, nine parts water solution in between cuts. Dry your tools at day's end and rub them lightly with oil to prevent rusting.
- Begin pruning fruit trees. Start with apples and pears first. Peaches and nectarines should be pruned just before they bloom.
- Grapes and bramble fruits may be pruned now.
- Established fruit trees can be fertilized once frost leaves the ground. Use about one-half pound of 12-12-12 per tree, per year of age, up to a maximum of 10 pounds fertilizer per tree. Broadcast fertilizers over the root zone staying at least one foot from the tree trunk.

Vegetables
- Run a germination test on stored seeds to see if they will still sprout.
- Start onion seeds indoors now.
- 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 allow, take a chance sowing peas, lettuce, spinach and radish. If the weather obliges, you will be rewarded with extra early harvests.
- Sow seeds of broccoli, cauliflower, Brussels sprouts and cabbage indoors now for transplanting into the garden later this spring.

Miscellaneous
- When sowing seeds indoors, use sterile soil mediums to prevent diseases. When seeds sprout, provide ample light to encourage stocky growth.
- Repot 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.
- To avoid injury to lawns, keep foot traffic to a minimum when soils are wet or frozen.
- Branches of pussy willow, quince, crabapple, forsythia, pear and flowering cherry may be forced indoors. Place cut stems in a vase of water and change the water every 4 days.
- Maple sugaring time is here! Freezing nights and mild days make the sap flow.

UPCOMING EVENTS

February 6: 18th Annual Greenhouse Growers School, Bradford Research and Extension Center, 4968 Rangeline Road, Columbia, MO, (From U.S. 63 travel east on Rt. WW to Rangeline and turn right). Cost-$30 includes lunch and breaks, payable at the door. For a copy of the agenda call or email me (Jennifer).

February 20: Good Agriculture Practices (GAP) Workshop, Truman State University Farm, Kirksville. See inside article.

March 1: Gardener’s Palette, 9-3:30 at John Wood Community College, Quincy, IL. Download registration form at http://web.extension.illinois.edu/ahbps/downloads/51378.pdf or call me at 660-665-9866 and I will mail you a form.

April 5: Spring Forward Gardening Workshop, Moberly High School, 9-3:15. Cost $16 and includes lunch. Registration details in March issue of this newsletter or check Adair County Extension website http://extension.missouri.edu/adair.

Missouri Botanical Garden