

GROWING FRUIT TREES

Seeing the beautiful pictures and reading delicious descriptions in gardening catalogs, or all the new and promising trees at the local nurseries, many times gardeners will purchase and plant a few trees with good intentions. When they discover the discipline required for growing high quality fruit, the project is soon abandoned to become a deer feeding station. Before embarking on your journey to grow your own apples, peaches, pears and cherries, or the many other available fruits, here are a few things to consider.

The first thing that needs to be done is to assess your property to determine if it is suitable for growing fruit trees. The soils must be well-drained (no standing water at any time of the year), have a slightly acidic pH (this can be determined by a soil test), at least eight or more hours of direct or full sunlight, a source of water, and enough space for the trees to grow, which will depend on their mature size.

The first recommendation is to select dwarf trees as much as possible. The ultimate size of the tree is determined by the rootstock (almost all fruit trees are grafted) and to a lesser extent the scion or cultivar that is grafted onto the rootstock. Smaller trees are easier to prune. The crop will be closer to the ground which decreases the need for ladders. They are easier to spray and require significantly less space. Trees are sold as standard, semi-dwarf and dwarf.

If you hope to produce attractive fruit, the trees will need to be pruned annually and sprayed at the proper time for various pests during the growing season. This will take dedication, especially during the hot days of summer. Not pruning properly and missing sprays, especially if you are trying to grow fruit organically, will result in less desirable and possibly unusable fruit.

In Michigan, the harvest season will begin in July for cherries and ends in late October for apples. Depending on what is grown, picking and processing by freezing and canning will take up quite a bit of your time. You will probably have more than you can use anyway. Unless you are growing larger quantities, you may not necessarily save a lot of money, but at least you can have greater control over what has been applied or added to your food during the growing and preservation processes.

When to plant

Fruit trees may be planted in early spring, as soon as the frost in the ground has thawed. If the soil is very waterlogged, it is best to wait until it drains. Wait until the soil no longer comes up in sticky clumps that stick to the shovel. Fall-planted trees will not have any advantage in growth over trees planted the following spring. Fall-planted trees

may also be damaged in the winter months by rodents, deer or severe low temperatures. Bare-root nursery stock is usually less expensive and will establish and grow well, if planted in April or early May. If you must hold the trees a short time before planting, store them in a cool, shady place where they will be out of the sun and wind. Pack the roots in moist sawdust or sphagnum moss to prevent them from drying out. Potted or ball-and-burlap trees are preferable for planting dates in late May or early June.

Digging the Hole

Select a site with direct sunlight. Allow enough room between the planting site and buildings, trees, power lines or other obstructions for the tree to fill its space when full grown. Tree size varies with different species and the rootstock that the tree is on. The nursery where you bought the tree can advise you as to how much space the tree will need when full grown.

Fruit trees are tolerant of a fairly wide range of soil types, but the soil should be well-drained. Start by cutting through the sod in a circle that is about a foot wider than the diameter of the root ball. Roll the sod out of the hole and discard it or use it to cover a place where you want grass. Then dig a hole wide enough to allow the root system to fit without roots wrapping around the edge of the hole in a circle.

Dig the hole deep enough to allow the tree to be planted with the graft union two to three inches above ground (see image on next page). This planting depth is critical for trees on dwarf or semi-dwarf rootstocks. If the tree is planted too deep and the graft union is below the soil line, the scion variety will form roots and the tree will become a standard sized tree.

Filling the Hole

What should you put in the planting hole? Only roots, clean soil and water! Never put any fertilizer in the planting hole. If the soil is poor, you can mix in peat moss or thoroughly conditioned compost before filling the hole. A ratio of up to 50/50 peat to soil may be beneficial. Trim off any broken or damaged roots before planting. Place the tree in the hole, and after making sure that the depth is correct, fill the hole with clean topsoil. It is helpful at this stage to making sure that the depth is correct, fill the hole with clean

topsoil. Have someone hold the tree straight while the hole is being filled. Pack the soil in the hole by gently stamping it with your feet. After the hole is filled, water the tree with two to five gallons of water, poured slowly enough so that the water doesn't run off.

Care and Pruning

All newly planted fruit trees will benefit from being staked. This will result in a straighter tree with more growth. Staking is especially important for trees planted on a wind-blown site and for dwarf fruit trees. Consider a strong permanent stake for dwarf fruit trees.

After the tree has started to grow (in about two weeks) you can apply a nitrogen fertilizer. Apply one ounce of actual nitrogen in a 12-inch circle around the base of the tree, and make sure the tree is well-watered after fertilizing. All nitrogen fertilizer should be applied before mid-June. Late application nitrogen can lead to late-season growth, and the tree may not harden off in time to withstand winter.

Watering the new tree is important to help get it started, especially in the first few weeks after planting. A good rule is to apply five gallons of water around the base of the tree every week of the growing season in which there is less than an inch of rainfall.

Apples and pears are usually trained as central leader or cone-shaped trees. If the tree is an un-branched "whip," prune the stem to a height of 30 to 36 inches above the soil line. This will stimulate the buds just below the cut to grow. The top bud will grow vertically and form the leader, or trunk of the tree. The next one or two buds can be rubbed off with the fingers to prevent them from competing with the leader. The buds that grow out below the top two or three should be retained to form the scaffold branches. Remove branches that grow out below a height of 18 inches from the ground. Bend the branches that remain to an angle of 45 to 65 degrees from vertical using clothespins, toothpicks or small weights. This keeps these branches from growing so strongly that they compete with the leader, and it stimulates flower production.

Weed Control

Weeds compete with young trees for water and nutrients. A weed-free zone should be established at the base of the tree that extends out to form a circle with a diameter of two to three feet. Mulch or cultivation may be used to prevent weeds.

The **Master Gardener Hotline** is open from April to October, Monday through Friday. Lines are available 9:00 am to noon and 1:00 pm to 4:00 pm at 888-678-3464

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