

# Growing Fruits and Nuts in Your Home Garden

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**Ease of plant maintenance** (assuming the plant has enough sun and water, good drainage, appropriate soil, good establishment processes, and proper mulching)

## Low Maintenance

American persimmon  
Aronia berry  
Beach plum  
Blackberry with pruning  
Chestnut  
Chickasaw plum  
Comfrey  
Cornelian cherry  
Elderberry  
Fig, with good placement  
Goumi  
Hazelnut  
Honeyberry  
Horseradish  
Mulberry  
Muscadine grape  
Nanking cherry  
Rabbiteye blueberry  
Raspberries  
Rosa rugosa  
Serviceberry  
Willow

## Medium Maintenance

Apples (disease resistant)  
Asian pear  
Asian persimmon  
Highbush and lowbush blueberry  
Cranberry  
Fall-ripening bush cherry  
Grape (disease resistant)  
Hardy citrus  
Hardy kiwi  
Highbush cranberry  
Korean bush cherry  
Mazzard cherry  
Pawpaw  
Pear  
Pie cherry  
Rhubarb  
Seaberry  
Strawberry  
Tea camellia  
Ume plum  
Wineberry

## High Maintenance

Almond  
Apple (most varieties)  
Apricot  
Lingonberry  
Peach  
Plum  
Quince  
Schisandra  
Sweet cherry  
Table & wine grape (most varieties)

## Need for annual pruning once established

### Low

American persimmon  
Asian persimmon  
Blueberries, rabbiteyes  
Cherry trees  
Chestnut  
Cornelian cherry  
Fig tree  
Mulberry trees  
Nanking cherry  
Pawpaw  
Serviceberry

### Medium

Apple  
Cherry trees  
Elderberry  
Fig (if kept small)  
Hazelnut  
Peach  
Pear

### High

Blackberry  
Grape  
Kiwi  
Mulberry shrub  
Muscadine grape  
Raspberry  
Strawberry

## Especially pretty plants that are good for landscaping too

Aronia berry, Asian pear, Asian persimmon, blueberry, cherry tree, Cornelian cherry, fig, goumi, hardy citrus, hazelnut, Nanking cherry, pomegranate, serviceberry, and tea camellia.

# Planting and Plant Care Instructions

## Planting materials

- ☐ The plant
- ☐ A spade and digging fork
- ☐ Water
- ☐ Organic fertilizer, if planting between February and July. (When planting between August and January, wait until late winter to apply fertilizer.)
- ☐ Agricultural lime, if necessary for your soil. Do not use agricultural lime for acid-loving plants.
- ☐ Pine bark soil conditioner, such as Nature's Helper.
  - For acid-loving plants, use enough to mix 50-50 with the soil that will backfill the hole.
  - For other plants in heavy clay or sandy soils, use half the size of the plant container. For example, use half a gallon of soil conditioner for a plant in a one-gallon container.
- ☐ Rock phosphate, which is needed for fruiting. For blueberries, cranberries, or lingonberries, DO NOT use colloidal or rock phosphates, because they are also high in calcium.
- ☐ Greensand: adds minerals and improves soil texture.
- ☐ Earthworm castings or good quality compost: inoculates the soil with beneficial bacteria.
- ☐ Mulch: enough to cover the planting area 2". In the winter, you might want a deeper mulch to insulate the roots. Good mulches include: pine or hardwood bark, leaves, rocks, cover crops, or compost.
  - For blueberries, ensure that the mulch does not contain any form of calcium, such as limestone rocks or eggshells from compost.
- ☐ Seaweed plant solution, such as Nature's NOG or a granular seaweed soil additive.

