Fruits and Nuts

Planting Fruit Trees

David W. Lockwood, Professor, Plant and Soil Sciences

What to buy – Buy small, bare-root trees, since growth and survival, as well as time to significant fruiting, will be more favorable with small trees versus large trees.

Time to plant – Mid-February through March.

Site preparation – Soil test, lime and fertilize accordingly. Eliminate grasses and weeds from a 4- to 6-foot diameter circle at the tree site prior to planting.

How to plant:
1. Dig the hole slightly deeper and wider than needed. (If using an auger to dig the hole, score the sides and bottom of the hole to break the glaze that would restrict root growth).
2. Depth of planting – plant at the same depth as the tree was set in the nursery (note the differences in color and/or texture of the bark in the below ground versus the above ground parts). Leave the graft or bud union above ground, but not more than 2 inches above.
3. Root pruning – prior to planting, prune back dead or broken roots. Also prune long roots back to the same length as the rest of the roots.
4. Planting – set the tree in the hole and spread the roots so they are not curled or twisted, then put soil in the hole and work it around the roots. Tamp down the soil to eliminate air pockets, and fill the hole to the same height as surrounding ground. Tamp again, and refill the hole to ground level.
5. Do not use soil amendments such as peat moss, fertilizers or sawdust in the hole – use only the soil that was taken out of the hole (perhaps putting the topsoil in the bottom of the hole), plus any extra soil needed to complete filling the hole.
6. Water the tree immediately to establish good root-soil contact if the soil was dry at the time of planting.
7. While mulches may help to conserve water, they also harbor insects, diseases and rodents that can damage trees. If a mulch must be used, keep it at least 12 inches away from the tree trunk.
Pruning

At the time of planting, prune back the tops of trees to the following heights:

- Apple, pear, sweet cherry – 30 to 36 inches above ground.
- Peach, plum, tart cherry – 24 to 30 inches above ground.

If trees are shorter than the sizes listed above, cut out the upper 4 to 6 inches off the top. This will encourage development of a strong leader from which side branches will arise later.

For branched trees, remove all side limbs, as they frequently are undesirable. Cut limbs off within 1/4 inch of the trunk.

Make all cuts close to a bud (within 1/8 inch), as shown in Diagram 4. Cuts too close to a bud can damage the bud. Cuts too far from a bud leave a stub where diseases may become established. Cuts should be made at an angle to allow water to drain off.

Fertilization

After trees have been in the ground several weeks, they may be fertilized. Apply fertilizer in a band around the tree but not within 10 to 12 inches of the trunk (Diagram 5). Determining the type of fertilizer to use can be accomplished by referring to the soil test results. If phosphorus and potassium tested high to very high, use a nitrogen fertilizer such as ammonium nitrate (one-third pound per tree) or calcium nitrate (one-half pound per tree). Where phosphorus and potassium tested low to medium, use a balanced fertilizer such as 10-10-10 (one pound per tree) or 15-15-15 (two-thirds pound per tree). Fertilizer may be broadcast on the soil surface.

Pest Control

Although newly-planted trees do not need to be sprayed as frequently as fruiting trees, certain sprays are necessary. The following chart indicates sprays necessary for the different types of fruit trees.

Refer to Extension PB 1622, *Disease and Insect Control in Home Fruit Plantings*, for additional information regarding pest control in fruit trees.

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Peach</th>
<th>Nectarine</th>
<th>Plum</th>
<th>Cherry</th>
<th>Apple</th>
<th>Pear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaf curl</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Trunk Borers</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Oriental fruit</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>moth</td>
<td>✔ *</td>
<td>✔ *</td>
<td>✔ *</td>
<td>✔</td>
<td>✔</td>
<td>✔ *</td>
</tr>
<tr>
<td>Aphids</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Mites</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Cedar rust</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Scale</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

✔ = spray needed as a preventative measure

✔ * = spray needed only when pest is visible

---

The Agricultural Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, age, disability, religion or veteran status and is an Equal Opportunity Employer. COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS. The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture, and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914. Agricultural Extension Service Charles L. Norman, Dean