

# BARE ROOT ROOTSTOCK GUIDE

## APPLE ROOTSTOCKS

### Domestic Apple Seedling

Most rugged rootstock for apples. Vigorous, deep-rooted, tolerates wet, dry or poor soil. Cold-hardy. Unpruned tree height of standard varieties 18-30 ft. Trees on apple seedling may be held to any desired height by summer pruning.

### M-111

Excellent all-around rootstock for apples. Tolerates wet, dry or poor soil. Resists woolly apple aphids and collar rot. Induces bearing at young age. Unpruned tree height 80-90% of standard, or about 15-25 ft. Trees on M-111 may be held to any desired height by summer pruning.

**MM111 (Semidwarf)** Produces a tree 70-80% of standard size. Growth tends to be upright with wide crotch angles. Well anchored, resistant to drought and high soil temperatures. Excellent semi dwarf rootstock for heavy soils. Resistant to woolly aphids. Disadvantage is burr knotting. Bears fruit in 2 to 4 years and grows to 10 to 16 ft depending on variety. Summer prune to 8ft. if smaller tree is desired.

### M-7

For apples. Unpruned tree height 2/3 of standard, or about 12-20 ft. Induces early and heavy bearing, resists fire blight and powdery mildew. Moderately resistant to collar rot. Good anchorage. Very winter hardy, widely adapted. Trees on M-7 may be held to any desired height by summer pruning.

### Geneva® 935

A Cornell University introduction, unpruned height is 40%-50% of standard, or about 8-10 ft. Very cold hardy and very fire blight resistant. A precocious bearer of large fruit, this rootstock resists crown and root rots while suckering very little.

### Geneva® 969

Developed in 1976 by Cornell University. Well-anchored tree, 50% of standard. High resistance to woolly apple aphids and fire blight. Medium resistance to crown and root rots. Few suckers

and burr knots. Precocious and productive. Provide adequate drainage.

## CHERRY ROOTSTOCKS

### Mahaleb

The most winter hardy of the cherry rootstocks. Induces bearing at young age. Resists crown gall, bacterial canker, and some nematodes. Not tolerant of wet soils. Standard varieties slightly dwarfed, to about 85% of their height on Mazzard, or about 25-35 ft. if not pruned. Trees on Mahaleb may be held to any desired height by summer pruning.

### Maxma® 14

Maxma® 14 (brokforest cv.) is a dwarfing rootstock for sweet cherries; trees are dwarfed to about 2/3 of standard. Less dwarfing expected in fertile loamy soils. Induces early heavy bearing; crop management may be needed for productive varieties in early years. Good tolerance to wet soils, also performs well in calcareous soils. Resistant to bacterial canker and nematodes. Well anchored, very little suckering. Trees may be held to any desired height by summer pruning.

### Mazzard

Cherries on Mazzard are vigorous and more tolerant of wet soils than Mahaleb (but good drainage is still essential). Resistant to root-knot nematodes and oak root fungus. Unpruned tree height of standard varieties 30-40 ft. Trees may be held to any desired height by summer pruning.

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## PEAR ROOTSTOCKS

### **OHxF 333**

European and Asian pears on OHxF 333 are dwarfed to about 2/3 the size of standard, or about 12-18 ft. if not pruned. Widely adapted, disease-resistant. Trees on OHxF 333 may be held to any desired height by summer pruning.

### **Calleryana**

Used for Asian and flowering pears, especially in warm winter/hot summer climates. Sandy or heavy soils. Asian pears on Calleryana are comparatively small, 15-20 ft. if unpruned. Heavy bearing at young age. Trees may be held to any desired height by summer pruning.

## PEACH, PLUM, & HYBRID ROOTSTOCKS

### **Nemaguard Peach Rootstock**

For nectarines, peaches, apricots, plums, almonds. Vigorous, resistant to root-knot nematode - an excellent rootstock for well-drained soils. In slower-draining soils, plant on mound or berm. Unpruned tree height of standard varieties 15-25 ft. Trees on Nemaguard may be held to any desired height by summer pruning.

### **Lovell Peach Rootstock**

For nectarines, peaches, apricots, plums and almonds. Vigorous, more tolerant of wet soils than Nemaguard, also more cold hardy. Susceptible to nematodes in sandy soils. Unpruned tree height of standard varieties 15-25

ft. Trees on Lovell may be held to any desired height by summer pruning.

### **Marianna 26-24 Plum Rootstock**

For apricots, plums and most almonds. Shallow root system, tolerant of wet soils. Resists oak root fungus and root-knot nematodes. Mature trees of standard varieties comparatively small, 15-20 ft. if unpruned. Trees on Marianna may be held to any desired height by summer pruning.

### **Myrobalan 29C Plum Rootstock**

Shallow but vigorous root system tolerates wet soils, is immune to root-knot nematodes, and has some resistance to oak root fungus. Widely adapted, excellent all-around rootstock for almonds, apricots and plums. Unpruned tree height of standard varieties is 15-25 ft. Trees on Myro 29C may be held to any desired height by summer pruning.

### **Citation Hybrid Rootstock**

Dwarfs peaches and nectarines to 8-14 ft., apricots and plums to 12-18 ft. Very tolerant of wet soil, not drought tolerant (induces early dormancy in dry soil). Very winter hardy. Resists root-knot nematodes. Induces heavy bearing at young age. Trees on Citation may be held to any desired height by summer pruning.

### **Viking™ Hybrid Rootstock**

Vigorous, well-anchored, precocious, productive tree, fruit size increased. Highly resistant to root-knot nematode, tolerant of ring nematode and bacterial canker, more tolerant of high pH/saline than peach rootstocks. Shows tolerance of wet soil conditions. For almonds, apricots, nectarines, peaches, plums. (Zaiger)