UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION

Dwarf Apple Trees for Home Gardens

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The use of dwarf apple trees for home plantings is highly recommended. Dwarf trees have many significant advantages over standard or seedling trees including:

(1) Reduced tree size which reduces the difficulty involved in pruning, spraying, and harvesting fruit

(2) They require less space in the garden

(3) They usually bear fruit earlier than their standard sized counter parts, often in just 3-4 years from planting.

What is a Dwarf Apple Tree

Dwarf apple trees are produced by grafting the desired variety (such as McIntosh) onto a specific rootstock that has been selected on the basis of its dwarfing character. The most common dwarfing rootstock recommended and used in New Hampshire is M.7 although others such as M.106, M.26, and M.9 are also used. The degree of dwarfing varies among these rootstocks and a proper spacing guide is provided in Table 1.

APPLE TREE SPACING IN THE HOME GARDEN

Rootstock	Tree Spacing	
	Between Trees	Between Rows
Full dwarf (M.9)	8 feet	12 feet
Semi-dwarf		
M.26	10 feet	16 feet
M.7, M.106	14 feet	22 feet

When a semidwarf tree is desired, M.7 should be used for all varieties except Red Delicious. For Delicious, use M.106 or M.26.

Purchasing Nursery Stock

Purchase trees (dormant trees preferred) from a reputable garden dealer or nursery. Request the specific rootstock you need for your situation. For example, if garden space is limited, you may want to purchase dwarf trees with M.9 rootstock (see Table 1). If, however, space is not a real concern, semidwarf trees with a M.7 rootstock would be more appropriate.

Tree quality rather than price should be the major consideration when purchasing trees. One-year old trees, 4 to 6 feet in height and at least 5/8 inches in diameter usually grow better than smaller grades.

When ordering trees, plan for the pollination needs of the varieties you choose. Most apple varieties are self-unfruitful and require pollen from a different variety (cross-pollination) to set a crop so at least two varieties are needed. Several varieties will not serve as pollinators. These include Mutsu, Gravenstein, Jonagold, Spigold, Roxbury Russet, Rhode Island Greening, and Baldwin. A separate listing of tree fruit varieties recommended for New Hampshire is available from your County Extension Office.

Planting

Apple trees will do reasonably well in a wide range of soil types except that they will not tolerate poorly drained soils with a high water table.

Proper soil preparation is an important first step. Soil should be tested and lime applied as recommended to raise the pH to 6.5. Complete eradication of perennial weed species, particularly quackgrass, is also necessary to insure success. Fruit trees require full sunlight and should not be planted in the shade of a building or large tree.

All fruit trees including apple should be planted in very early spring--as soon as the soil is dry enough to work (mid-April - May). If the planting site is not ready when the trees arrive from the nursery, unwrap the trees and "heel-in" the roots in moist soil in a shady spot. Trees should be planted while still dormant.

Planting The Tree

(1) Dig a hole enough to allow the roots to be spread out completely. (This will require a hole that is usually much wider than it is deep).

(2) Back-fill the planting the plant hole with top-soil or a mixture of top-soil and compost or peat moss. Do not use sod to fill the hole.

(3) Plant the tree so the graft union is 1 to 2 inches above the soil surface. The graft union is the point where the variety was grafted onto the rootstock. A small crook in the trunk is usually present at that point.

(4) Firmly pack the soil around the roots. Back-fill the hole 2/3 full, soak in 2 to 3 gallons of water, and finish backfilling. Do not leave a depression or water catching basin around the tree.

(5) Remove any tags or labels attached to the trees as they will gridle the trunks after growth begins.

(6) As a rule, all desirable branches on the tree at planting should be left unpruned. An exception to the rule would be when a tree has one branch larger than other branches on the tree. This should be removed because it may cause one-sided development on the tree. Newly planted trees should be headed to a height of 36 inches or 14 to 18 inches above the highest branch. More detailed information on pruning and training young apple trees is available from your County Extension Office.

(7) Trees on M.9 and M.26 should be staked soon after planting as these rootstocks require support to develop properly.

(8) No fertilizer should be added to the planting hole. Trees can be fertilized after rain has thoroughly settled the soil around the roots. Apply 1/2 pound of 10-10-10 by spreading it lightly in a wide circle 16-20 inches from the tree trunk.