

Regardless of rootstock... almost all fruit trees are too big for a typical backyard orchard.

The easiest, most effective way to keep fruit trees at manageable size (about eight feet high) is by summer pruning.

	Rootstock	Advantages	Disadvantages
Apples	Domestic Apple	Most rugged rootstock for apples. Vigorous, deep-rooted, cold-hardy. Tolerates wet soil, dry soil, poor soil. <u>Unpruned tree height of standard varieties 18 - 30 feet.</u> Trees on apple seedling may be held to any desired height by summer pruning.	
	Geneva 935 <i>for reference only</i>	A Cornell University introduction, un-pruned height is 40%-50% of standard (8'-10'). Very cold hardy and very fire blight resistant. A precocious bearer of large fruit, this rootstock resists crown rot and root rot while suckering very little. <u>2024 NOT CURRENTLY USED BY DWN</u>	
	Geneva 969	Developed in 1976 by Cornell University. Well-anchored tree, <u>50% of standard.</u> 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.	
	M 7 apple layered cutting	<u>Dwarfs unpruned tree height 2/3 of standard, or about 12-20 ft.</u> Induces early and heavy bearing, resists fire blight and powdery mildew. Moderately resistant to collar rot and Phytophthora. Good anchorage. Very winter hardy, widely adapted to various soil conditions.	suckers, staking may be required, susceptible to woolly apple aphid
	M 111 apple layered cutting	Excellent all-around rootstock for apples. Tolerates wet, dry or poor soil; good for sandy soils . Well-anchored, resists woolly apple aphids and collar rot. Induces bearing at young age. <u>Unpruned tree height 80-90% of standard, or about 15-25 ft.</u>	susceptible to crown rot under very poor conditions
Cherries	Mahaleb cherry seedling	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, more drought tolerant than <i>Mazzard</i> . <u>Standard varieties slightly dwarfed, to about 85% of their height on Mazzard, or about 25-35 ft. if not pruned.</u>	intolerant of wet heavy soils, attracts gophers, tends to sucker, susceptible to oak root fungus, some root-knot nematode susceptibility - very susceptible to Phytophthora crown and root rot and Prunus stem pitting
	Maxma 14	(brokforest cv.) is a dwarfing rootstock for sweet cherries; <u>trees are dwarfed to about 2/3 of standard approx. 20 - 25 feet.</u> 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.	Less dwarfing expected in fertile loamy soils. Induces early heavy bearing; crop management may be needed for productive varieties in early years.

more cherry rootstocks ↓ ↓

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more cherry rootstocks ↑ ↑

Cherries

New Root 1 [Zaiger] <i>for reference only</i>	Dwarfing rootstock for cherries. Dwarfs cherry trees 8 - 12 feet unpruned. Ideal for container growing. Promotes early bearing. More versatile than Mazzard and Mahaleb. Better adapted to clay soils than Mazzard and Mahaleb. Tested as 3CR178. <u>2024 NOT CURRENTLY USED BY DWN</u>	
Mazzard cherry seedling	Cherries on Mazzard are vigorous, cold hardy, and more tolerant of wet soils than <i>Mahaleb</i> (but good drainage is still essential). Resistant to root-knot nematodes and oak root fungus. <u>Unpruned tree height of standard varieties 30-40 ft.</u>	slow to bear, large tree prone to root suckering, susceptible to crown gall, bacterial canker & root-lesion nematode, scion doesn't show buckskin infection as quickly as on <i>Mahaleb</i>

Pear

Winter Nellis Domestic Pear Seedling <i>for reference only</i>	For European and hybrid pears. Vigorous, relatively tolerant of wet soils. Resistant to oak root fungus and pear decline. Unpruned tree height 20-25 ft. <i>Not currently used by DWN.</i>	
OHxF333	European and Asian pears on OHxF333 are <u>dwarfed to about 2/3 the size of standard, or about 12-18 feet.</u> Widely adapted, disease-resistant.	
Betulafolia	For Asian and flowering pears. Very vigorous, tolerates wet soil, dry soil, alkaline soil. Resists pear decline. More vigorous than <i>Calleryana</i> and more winter hardy. <u>Unpruned tree height of Asian pears 15-25 ft.</u>	
Calleryana	For Asian pears and flowering pears. Preferred rootstock for warm-winter/hot summer climates and for sandy soils. Also adapted to wet soils. Asian pears on Calleryana are comparatively small, <u>15-20 ft. if unpruned.</u> Heavy bearing at young age.	

On Dehydration...

