UPCOMING EVENTS

The Friends of the KSU Gardens Board Luncheon Series, Awesome Annuals for Summer Gardens, will be held Friday, March 5 from 11:45 a.m. - 1:00 p.m. at the KSU Gardens Visitor’s Center (1500 Denison, Manhattan). Mike DeRee from Ball Seed Co. Will present new and award winning annuals. The cost is $25.00 and includes a boxed lunch. To place reservations, please e-mail spr@ksu.edu or call (785) 532-1442.

VEGETABLES

Cure the Itch by Planting Peas

If you are tired of winter and hunger for spring, try planting peas as soon as the soil dries and the soil temperature reaches 40 degrees. We have several types of peas we can plant in Kansas. Probably the most common is the shelling pea and the old standard in this group is Little Marvel. Though Little Marvel is still on our recommended list, we have a number of others that do well including Green Arrow, Knight, Maestro, Burpeeana and Mr. Big. All of these are early maturing types that allow us to harvest a crop before the hot weather arrives and stops production. Snow peas are those commonly used in stir-fry that have a crisp edible pod. Recommended varieties include Dwarf Grey Sugar, Mammoth Melting Sugar and Snow Green. Sugar snap peas resemble shelling peas but have a thick, fleshy pod and can be eaten fresh, steamed or cooked. Like snow peas, they are not shelled but eaten pod and all. We recommend Sugar Bon, Sugar Ann, Super Sugar Snap and Sugar Sprint.

Peas should be planted shallow, about one-half inch deep, to encourage rapid germination and emergence. Seed in the row should be spaced 2 inches apart. Many people often plant two rows 6 to 8 inches apart so the floppy plants can support one another. For some older varieties, this may not be enough. They may need trellising to support the growing vines. Fencing may be needed to keep rabbits away. (WU)
Soil Temperature and Vegetables

One of the most neglected tools for vegetable gardeners is a soil thermometer. Soil temperature is a much better measure of when to plant than air temperature or the calendar. Planting when soil is too cool can cause seeds to rot and transplants to just sit there.

A number of vegetables can germinate and grow at cool temperatures. For example, peas will germinate and grow well at a soil temperature of 40 F. Though lettuce, parsnips and spinach can sprout at a soil temperature of 35 F, they prefer at least 45 F for best germination and growth. Radishes also do well at a soil temperature of 45 F.

Warm-season crops such as tomatoes, sweet corn and beans prefer at least 55 F for germination (or transplanting), but others such as peppers, cucumbers, melons and sweet potatoes need it even warmer, about 60 F.

Taking soil temperature accurately is a bit of a science. First, use a metal soil thermometer, which is sold in many garden and hardware stores. Take temperature 2.5 inches deep at about 10 to 11 a.m. Diurnal variations affect soil temperature, with lowest readings after dawn and warmest around mid-afternoon. The late-morning reading gives a good average temperature. Also be sure to get a consistent reading for 4 to 5 days in a row before planting, and make sure a cold snap is not predicted.

An excellent guide sheet on this subject is published by the Alabama Cooperative Extension System and is titled “Soil Temperature Conditions for Vegetable Seed Germination.” It can be found at [http://www.aces.edu/pubs/docs/A/ANR-1061/ANR-1061.pdf](http://www.aces.edu/pubs/docs/A/ANR-1061/ANR-1061.pdf)

FRUIT

Growing Blueberries

Though blueberries are not native to Kansas, we can grow them at least in the eastern half of the state. However, just because we can grow them doesn’t mean they are easy. The key is good preparation. Blueberries are related to azaleas and rhododendrons and therefore require an acid pH (between 4.8 to 5.2 is best) and do not have root hairs. The lack of root hairs means we must do a good job of watering, and mulching is very
important.

It is best to start a year ahead of time to allow for pH adjustment, weed control and the addition of organic matter. The first step is always a soil test so that you know how much the pH needs to be dropped. For a pH up to 5.5, the addition of sphagnum peat moss at the rate of 2 cubic feet per 100 square feet will be adequate. For a pH 5.5 to 6.0, add one pound of sulfur per 100 square feet of bed in addition to the peat moss. For a pH 6.0 to 6.5, add 1.5 lbs. sulfur per 100 square feet of bed. For pH levels above 6.5, use 2 lbs. sulfur per 100 square feet of bed and double the amount of sphagnum peat moss suggested earlier. Do not use aluminum sulfate to correct a high pH as excessive levels of aluminum can be toxic to blueberries. For each 0.5 movement up the pH scale from 6.5, add an additional pound of sulfur. Sulfur can be applied as a dust, but the pelletized sulfur is much easier to spread. Only the row should be treated and the row width should be 5 feet. Blueberries are normally spaced about 5 feet within the row. Sulfur takes time to react and so this should be done so that there is as much time as possible between applying sulfur and planting.