## Most plants

1 - 3 gal plant	5 - 10 gal plant	Amendment
1 pint	1 quart	Phosphate rock
1 cup	1 pint	Greensand
1 cup	1 pint	Blended organic fertilizer, such as Fertrell 5-5-3
1 cup*	1 pint*	Limestone * depending on soil pH
1/2 cup	1 cup	Seamic or granular seaweed-humate
1 tsp	1 tbs	Microbial blend
1/2 shovel	1 shovel	Compost and/or worm castings
1 pint	1 quart	Biochar or ground charcoal
1 pint	1 quart	Granite quarry crusher fines, if available

## Acid-loving plants

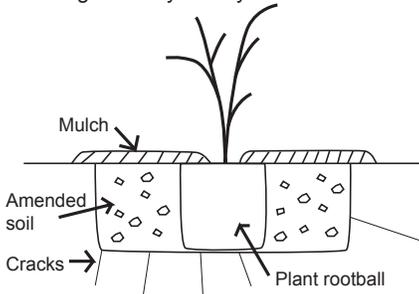
1 - 3 gal plant	5 - 10 gal plant	Amendment
5 gal*	10 gal*	Pine bark soil conditioner or triple ground pine bark *blueberries only
1 cup	1 pint	Greensand
1 cup	1 pint	Fertilizer for acid-loving plants, such as Fertrell HollyCare
1/2 cup	1 cup	Seamic or granular seaweed-humate
1 tsp	1 tbs	Microbial blend
1/2 shovel	1 shovel	Worm castings
1/4 cup	1/2 cup	Granular sulphur
1 pint	1 quart	Biochar or ground charcoal

## Planting instructions

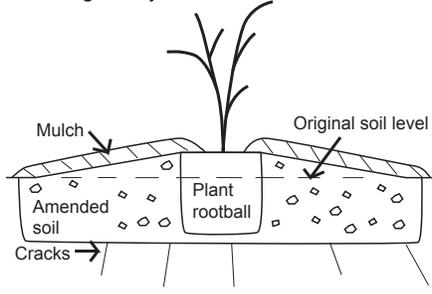
1. Prepare the planting area. When possible prepare the soil of whole beds or rows, rather than planting plants individually. Taking the time, effort, and expense of doing whole-bed soil preparation will reward you with faster, healthier plant growth and greater production.
  - Skim off grass or weeds and their roots from the soil surface.
  - Loosen the soil to the depth of the plant container.
  - For heavy clay or sandy soils, make the hole at least five times as wide as the plant container. Even better is to prepare a whole bed.
  - For loam or silt soils, make the hole at least three times as wide as the plant container.
  - For beds, till the soil with rock powders and a 2-3" layer of organic soil conditioner to a depth of 8-10". Crack the bed bottom deeper with a digging fork if necessary to provide root penetration in heavy soils.

2. Before removing soil from the hole, place the amendments on top of the planting area:
  - Fertilizer
  - Earthworm castings and/or compost
  - Rock phosphate
  - Agricultural lime if needed.
  - Greensand
  - Pine bark soil conditioner, if needed
3. Mix these ingredients in the hole to achieve a homogenous soil mixture.
4. Excavate enough soil to form a hole the size of the container.

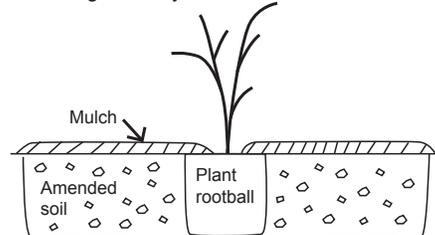
Planting in loamy or silty soils



Planting in clay soils



Planting in sandy soils



5. Crack the bottom and sides of the planting hole with digging fork. These cracks make it easier for the plant to get its roots into the soil.
6. Water the plant in its container thoroughly or dip the plant in a seaweed solution.
7. Remove the plant carefully from its container.
  - If the plant is in a white cloth planting bag, cut the bag with a box cutter at the seam and gently peel the bag away from the root ball.
  - If the plant is in a plastic container, loosen the plant's exterior roots, and spread any circling roots.
8. Place the plant in the hole with the top of the rootball at or above the soil line.
  - In heavy clay soils, place the top of the plant's rootball 3 to 6 inches above the ground soil line.
9. Replace excavated soil around the plant's rootball and gently compress it to hold the plant in position.
10. Create a water mound around the outside diameter of the hole
11. Mulch with a good organic mulch 2" deep. Keep mulch away from the stem of the plant.
12. Water the plant well. If possible, use a seaweed solution as a soak and finishing drench during transplanting.

## Watering schedule

Watering schedule for first 3 weeks. The first day is the planting day.