Trees on peach x almond hybrid rootstocks, including interspecifics, are very sensitive to dehydration.

While planting, keep roots damp and irrigate after planting.

Almonds, Apricots, Nectarines,
Peaches, Plums, Pluots

Citation interspecific peach & plum-rooted cutting	Dwarfs peaches and nectarines to 8-14 ft., <u>apricots and plums to 12-18 ft.</u> 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 advances maturity and increases size and sugar content of fruit.	..susceptible to crown gall, bacterial canker and oak root fungus, intolerant of virus with peach or nectarine
Lovell peach seedling	For nectarines, peaches, apricots, plums/prunes and almonds. Vigorous, more tolerant of wet soils than <i>Nemaguard</i> , but prefers well-drained soils, also more cold hardy. Susceptible to nematodes in sandy soils. <u>Unpruned tree height of standard varieties 15-25 ft.</u>	..susceptible to root-knot and root-lesion nematodes and to oak-root fungus, some what susceptible to bacterial canker [but less than <i>Nemaguard</i>] ...prunes subject to brown line on this rootstock
Nemaguard peach seedling	For nectarines, peaches, apricots, plums, almonds. Vigorous, strong tree, resistant to root-knot nematode - an excellent rootstock for well-drained soils. <u>Unpruned tree height of standard varieties 15-25 ft.</u>	...susceptible to root-lesion nematodes, prefers sandy soil, susceptible to oak root fungus & bacterial canker, prunes subject to brown line on this rootstock. In slower-draining soils, must plant on mound or berm.

more Almond, Apricot, Nectarine, Peach, Plum, Pluot rootstocks ↓ ↓

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more Almond, Apricot, Nectarine, Peach, Plum, Pluot rootstocks ↑ ↑		
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Almonds, Apricots, Nectarines, Peaches, Plums, Pluots</p> <p>Myrobalan 29-C plum-rooted cutting</p> <p>> Not used for < Peach or Nectarine</p>	<p>Widely adapted, excellent all-around rootstock for almonds, apricots and plums. Shallow but vigorous root system tolerates wet soils, is immune to root-knot nematodes, and has some resistance to oak root fungus. Less sucker development than <i>Marianna 26-24</i>. <u>Unpruned tree height of standard varieties is 15-25 ft.</u></p>	<p>tends to lean, some incompatibility with almonds, prunes subject to brown line on this rootstock, may set lighter crop than <i>Marianna 26-24</i>, susceptible to oak root fungus</p>
	<p>Marianna 2624 plum-rooted cutting</p> <p>> Not used for < Peach or Nectarine</p>	<p>For apricots, plums and most almonds. Shallow root system, tolerant of wet soils. moderately resistant to Phytophthora crown Resists oak root fungus and root-knot nematodes. Mature trees of standard varieties comparatively small, <u>15-20 ft. if unpruned.</u></p>



Urban Tree Farm Nursery
 3010 Fulton Rd
 Fulton CA 95439
 707/544.4446
 FAX 707/544.5527

rootstock information provided by



Dave Wilson Nursery
 Hickman, California 95323
 davewilson.com

answers to many Fruit Tree Questions available at

<https://www.davewilson.com/home-garden/faq/>

[FAQ | Dave Wilson Nursery](#)

Here are some Samples of What You Can Find There...

Why did my fruit tree die?



The most common causes of tree failure are slow-draining soil, overwatering and underwatering. When planting in slow-draining soil, be sure to elevate the trees by planting on a berm or in a raised bed. In slow-draining soil especially, water only when the soil is on the verge of becoming dry, then water deeply.

What are the pros and cons of container fruit trees vs. bareroot?



Bareroot trees (dormant, with no soil around the roots) are available in winter, in the widest selection, from the most retail sources and at the best prices. Especially if planted early, they are well-established before any hot weather. Bareroot trees may be topped, limbed and shaped as the grower chooses. Container trees are conveniently available in spring, but at a higher price than bareroot, and all varieties and variety-rootstock combinations may not be available.

Is it necessary to cut back a fruit tree after planting?



Cutting back a tree at planting time helps it make a vigorous start by channeling available energy into fewer growing tips, as well as allowing the grower to choose where the lowest branches will be.

Are backyard fruit trees worth the effort?



Backyard fruit trees are easily worth the effort if you plant varieties and rootstocks adapted to your area and keep the trees small so care and harvest is easy. Anyone who likes gardening is capable of being a good fruit grower. For many types of fruit, the most luscious flavors you can ever experience are of the fully tree-ripened fruits you grow at home.