ORNAMENTALS

Plants Breaking Dormancy Early

Plants that become dormant in preparation for winter must have a certain number of "chilling hours" before the buds will begin growth the next spring. "Chilling" hours are those in which the temperature remains between 32 and 45 degrees F. Plants differ in the number of chilling hours needed, with those adapted to colder climates usually requiring more than those adapted to warmer zones. Even plants within the same species can differ markedly in the number of chilling hours required for bud break. For example, apple varieties range from a low of 250 (or fewer) chilling hours to a high of 1700.

The chilling requirements of some plants have been met already this winter. For these plants, dormancy is over and warm periods can lead to bud swell or even flowering. We have had reports of daffodils blooming in Wichita. Unfortunately, buds that have swollen have lost virtually all of their winter hardiness and can be damaged by severe cold.

So what do you do if you have a plant that has swollen buds? Actually, there is not much you can do to slow the bud development process because it is completely dependent on weather. However, watering during dry weather may help in an indirect way. Roots can suffer drought damage during the winter. A tree with a damaged root system and damaged buds will be slower to recover than one with just damaged buds. Readily available soil moisture will aid in keeping the plant healthy so it will be better able to recover from cold damage. Also, it is important to determine if the swollen buds are flower buds or leaf buds. Even if the flower buds are killed by cold temperatures, the health of the plant should not be affected. If, in addition to the swollen buds, you also see small buds on the stems, then the swollen buds are flower buds and the small buds are leaf buds.
Leaf buds are more hardy than flower buds but even they can be killed if they have lost their winter hardiness. Even if the leaf buds swell and are killed by a cold snap, a healthy tree will still be able to survive. There are secondary buds that remain dormant unless the primary bud is killed. Secondary bud growth may be slower and less vigorous, but the tree will eventually recover. (WU)

FRUIT

Some Fruit Trees Need Pollinators

Fruit and nut trees must be pollinated before fruit will develop. Nut trees are pollinated by the wind, but bees pollinate most fruit trees. If you are planning a fruit planting, be sure to check to see if the cultivars (varieties) you are buying require a second cultivar as a source of pollen. It is important to understand that the different source of pollen is from a different cultivar, not a second plant or tree of the same cultivar. For example, Jonathan apple cannot be pollinated by another Jonathan, but rather another cultivar such as Golden Delicious. Cultivars of apples, sweet cherries, pears, Japanese plums, blueberries, and elderberries generally need a second cultivar for a pollen source. There are some exceptions such as Golden Delicious apple and Stella sweet cherry that are self-pollinating, and one tree is sufficient. Apricots, tart or pie cherry, European plum, peach, nectarine, blackberry, raspberry, currant, gooseberry, grape, and strawberry plants are all self-pollinating, and only one tree or plant is adequate for pollination and fruit development. Apricots would benefit from a pollinator.

If you have only one fruit tree that requires a pollinator, you can fool Mother Nature by using a bouquet of blossoms from another cultivar of the same species. Place the bouquet in a container of water, and hang it on the sunny side of the tree that needs to be pollinated. The bees will move from the flowers in the bouquet to the flowers in the tree and pollinate them. The trees must be blooming at the same time, and the bouquet should be replaced every two or three days to keep the flowers fresh and the pollen viable. (WU)

Dormant Oil Sprays for Fruit Trees

There are a number of dormant sprays used on fruit to control various diseases and insects, but a dormant oil spray is designed to control scale insects. If you have a problem with scale, now is the time to start looking for an opportunity to spray. Normally spray should be applied by March 1, especially with peaches and nectarines. Apples are tougher, and application may be
delayed up to the green tip stage. Temperatures need to be at least 40 degrees so spray has a chance to dry before freezing. If the spray does freeze before it dries, plant injury can occur. Applying the spray during the morning will help insure that it dries properly. Thorough coverage of limbs, branches, and twigs is vital for good control. Note that it is much easier to achieve good spray coverage if the tree is pruned before spraying. (WU)

PESTS

Check Plants for Scale Insects

The dormant season is a good time to check woody plants for scale insect infestations. This time of year, deciduous plants do not have leaves, so scale are more easily seen. If an infestation is detected, make plans to apply a dormant oil for control by March 1. Be sure temperature is 40 degrees or above before spraying. Scale insects are easily overlooked because they are small and immobile most of their lives, and they do not resemble most other insects. Many of them resemble small shells that are oval or circular, but some have more unusual shapes like oyster shells. Coloring varies, but can include white, tan, and brown. Plants that should be inspected for scales include apples, pears, other fruit trees, bush fruits, lilac, crabapple, oak, ash, elm, lilac, maple, linden, arborvitae, juniper, pine, spruce and yew. Manhattan euonymus is especially noted for having scale problems. Plants are not harmed if only a few scales are present. But scale population can increase dramatically during the growing season. Heavy scale infestations can damage fruit crops, destroy branches and kill entire plants. (WU)

MISCELLANEOUS

Use a Planting Calendar

If you start vegetable plants indoors, it is often helpful to list seeding dates on a calendar so that plants are ready for transplanting at the proper time. To do this, choose your transplant date and count back the number of weeks necessary to grow your own transplants. For example, cabbage, broccoli, and cauliflower are usually transplanted in late March to early April. It takes 8 weeks from seeding to transplant size. Plants should be seeded in early February. Information on how many weeks it takes to grow transplants is available in our January 10 newsletter at http://www.hfrr.ksu.edu/~doc3300.ashx. Below are some common
vegetables grown for transplants and a recommended date for seeding. Dates are Saturdays as this is when many homeowners have the most free time. The dates are not set in stone, and a week earlier or later will not ruin the plants. Also, you may want to seed a week or two earlier if you are in southern Kansas and possibly a week later if you are in northern Kansas. Keep notes on how well the transplants did so you can tweak the planting schedule. Your conditions may result in plants that need a bit more or a bit less time.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Seeding Date</th>
<th>Transplant Date</th>
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</thead>
<tbody>
<tr>
<td>Cabbage, Broccoli &amp; Cauliflower</td>
<td>February 11</td>
<td>April 7</td>
</tr>
<tr>
<td>Lettuce (if you grow transplants)</td>
<td>February 11</td>
<td>April 7</td>
</tr>
<tr>
<td>Peppers</td>
<td>March 24</td>
<td>May 19</td>
</tr>
<tr>
<td>Tomatoes (WU)</td>
<td>March 31</td>
<td>May 12</td>
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**Leaching Houseplants**

Everyone knows that someone stranded in the ocean should not drink the water. The salt content of that water will make a bad situation worse. What many people don’t realize is that this same principle can harm plants.

Fertilizers are salts. They must be salts in order for the plant roots to take them up. However, salt levels can build up over time and eventually may harm plant roots leading to scorched leaves and unhealthy plants. Though this can happen under field conditions, especially in low rainfall areas, it is particularly critical with houseplants.

Houseplants have a certain soil volume that doesn’t change until a plant is repotted. Salt build-up can be a crucial concern especially if plants are fertilized heavily. Leaching an overabundance of salts can be an important practice to insure the health of our houseplants.

Leaching is not a complicated or difficult process. It consists of adding enough water to wash out excess salts. How much water is enough? Add the amount of water that would equal twice the volume of the pot. This, of course, would need to be done outside or in a bathtub or sink. Water must be added slowly so that it doesn’t overflow the rim of the pot.

If salt has formed a crust on the surface of the soil, remove it but don’t take more than 1/4 inch of the underlying media. This may also be a good time to repot the plant. (WU)
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