FRUIT

Frost Tolerance of Apricots and Peaches

Growers of apricots and peaches often wonder at what temperature fruit buds are killed especially in years where we have an early spring. These two tree fruits bloom very early and are often caught by a late frost. The following will give you some guidelines but remember that the actual damage is going to be influenced by the weather before the temperature drops. An extended warm spell before the cold snap may result in more damage due to a loss in cold hardiness. The stages listed are for the fruit buds.

<table>
<thead>
<tr>
<th>Apricot</th>
<th>10% Kill (°F)</th>
<th>90% Kill (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First white</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>First Bloom</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td>Full Bloom</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>n the Shuck</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>Green Fruit</td>
<td>28</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Peach</th>
<th>10% Kill (°F)</th>
<th>90% Kill (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swollen bud</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Half-inch green</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Pink</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>Bloom</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>Petal fall</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>Fruit set</td>
<td>28</td>
<td>25</td>
</tr>
</tbody>
</table>

To check for low temperature injury to fruit buds or blossoms, use a sharp knife and cut them in half longitudinally (from top to bottom). If the tiny seed in the center is white to cream color no damage has been done. But if the seed in several buds or blossoms is dark brown or black, it has been killed. It is possible to give some protection to blossoms from freezing by covering the tree
with a bed spread, blanket or similar fabric. Old-fashioned Christmas lights distributed around the tree will help to give additional protection. The newer, smaller Christmas lights do not give off enough heat and are not recommended. Of course the practicality of this method of protection depends upon the size and number of trees.

Sprinkling the tree with water throughout the freezing period can also protect the blossoms. Sprinklers should be started before the temperature drops to freezing to be sure ice does not block the garden hose or water line. Continue until the temperature warms. With this protection method, there is the potential of creating an ice storm. If temperatures remain below freezing for several hours, ice will accumulate on the branches and limbs. The weight from the ice may cause branches and limbs to break causing severe, and possibly permanent, damage to the tree structure. Also, if water drainage from the soil is slow and the water displaces oxygen from the roots, damage to trees may result. (Ward Upham)

**VEGETABLES**

**Controlling Weeds in Home Garden Asparagus Beds**

The best time to control weeds in asparagus is early spring before the asparagus emerges. A light tilling (or hoeing) that is shallow enough to avoid the crowns will eliminate existing weeds. Many gardeners like to mix in organic matter during the same operation.

Herbicides can be used before asparagus emerges. Glyphosate (Roundup, Killzall) will kill weeds that are actively growing, and the preemergence herbicide trifluralin can be used to kill weed seeds as they germinate. Trifluralin is found in several products, but not all of them list asparagus on the label. Those that do have asparagus on the label include Miracle-Gro Weed Preventer Granules and Monterey Vegetable and Ornamental Weeder. Mulch can also be used to keep weeds from invading.

No herbicides can be used during harvest. The end of harvest presents another opportunity. Remove all fern and spears and apply Roundup to control virtually all of the weeds present. Past the harvest season and after regrowth of the asparagus, options are limited. Products that contain sethoxydim can be applied to asparagus to kill grassy weeds. Sethoxydim has no effect on broadleaves including asparagus. Two sethoxydim products available to homeowners and labeled for asparagus are Monterey Grass Getter and Hi-Yield Grass Killer. With broadleaves, the only option is to pull them and look forward to next year. (Ward Upham)

**Remove Fern and Fertilize Asparagus**

If you haven’t removed last year’s growth from asparagus plants, now is the time. Asparagus comes up around the first of April in Manhattan but will be earlier in southern Kansas and a bit later further north.
Also, asparagus benefits from a fertilizer application early spring. Fertilize according to a soil test or add 1 to 2 pounds of a 10-20-10 fertilizer per 20 feet of row before growth starts. If a soil test shows that only nitrogen is needed, apply 1 pound of a 16-0-0 product or ½ pound of a 30-4-5, 27-3-3 or similar fertilizer per 20 feet of row. Incorporate lightly with a tiller or rake in fertilizer before spears emerge. Fertilize again at the same rate after the last harvest. (Ward Upham)

**FLOWERS**

**Preventing Weeds in Flower Beds**

Often mulch does a good enough job in perennial flower beds to prevent weeds but sometimes the mulch needs a little help. In annual beds, judicious hoeing will keep weeds down until the foliage forms a canopy that prevents weed germination. However, a lack of time may have you considering an easier way than hoeing or pulling weeds that come through mulch. Preemergence herbicides can help though you should not expect 100% control.

