

Planting Requirements for Semi-Dwarf Apple Trees

Thanks to modern grafting techniques, apple trees come in three sizes: standard, semi-dwarf and dwarf. Semi-dwarf trees grow between 10 and 16 feet tall and bear fruit within four to five years. Semi-dwarf trees are a bit hardier than dwarf trees, but are easier to care for and harvest than standard trees. Their planting requirements are similar to other types of apple trees.

Site Location

Apple trees can be grown in U.S. Department of Agriculture plant hardiness zones 3 to 9, depending on the specific cultivar. Like all apple trees, semi-dwarf trees need full sun to produce abundant, quality fruit. They also need protection from high winds. An open area in a cultivated lawn is ideal, but don't plant them near other trees or shrubs. These other plantings compete for nutrients, water and sunlight. Semi-dwarf trees need less space than standard apples, but more space than dwarfs. How much space your semi-dwarf apple tree needs depends on the variety and the root stock, but in general, space semi-dwarf apple trees 14 to 20 feet apart.

Soil Conditions

Semi-dwarf apple trees need rich, slightly moist, but well-draining soil. Avoid boggy, low-lying areas where water pools. Don't fertilize the first year after planting, but plan to fertilize annually in subsequent years. In a cultivated, fertilized lawn, the trees may not need additional fertilizer beyond a shovelful of manure every spring. In less fertile soils, spread 2 to 6 pounds of 10-10-10 fertilizer around the base of the tree.

Variety Selection

Most semi-dwarf apple trees aren't self-pollinating. You'll need to plant at least two trees to produce fruit. Select varieties that bloom at the same time and are known as good pollinators. Crab apple trees are also an excellent choice. Avoid "Baldwin," "Gravenstein," "Winesap" and "Mutsu," which do not pollinate well.

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Root Stock

When choosing a semi-dwarf apple tree, choose one with a rootstock suitable for your growing conditions. Most nurseries carry M.7, which doesn't require staking, but is slow to bear fruit. Geneva 30 is suitable for cold climates and bears fruit earlier, but it needs staking because of its small root system. MM.106 doesn't need staking, but the trees grow larger so you must allow more space.

Planting

After you've carefully considered site location, soil condition, pollinators and root stock, the actual tree planting is fairly straightforward. Dig a hole as deep and twice as wide as the root ball. Plant the tree so the graft sits 1 to 2 inches above the soil. The graft is the area at the base of the tree where the scion was grafted to the root stock. The bark may be a slightly different color or you'll see a crook or knob. Some nurseries paint this area. If the graft is planted beneath the soil or very close to it, the rootstock will begin to form a tree. This tree grows very quickly and won't produce fruit, or will produce poor quality fruit. Fill in the hole with soil and firm down with your foot. Keep the soil evenly moist the first summer.