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Nassau County

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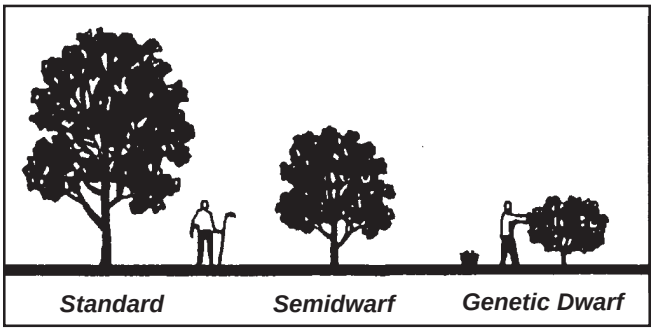
Dwarf Fruit Trees

Dwarf fruit trees were developed in the nursery to meet a demand for trees requiring less growing space than those of standard size.

As compared to standard fruit trees, dwarfs have several advantages. They utilize sunshine better and produce better fruit. Dwarf trees are easier to spray, prune and harvest, and they begin to produce fruit earlier than semi-dwarf and standard size trees. They require less space per tree than standard trees and can be pruned and trained as ornamentals in landscape plantings.

A dwarf fruit tree is expected to develop no taller than 6 to 8 feet. Semi-dwarf trees grow 10 to 12 feet and standard trees may grow as high as 20 feet.

When purchased, dwarf fruit trees may have only a single stem or two to three branches along the main stem.



Planting and Training

They should be planted in early spring in areas where winters are severe or in late fall or early spring in areas where the climate is milder. Full dwarf apple trees should be planted 10 to 12 feet apart each way, or 6 to 8 feet apart in rows with 15 feet between them. Place semi-dwarf apple trees about 20 feet apart each way. Dwarf trees should be placed 15 to 18 feet apart. Trees must be planted in soils that are well drained. Dwarf fruit trees soon die in poorly drained soils.

Plant the trees at the depth at which they stood in the nursery. You can see the change of color in the bark near the root below the graft union. Usually the color of the bark changes at the soil line. Be sure the graft union is above the ground when you plant the tree.

At the time of planting, place a stake in the ground about 6 inches from the stem. The stake should extend 5 feet above the ground. Pack topsoil around the roots and water the plant well.

Pruning and Training

When you set out dwarfs, prune them back to keep the top in balance with the roots. A loss of roots always occurs when transplanting. If the trees are single stems 3 to 4 feet high, prune them back to about 30 inches. Generally, no further pruning is needed during the first year. At the beginning of the second year of growth, select four or five well-spaced branches you want to keep on each tree and remove the rest. Trees that are to be grown as natural bushes need no further pruning except to thin out branches.

If you are training a tree on a wall or trellis, fasten the branches to wires on the wall during the first year. Remove new branches that form and grow upright; cut them to short stubs. This will encourage spur-type growth.

Fertilizing

Dwarf fruit trees require a well-limed soil. Liming can be done at the time of planting. Do not apply fertilizer in the first year of planting. The need for fertilizer in subsequent years depends on the soil and the cultural practice. It is important to obtain good annual growth with a dark green leaf surface. The liberal use of stable manure, when available, generally gives excellent results. When manure is not available, commercial fertilizers can be used. Use a general purpose balanced fertilizer such as 10-10-10 or 5-10-10. This should be applied in late November, late February or early March.

Mulching

Mulching is an excellent practice for growing dwarf trees. Mulch provides a better uptake of nutrients, ensures a more even supply of moisture and prevents the overheating of soil around the roots. Keep mulch away from the trunk - this will discourage mice from nesting near the tree. Sharp bluestone chips can be put around the trunk if they are available. This keeps rodents away from the trunk and prevents them from damaging the bark during the winter.

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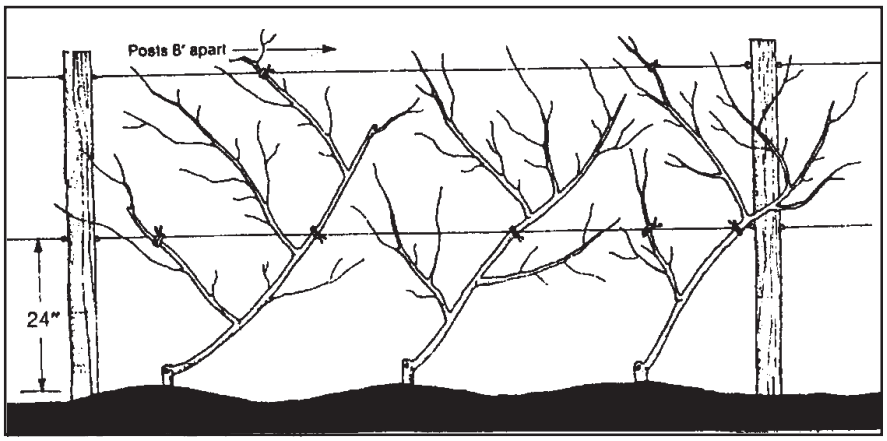
Fruit Thinning

Thin out excess fruits by picking off the small ones. An excess is anything more than one fruit for each 6 to 8 inches along a branch. Thin within 20 days after trees start to bloom. If the fruit is not thinned, dwarfs may set more fruit than they can carry and if the trees bear excess fruit they may not bloom the following year.



