VEGETABLES

Bolting and Buttoning in Cole Crop Plants

Broccoli, cabbage and cauliflower are cole crops that have a tendency to bolt (go to seed) or button (produce an extremely small head) if plants are not grown properly. These crops need to be kept actively growing through their production cycle. If they slow down due to underfertilization or are stunted due to overgrowing their container, buttoning or bolting is more likely. If you are not growing your own but rather selecting plants from a retailer, choose small, stocky dark green plants. Even after transplanting, these plants need to be well-fertilized. Fertilize at transplanting with a starter solution and continue to fertilize every 2 to 3 weeks until harvest. Both buttoning and bolting are irreversible. Once a seed stalk starts for form, nothing can be done to force the plant to produce a normal crop. (Ward Upham)

Time to Plant Potatoes Approaching

St. Patrick’s Day is just around the corner, so it is time to get seed potatoes in the ground. Actually any time from mid- to late-March is fine for potato planting. Be sure to buy seed potatoes rather than using those bought for cooking. Seed potatoes are certified disease free and have plenty of starch to sprout as quickly as soil temperatures allow. Most seed potatoes can be cut into four pieces, though large potatoes may yield more, and small less. Each seed piece should be between 1.5 and 2 ounces to insure there is enough energy for germination. Each pound of potatoes should yield 8 to 10 seed pieces.
Cut the seed 2 to 3 days before planting so freshly cut surfaces have a chance to suberize, or toughen, and form a protective coating. Storing seed in a warm location during suberization will speed the process. Plant each seed piece about 1 to 2 inches deep and 8 to 12 inches apart in rows. Though it is important to plant potatoes in March, emergence is slow. It is often mid- to late-April before new plants poke their way through the soil. As the potatoes grow, pull soil up to the base of the plants. New potatoes are borne above the planted seed piece, and it is important to keep sunlight from hitting the new potatoes. Exposed potatoes will turn green and produce a poisonous substance called solanine. Keeping the potatoes covered will prevent this. (WU)

FRUIT

Strawberry Planting and Mulch Removal

New strawberry plantings should be set early in the growing season so that mother plants become established while the weather is still cool. The mother plants develop a strong root system during this cool period when soil temperatures are between 65 and 80 degrees F. The most appropriate planting time is mid- to late March in southern Kansas and late March to mid-April in the northern areas of the state. Later in the season, runners and daughter plants develop. The earlier the mother plants are set, the sooner the first daughter plant will be formed and take root. These first daughter plants will be the largest plants at the end of the growing season and will bear more berries per plant the following spring.

When planting is done later, the higher temperatures stress the mother plants resulting in reduced growth, weaker mother plants and delays in daughter plant formation. Fewer and smaller daughter plants produce fewer berries, resulting in a smaller crop.

Remove all flowers during the first year. New plants have limited energy reserves that need to go toward establishing the mother plants and making runners rather than making fruit. If fruit is allowed to develop the first year, the amount of fruit produced the second year is drastically reduced due to smaller, weaker daughter plants.

Research in Illinois has shown that the straw mulch should be removed from strawberry plants when the soil temperature is about 40 degrees F. Fruit production drops if the mulch remains as the soil temperature increases. There are likely to be freezing temperatures that will injure or kill blossoms, so keep the mulch between rows to conveniently recover the berries when freezing temperatures are predicted. (Ward Upham)
An Old-Time Concoction for Mildew Control on Peach

The following “recipe” was a recommendation for the control of mildew on peach made in 1849. We list it to show the good-old-days may not have been so good.

Mix 26 gallons of urine with 6.5 gallons of pigeon dung and allow to ferment for 48 hours. Then add 2.2 pounds of aconite (Monk’s Hood) branches and 3.8 gallons of water. Apply mixture to peach leaves. A single application in April was said to provide year-long control.

We have not done any efficacy studies, nor do we plan to. The preceding was from a fascinating book titled, “The Truth About Garden Remedies” by Jeff Gillman. (Ward Upham)

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 in this article, 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 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 seasons’ 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. (Ward Upham)

The Race for Spring Is On!

What’s going to flower first? What’s going to give us the sign that long, cold nights are nearing an end? I’ll give you a hint…they’re usually yellow.

Some of us have daffodil and crocus bulbs peeking up, even though it’s not quite time. Maybe you have noticed buds swelling on all types of plants. But for most of us, the very first sign of spring is forsythia. Your grandparents probably grew it and loved it, and it can be seen in the yards of many older homes. The bright yellow flowers of forsythia are a cheery welcome to the spring growing season.

Unfortunately, forsythia doesn’t offer much the rest of the year. In fact, I’d say they’re a little on the boring and unkempt side of ornamental shrubs. Forsythia tends to b leggy and spidery; a great place for trash to collect. Lots of people like to prune forsythia into shapes of all kinds, but this generally cuts off the flower buds and when it does bloom in the spring, the flowering is spotty which looks strange on a formally pruned shrub. As with many shrubs, I believe in letting
them do their “thing” and growing the way they want with as much space as they will naturally fill. Afterall, if you inhibit forsythia’s spring show, what’s left to be excited about?

Having said all of that, forsythia has improved cultivars that work in a small garden. A splash of contained spring color can bring just as much enjoyment as a large shrub that looks scraggly the rest of the year. I really like some of the new cultivars that are small and have stout, upright stems with quite large flowers. These cultivars make excellent specimen plants, particularly for early spring interest.

So what are some of these beautiful cultivars? *Forsythia x intermedia* ‘Kolgold’ (Magical® Gold) has extra large (quarter-size), rich golden-yellow flowers and grows 4 to 5 feet tall and wide (Monrovia introduction). Golden Peep™ (‘Courdijau’) forsythia is a smaller, more compact form (1½ to 2½ feet tall and wide) with bright yellow flowers and yellow to purple fall color as a bonus feature. And lastly, a trio of introductions from the Proven Winners® brand: Show Off® (‘Mindor’), Show Off® Starlet (‘Minfor6’) and Show Off® Sugar Baby (‘Nimbus’). All three are compact growers (Show Off® grows 5 to 6 feet tall), but the second two are dwarfs (Starlet grows 24-36 inches tall and wide and Sugar Baby grows 18-30 inches tall and wide).

I don’t know about your family, but when Easter candy gets put on store shelves, I know most of my family will be hunting for some yellow marshmallow Peeps®. Except me; I think I’ll be hunting for a Golden Peep™ forsythia. How about you? (Cheryl Boyer)

**MISCELLANEOUS**

**Soil Tests When Soils are Wet**

It is still possible to take soil tests when soils are wet though there are precautions. Soil samples should be air-dried before being submitted for testing. Do NOT use artificial means of drying such as an oven or microwave as such treatment may result in inaccurate readings of nutrient levels. Also, be sure to use a clean container to collect the sample. Wet samples are more likely to absorb foreign materials adhering to the container, which may also influence soil test results. For information on how to take a soil sample, see [http://www.agronomy.ksu.edu/soiltesting/p.aspx?tabid=40](http://www.agronomy.ksu.edu/soiltesting/p.aspx?tabid=40).

Take the sample into your local extension office. If you don’t know the address for your local, county extension office, see [http://www.ksre.ksu.edu/Map.aspx](http://www.ksre.ksu.edu/Map.aspx) (Ward Upham)

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