

# APPLE ROOTSTOCKS

Apple trees are grafted to roots called ‘rootstocks’ that determine the eventual height of the tree. Rootstocks reduce the size of the tree by a percentage of the standard size, producing semi-dwarf and dwarf trees. For example, an M26 rootstock will reduce a tree to 45% (8-14’) of the standard size. Height is also influenced by the individual variety’s growth habit. A ‘Gravenstein’ apple may be 10-11 feet tall on the M26 rootstock, where as a ‘Golden Russet’ apple will be around 8-9 feet tall because it is a less vigorous variety.

Rootstock	Standard	Semi-dwf M106	Semi-dwf M7	Dwarf M26	Miniature M27
<b>Height</b>	20-30 ft.	14-18 ft. 65% of std.	11-18 ft. 55-70% of std.	8-14 ft. 45% of std	4-6 ft.
<b>Soil</b>	Adapts well	Well drained	Well drained	Well drained	Well drained
<b>Hardiness</b>	Zone 4	Zone 5	Zone 4	Zone 4	Zone 6
<b>Disease Problems</b>		Collar rot	Collar rot	Collar rot	Resistant to Fireblight
<b>Anchorage</b>	Excellent	Good	Good-fair	Fair-stake	Poor-stake

If ‘EMLA’ appears before a rootstock number, it indicates that the rootstock has been heat treated to remove viruses, and may result in a slightly larger tree. This does not imply that rootstocks without EMLA will have excess problems.

Disease problems in rootstock can be greatly reduced by adding compost at the time of planting to increase air circulation in the soil.