Blueberries will bear more if you have more than one variety. Recommended varieties vary but you may want to try Bluecrop as it is very adaptable. Patriot also seems to do well. You may want to try some other varieties depending on the descriptions you read.

Blueberries should be mulched. Sawdust is the traditional material but I have also used straw and wood chips to good effect. Mulch to a depth of about 3 inches.

Irrigation is also a must. Soils should be kept moist but never waterlogged. Adding peat moss to the planting row will elevate the planting bed enough that standing water should not be an issue. However, an elevated bed will dry out more quickly, so there must be a way to add water. Trickle irrigation works well for blueberries. Try watering twice a week during the summer with enough water to wet the soil 8 inches deep. Watering once a week may be enough during the cooler weather of spring and fall.

As you can guess, there is more to growing blueberries than can be included in a short article. Dr. Art Gaus from the University of Missouri shared with me an instruction sheet on how to grow blueberries more than 20 years ago. It is still excellent information on blueberry culture. You can access it by going to: http://www.oznet.ksu.edu/dp_hfr/blueberries.pdf

(WU)

**ORNAMENTALS**

**Pruning Deciduous Shrubs**

Before Pruning

After Pruning
Gardeners are eager to get out and do something in the landscape this time of year. One chore that can be taken care of now is pruning certain shrubs. Often, gardeners approach pruning with trepidation, but it is not as difficult as it may seem. Remember, not all shrubs need to be pruned (i.e. witch hazel), and certain shrubs, which will be identified later, should not be pruned this time of year. Shrubs are pruned to maintain or reduce size, rejuvenate growth, or to remove diseased, dead or damaged branches. Deciduous shrubs are those that lose their leaves each winter. Evergreen shrubs maintain foliage all year and include yews and junipers.

Deciduous shrubs are placed into three groups:
- Those that flower in the spring on wood produced last year;
- Those that flower later in the year on current season’s growth; and
- Those that may produce flowers, but those flowers are of little ornamental value.

Shrubs that flower in the spring should not be pruned until immediately after flowering.

Though pruning earlier will not harm the health of the plant, the flowering display will be reduced. Examples of these types of plants include forsythia, lilac and mock orange. Shrubs that bloom on current season’s growth or that do not produce ornamental flowers are best pruned in late winter to early spring. Examples include Rose-of-Sharon, pyracantha, Bumald spirea and Japanese spirea.

Pruning during the spring allows wounds to heal quickly without threat from insects or disease. There is no need to treat pruning cuts with paints or sealers. In fact, some of these products may retard healing. There are three basic methods used in pruning shrubs: thinning, heading back and rejuvenating. Thinning is used to thin out branches from a shrub that is too dense. It is accomplished by removing most of the inward growing twigs by either cutting them back to a larger branch or cutting them back to just above an outward-facing bud. On multi-stemmed shrubs, the oldest canes may be completely removed.

Heading back is done by removing the end of a branch by cutting it back to a bud and is used for either reducing height or keeping a shrub compact. Branches are not cut back to a uniform height because this results in a "witches-broom" effect.

Rejuvenation is the most severe type of pruning and may be used on multi-stem shrubs that have become too large, with too many old branches to justify saving the younger canes. All stems are cut back to 3- to 5-inch stubs. This is not recommended for all shrubs but does work well for spirea, forsythia, pyracantha, ninebark, Russian almond, little leaf mock orange, shrub roses and flowering quince. (WU)
PESTS

Fungus Gnats

Fungus gnats are small insects (1/8 to 1/10 inch long) that are common in high-organic-matter houseplant soils that are kept moist. Though the adults are mosquito-like in appearance, they do not bother humans or pets. It is actually the larvae or maggots that can injure plants by feeding on the roots. Symptoms include sudden wilting, loss of vigor, poor growth or yellowing of leaves.

Use of sterile media and avoiding overwatering can help prevent infestations. Existing infestations can be controlled with Bacillus thuringiensis v. israelensis, which is found in Gnatrol (commercial) and Knock-Out Gnats (homeowner). Imidacloprid is a systemic insecticide that can also be effective. Homeowner formulations include Bonide Systemic Houseplant and Bayer 3-in-1 Insect, Disease and Mite Control Concentrate. We also have a biological control via certain nematodes. The species Steinemema feltiae is especially effective in controlling the larvae of fungus gnats. (WU)

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To view Upcoming Events: http://tinyurl.com/fswqe

Horticulture 2010  E-mail Subscription

For questions or further information contact: Hort WebMeister.

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