

Although trees vary in their tolerance for different soil conditions, most do best in well-drained soils. To test the drainage of the area where the tree is to be placed, dig a hole at least a foot deep and fill it with water. The next day, fill the hole again and see how long the water remains. If the water is absorbed within 12 hours, then drainage is adequate for planting.

If water remains in the hole for more than 12 hours, the soil probably has the consistency of clay. Mix the soil with sand or organic matter. Drainage can be improved even more by digging the hole where you'll plant the tree a foot deeper than required and filling in this extra space with stones, crushed rock, or gravel.

Do not add fertilizer to the soil replaced in the hole, and do not add peat moss, vermiculite, sand, or pine bark to soils that pass the drainage test.

Medium- to slow-growing trees are often least vulnerable to insects, disease, cold, and storm damage. However, a way to stimulate growth of a problem-resistant tree is to start by digging a big hole--the bigger the better. The poorer the native soil, the bigger the hole should be for faster growth. Break up clods and use the same soil to replace around the tree roots or rootball.

In general, dig the hole at least a foot deeper than the height of the roots and twice as wide as the root span or rootball. If planting on or near the lawn, spread a tarp or plastic over the grass and pile the soil onto the covering. Loosen several inches of soil at the bottom of the hole to facilitate drainage.

For bare-root plants, build a loose mound of soil at least six inches high for the roots to rest on. Make sure the hole is wide enough for the roots to spread out naturally and deep enough so the tree, when planted, is slightly higher than it was before being dug (you'll see a soil stain on the trunk). Press the soil firmly around the roots until the hole is about three-fourths full. Pack lightly to make sure there are no air cavities. Add a bucket or two of water. The tree will settle slightly.

After the water has been absorbed, add soil to fill the hole, but do not do more tamping. Leave a depression around the trunk to catch water. Water the tree deeply. It may take five to ten gallons.

The process is somewhat faster with a balled-and-burlapped tree. Set the ball in a hole at least one foot larger in diameter and six inches deeper than the size of the rootball. Cut the binding around the trunk but leave the burlap in place. It will rot. If the tree rootball is wrapped in a sheet of plastic, gently cut the covering away.

If the tree has been growing in a container, remove it and cut off any outer roots that circle the soil mass.

Fill the hole and water as you would for bare-root trees.