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
<b>Week 1</b>	Water	Water	Water		Water		Water
<b>Week 2</b>		Water			Water		
<b>Week 3</b>	Water				Water		

After the first three weeks, water at least once a week, watching for any signs of drought stress. Water immediately if your plant is wilting. Do not over water, particularly in poorly drained clay soils. Plants will need less frequent watering during rainy or overcast weather, and when they are dormant.

TIP: The plant may respond to both over-watering and under-watering the same way – with droopy leaves. If you think you've been watering enough, check the moisture of the soil by poking a screwdriver or metal rod about 4" into the ground. If the screwdriver feels damp, the plant probably has enough water.

Also, if the plant perks up about 20 minutes after watering, it didn't have enough water. If it doesn't perk after watering, it is either getting too much water or having another challenge.

## Fertilization schedule

Fertilize your new plants in mid-April, the first of June, and mid-July with one to two cups (depending on plant size) of a balanced fertilizer distributed evenly around the root zone. Water well after fertilizing. Berry plants may benefit from a December fertilization after dormancy.

# Chuck and Debbie's favorite fruits and nuts for every garden

**Blueberries** - Chuck likes rabbiteyes for their hardiness and Debbie likes highbush blueberries for their varied berry flavors. All are beautiful plants with highly nutritious berries. There's a blueberry variety for every garden and taste!

**Raspberries** - Yummo! And they're so much better and more affordable from the garden. Everbearing varieties produce a crop in mid-summer and then again in fall!

**Goldrush apples** - A disease-resistant gold apple for fresh eating, cooking, and cider. Debbie makes Goldrush applebutter and pies each year and Chuck always gets a bushel to store for winter eating.

**Hazelnuts** - Tasty nuts that grow on attractive shrubs with fuzzy leaves. The nuts have a lot of high-quality oil, which is hard to obtain from local plant sources. And you can pick the nuts up to a month before they're ripe to beat the squirrels to them!

**Nanking cherries** - Cherries on a shrub, what can be better than that? They have fuzzy leaves, fruit early in the spring, and even produce fruit under canopy trees that leaf out later!

**Strawberries** - Everyone can grow strawberries, even in a pot or vegetable garden. Kids love them, they're high in instant gratification, and don't require a long-term commitment.

**Elderberries** - Elderberries are very easy to grow and are a great immune system tonic. We use them in syrups, meads, and mixed with other berries.

**Asian pears** - They're easier to grow around here than apples or European pears and they're so much better off the tree than what you can find in the stores or even at farmers markets. Eat them crunchy and juicy right off the tree or let them soften on the counter for a few weeks.

## Resources

### Books

*The Holistic Orchard: Tree Fruits and Berries the Biological Way* and *The Apple Grower*, Michael Phillips  
*Grow Fruit Naturally, Landscaping with Fruit, Uncommon Fruits for Every Yard*, and *The Pruning Book*, Lee Reich  
*The Backyard Berry Book*, Stella Otto  
*Teaming with Microbes*, Lowenfels and Lewis  
*The Soul of Soil*, Grace Gershuny  
*Gaia's Garden*, Toby Hemmenway

### Websites

Useful Plants Nursery, [www.usefulplants.org](http://www.usefulplants.org) - plant information, planting instructions, technical information, videos

Living Systems Design, [www.livingsystemdesign.net](http://www.livingsystemdesign.net) - Permaculture design information

Barkslip's Fruit School, [www.barkslip.com/fs\\_home.html](http://www.barkslip.com/fs_home.html) - classes to learn plant care

Plants for a Future, [www.pfaf.org](http://www.pfaf.org) - information about many obscure and useful plants

Buncombe Fruit and Nut Club, [fruitandnutclub.com](http://fruitandnutclub.com) - connection to the local fruit nuts

Josephine Porter Institute, [www.jpibiodynamics.org](http://www.jpibiodynamics.org) - source of biodynamic preparations

### Soil tests

NCSU Cooperative Extension

### Additional information

See the Useful Plants Nursery website at [www.usefulplants.org](http://www.usefulplants.org) for videos demonstrating planting and other plant care techniques.