Diseases and Insects

Success in growing fruit depends on effective control of insects and diseases. This is based on recognition of common diseases and insects, use of IPM, selecting an effective pesticide, proper timing of the sprays and thorough coverage of the fruit and foliage.

Diseases

Apple Scab:

This is one of the most common diseases of apple and is easily recognized by olive green, velvety spots on the fruit and foliage. Severely infected leaves may be dwarfed, cupped or curled and may drop prematurely.

In autumn or as leaves or fruit drop in summer, rake and dispose of all fallen or diseased leaves and fruit. Prune in early spring to thin the trees, which allows air to circulate and fruit and leaves to dry quickly after rains. Plant resistant varieties (Redfree, Prima, Liberty, Freedom, Jonafree, Macfree, Sir Prize, Golrush).
(see note A.) *(see Home Grounds Fact Sheet E-2-10)*

Brown Rot:

This disease attacks peaches, plums, cherries and nectarines. The fungus overwinters in infected twigs or fruits that have remained on the tree or dropped to the ground. Removing and destroying "mummified" fruits on the tree or ground are important in control.
(see note A.) *(see Home Grounds Fact Sheet B-1-16)*

Cedar Apple Rust:

This rust disease is caused by fungi that complete part of their life cycle on the red cedar and part on apple. Cedar-apple rust produces bright orange-colored spots on the leaves and fruit. Infections of these fungi occur during rainy periods in early spring. To prevent, eliminate nearby red cedar and common junipers to whatever extent practicable.
(see note A.) *(see Home Grounds Fact Sheet E-2-9)*

Peach Leaf Curl:

This is caused by a fungus that overwinters as tiny spores on the twigs and bud scales of the peach tree. Infected leaves become thickened and curled or crinkled and have a reddish or yellowish color. Diseased leaves drop off later.
(see note A.) *(see Home Grounds Fact Sheet B-1-14)*

Powdery Mildew:

This disease is caused by a fungus that overwinters in the dormant buds. Leaves are covered by a white fungus growth. Prune out infected terminals as they develop. Prune in early spring to thin the trees and allow air to circulate and fruit and leaves to dry quickly after rains.
(see note A.) *(see Home Grounds Fact Sheet B-1-13)*

Insects

Aphids:

Aphids are sucking insects that cause leaves to become rolled and twisted. As the aphids suck, they secrete a honeydew in which black sooty mold grows. Apply multipurpose spray mixture, or insecticidal soap at pink if 1 colony is found per 10 terminals. After bloom, treat when 30 percent of terminals are infested. Use insecticidal soap as needed. (see note A.)

Apple Maggot:

This is the most destructive of all insects that attack apples and plums. The larvae bore into the flesh of the fruit, often leaving brownish trails behind them. The adults emerge from the soil from mid-June through mid-August. The female then deposits her eggs under the skin of the apple. Upon hatching, the larvae bore through the fruit. To control, pick up and destroy fallen leaves and fruit.
(see note A.) *(see Home Grounds Fact Sheet E-2-10)*

Codling Moth:

This is the most common worm found in apples. Control measures are directed against the adults and the larvae that hatch from eggs deposited on the fruit and foliage. (see note A.) Phermone traps can be used as monitoring tools.

Plum Curculio:
This is a small, short beetle about 1/4" long. The insect emerges from overwintering sites in hedgerows or other sheltered areas in the spring when newly formed fruit is exposed. Some feeding damage may occur by the adult, but more serious damage occurs when the female deposits her eggs in the fruit. A small, crescent-shaped scar is made at the time of egg laying. The larvae then bore toward the center of the fruit and feed there.

Infested fruits drop to the ground during June. The larvae then enter the soil, pupate and emerge as adults in August. Pick up all drops in early June. Jarring, a mechanical method of control, is sometimes helpful. Results with this method vary. If a tree is suddenly jarred with a padded mallet, the plum curculio beetles loosen their hold, contract their legs, and fall to the ground. Jarring should be done in the early morning. Place sheets on the ground to collect the beetles and then destroy them. Note: Young trees can be severely damaged if hit too hard.
(see note A.) *(see Home Grounds Fact Sheet B-1-14)*

note A. Chemical pesticides are available. If you choose to use chemical pesticides, contact your local Cooperative Extension office for specific recommendations.

Integrated Pest Management (IPM) Considerations

IPM is a common sense approach to pest control and plant care. It employs a number of measures to prevent, control or reduce plant problems. These include using resistant plant varieties, proper plant selection and placement, good aftercare and biological and/or mechanical controls. As a last resort, after all other remedies have been explored, a pesticide* that is least toxic to people and natural predators, can be considered. Prior to using any pesticides, plants should always be monitored for the degree of infestation and a sensible control measure considered.

** A pesticide is a substance that kills, or attempts to kill, a particular pest, e.g.* ***insect****icide,* ***fung****icide,* ***herb****icide, etc.*

"This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are still possible. Some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension specialist or your regional DEC office (631) 444-0340. Read the label before applying any pesticide. Cornell Cooperative Extension and its employees assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsement of products is made or implied."