Preemergence herbicides do not keep the weed seed from germinating but kill the young plant as it starts to grow. It is necessary to water these products in (1/4 inch of water) so that the young weed root will contact the herbicide. Be aware that most of these products are more effective on grassy weeds such as crabgrass rather than broadleaves such as dandelions or spurge.

These herbicides often have no effect on existing plants, so they must be applied before the weed seed germinates. Additionally, preventers do not last forever once applied to the soil. Microorganisms and natural processes begin to gradually break them down soon after they are applied. However, all should last long enough so that you get canopy cover before the herbicide wears off.

Read the label for information on when to apply the product. Also, be sure the ornamental plants within the bed area are on the label before purchasing the product. See below for products we can use.

- Dimension (dithopyr)
- Hi-Yield Turf & Ornamental Weed and Grass Stopper
- Bonide Crabgrass & Weed Preventer
- Treflan (trifluralin)
- Hi-Yield Herbicide Granules Weed and Grass Preventer
- Miracle Gro Garden Weed Preventer
- Preen Weed Preventer

(Ward Upham)
TURF

Managing Turf in Shade

Turfgrasses differ in their capacity to grow in shade. Among Kansas turfgrasses, tall fescue is the best adapted to shade though it isn’t all that good. Although the fine fescues (i.e., creeping red, chewings, hard and sheep) have better shade tolerance, they lack heat tolerance and typically decline during hot Kansas summers. The warm-season grasses have the poorest shade tolerance, although zoysia does better than Bermuda or buffalo. Where shade is too heavy for fescue, there are other courses of action. The most obvious is to either remove trees, or to prune limbs and thin the tree canopies. Grass will do better under openly spaced trees than under closely spaced trees. Pruned limbs and thinned canopies will allow more sunlight to directly reach the turfgrass. If possible, raise the mowing height in the shade to compensate for the more upright growth of the leaves, and to provide more leaf area for photosynthesis. The thin, weak turf in the shade may tempt you to fertilize more.

Remember the problem is lack of light, not lack of fertility. Too much nitrogen in the spring causes the plant to grow faster and may result in weak plants. The nitrogen rate for shaded grass should be cut back to at least half of that for grass in full sun. Late fall fertilization after tree leaves have fallen, on the other hand, is important for shaded cool-season turfgrasses and should be applied at a full rate. Irrigate infrequently but deeply. Light, frequent irrigation may encourage tree feeder-roots to stay near the surface, which increases competition between the trees and the turf. Restrict traffic in the shade.

Many times, the best choice for shaded areas is switch from a turfgrass to a more shade-tolerant plant. For example, English ivy and periwinkle (Vinca minor) are much more shade tolerant than any turfgrass adapted to our area. Another option is simply to mulch the area where turf doesn’t grow well. The trees will love the cool, moist soil and the absence of competition. (Ward Upham)

ORNAMENTALS

Brown Coloration on Junipers

Certain eastern redcedar and various other junipers are showing a brownish cast when viewed from a distance. This may be the male flowers. Male flowers are on the tips of the leaves and look somewhat like a cross between a miniature hand grenade and a pinecone. Shaking the branches on dry days will often result in a cloud of pollen being released.

Most junipers are dioecious, meaning they have both male and female plants. About half the junipers (the males) will have this coloration. The female flowers are much less obvious. If you have clients who are concerned about this brown coloration, have them check the plants to ensure the male
flowers are the cause. If they are, assure them that this is normal and will fade with time. (Ward Upham)

**MISCELLANEOUS**

**Adding Organic Matter in the Spring**

Organic matter is a good way to improve garden soil as it improves a heavy soil by bettering tilth, aeration and how quickly the soil absorbs water. However, organic matter added in the spring should be well decomposed and finely shredded/ground. Manures and compost should have a good earthy smell without a hint of ammonia. Add a 2-inch layer of organic matter to the surface of the soil and work the materials into the soil thoroughly. Be sure soils are dry enough to work before tilling as wet soils will produce clods.

To determine if a soil is too wet to work, grab a handful and squeeze. If water comes out, it is much too wet. Even if no water drips out, it still may not be dry enough to work. Push a finger into the soil you squeezed. If it crumbles, it is dry enough, but if your finger just leaves an indentation, more time is needed. Be sure to take your handfuls of soil from the depth you plan to work the soil because deeper soils may contain more moisture than the surface. (Ward Upham)

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