

Apples

The cultivation of apples began in the Roman times and continues today with over 1,000 varieties. The variety, planting site and maintenance of the tree should all be reviewed before purchasing. The following are hints for successful apple growing.

SELECTION

Characteristics to consider when selecting an apple tree: pollination compatibility, taste, and storage capability. Ask a **GARDENWORKS™** nursery staff member for details regarding suitable cultivars for your needs, including pollination.

POLLINATION

Most apples with the exception of a few, are incapable of setting fruit with their own pollen and thus it is necessary to have a pollination partner nearby (another variety which flowers at approximately the same time, enabling cross-pollination to take place). Some of the commonly available varieties are listed in the boxes below. Refer to our in-store pollination chart for a complete listing of compatible partners. If you are planting within an area where apple trees are prevalent, you will probably not need to plant a pollination partner. If space is limited for growing compatible trees, you may decide on a multi-variety tree, where 3 to 4 suitable apple types are grafted onto one tree.

Early season apples can pollinate mid-season apples. Mid-season apples can pollinate late-season apples. Late season apples will not pollinate early apples and vice-versa.

APROXIMATE RIPENING SEASON

Early-season	Mid-season	Late-season
Akane	Bramley's Seeding	Belle de Boskoop Cox's
Chehalis	Fuji	Orange Pippin
Discovery	Gala	Crispin (Mutsu)
Gravenstien	Golden Russet	Golden Delicious
Lodi	Golden Sentinel	Grannysmith
Summer Red	McIntosh	Jonafree
Tideman's Red	Red Delicious	Jonagold
Transparent	Royal Gala	King
Wealthy	Spartan	Liberty
Yellow Transparent	Spurmac Summerland Mac	Melrose
	Wealthy	Newton
		Northern Spy
		Red Roma
		Red Sentinel
		Winesap
		Winter Banana

ROOT STOCKS

Many fruit trees are grafted. The benefits of both the top stock and the root stock are present in the grafted tree. Most root stocks are chosen based on their dwarfing capability. Without this dwarfing root stock many apple trees would soon become too large to manage.

A dwarf apple tree is grafted onto M9 or M27 rootstock, and will grow to about 30% of the size of the standard tree, or about 3m to 4m (9' to 12').

A semi-dwarf is grafted onto M7 or M26 rootstock, and will grow to about 5m to 7m (15' to 20').

LOCATION

Plant apple trees in an area where they will get at least 6 hours of bright sunlight on good rich soil. A slope is usually ideal for it allows good air movement which can prevent disease problems. Sites that are subject to late spring frosts, flooding, or seepage water should be avoided.

For gardens in the northern areas, plant mid or late blooming varieties such as Granny Smith, Red Rome, and Golden Delicious to avoid flower bud damage from late frost.

Planting distance should be 5.4m to 6m (18' to 20') apart for most apple trees. Exceptions to this planting distance are those that are not on semi-dwarfing rooting stock.

PLANTING

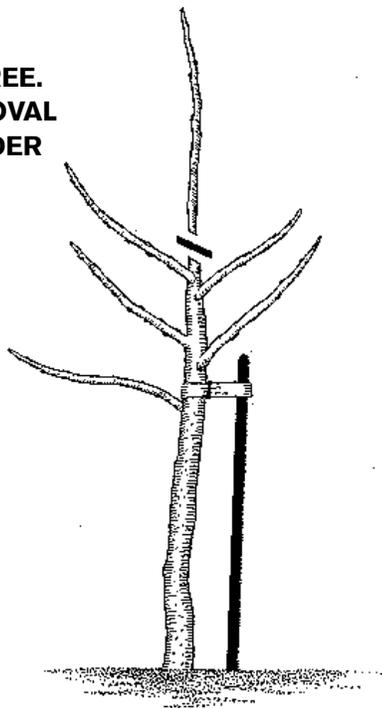
Apples may be planted in the fall or early spring. Fall is considered the best time to plant, and spring the second. Availability is generally better during spring. Be sure to pick up our "Planting Trees and Shrubs" information sheet for complete instructions on planting. The graft union on apple trees should remain 5cm to 7cm (2" to 3") above the soil. Once planted, be sure to keep the new tree well watered and delay all fertilizing until next spring.

PRUNING

For a one year tree without any lateral branches, cut back the leader (predominant branch) by one-half and side shoots to 2.5cm (1") or less (see fig. A). For older trees, remove any branches that have been damaged or are diseased, and any that are cross-ing over. Shorten the leader by one-third and the side shoots to between 2 and 6 buds - depending on variety.

For maintenance, all apple trees should be pruned during January or February. Branch thinning can be done during the summer months. Prune to encourage the tree to form a vase shape. Branches that tend to grow inwards, towards the trunk should be removed. Refer to our "Pruning Know-how" information sheet for more information.

**1 YEAR-OLD TREE.
SHOWING REMOVAL
POINT OF LEADER**



FERTILIZING

The young apple tree should be growing at a rate of 15cm to 35cm (6" to 14") per year. To encourage this growth, apply 10cm to 15cm (4" to 6") of well-rotted compost or mushroom manure annually as a mulch around the tree. Feed trees with a fruit tree fertilizer such as **GARDENWORKS™** 4-20-20 Fruit Tree and Berry Food. Avoid excess nitrogen for it can aggravate insect problems.

APPLE PESTS AND DISEASES

Quick and accurate identification of problems are key to successful apple growing. Sometimes a specific problem can be difficult to identify, so please visit one of our stores with a leaf sample for a thorough analysis.

HARVESTING AND STORING

Depending on variety, apples are ready to harvest from July into September. Some apples can even tolerate a little frost without damaging the eating quality (though frost will shorten storage life). Apples are ready to be picked when the fruit stem easily gives when you twist the apple. Harvest apples with stems over a period of time and do not try to get all of the fruit in one day. Consume bruised or damaged fruits first and keep the good ones for storage. The general rule of storage capability of apples: late fruiting types may be stored 1 to 6 months depending upon variety, mid-season types are limited to 2 to 3 weeks, and early varieties should be eaten immediately. Store apples in a cool (0°C to 2°C) and humid (80-90%) place. Each apple should be wrapped in newspaper and placed on trays that allow good ventilation.