Why would you choose to grow fruiting plants in a container, when they will grow perfectly well, if not better, in the ground? There are as many answers as there are people growing plants. Among the more common answers are: No ground available because the landscape is full or the soil is of poor quality, apartment deck is all that is available, not enough sun where there is ground, the plant would not survive winter outside, to decorate a patio, to take advantage of a micro climate location—warmer or cooler, more or less sun, wetter or dryer, or to prepare for moving to one’s dream farm/homestead.

The basics of growing fruiting plants in containers are no different from growing vegetables, flowers, or houseplants; you meet the needs of the plants and they grow. It’s just that some of the needs are different, but not all.

All plants benefit from growing in containers that allow water to exit the container readily. And plants that will be in a container for more than a growing season are best started in a smaller container and gradually moved to the final planned size over several years. Think about the long term when choosing container shapes or materials; will this container hold up over the long term, will it’s shape be easy to remove established plants from, will the root system be protected from extreme heat.

Match the pH and particle size of the potting mix you use to the needs of the plants and the size of the container. You can use the typically available smaller particle size mixes for smaller container sizes (up to 3 gallon). As the container size increases mix in medium grade bark, up to 30-50%, to ensure adequate air penetration to the roots. Encourage strong vegetative growth the first couple of years with a 2 Nitrogen:1 Phosphorous balance, then, when it is time for them to start initiating flowers, change to a 1 Nitrogen:1 Phosphorous balance. And you will notice, as you learn about the needs of the different kinds of fruiting plants you are growing, that their pH requirements are more varied than vegetables or houseplants tend to be.

It is important you assess the water needs of your plants based on what is happening where the roots are, rather than looking at the surface, yet, that is all you can see! Instead, use your finger, poke into the soil as deep as you can; compared to the air temperature if it feels warmer it means the soil is more dry, cooler means the soil is more moist. Water has weight, get to know how heavy the container feels when it is more or less dry. When it is time to water be generous, make sure plenty of water exits the container, so you know you have completely saturated the soil. Then allow the soil to dry again before the next watering. How dry the container should get depends on the plant(s) in the container.

It will be necessary to repot your plants periodically. Initially every year or two as you increase the container size up to the final size you prefer. Then, depending on the vigor of the roots in the container, every 1-3 years. Fresh soil is needed to encourage the roots to grow and find water and nutrients, if the roots are not growing the plant will not grow. Current thinking recommends you cut the sides and bottom of the root ball, removing all circling and matted roots, plus enough extra that there is room to add fresh soil around the root ball when it goes back in the container. I like to remove twice as much from the bottom of the root ball as I do from the sides.
Contained Bounty Growing Fruit Bearing Plants in Containers
By Theresa Knutsen
Raintree Nursery

The majority of the fruiting plants you can grow in containers will be happy with the basic soil mix recipe below, with a pH of about 6.0-6.3, and average drainage. They will need watering when their containers are about 50% dry, and most will tolerate full sun just fine. There are exceptions though:

**Citrus** need an acidic very well-draining soil mix. You can start with a conventional potting mix, making sure no lime has been added, and add 30-50% sand, perlite, or pumice. Or start with the mix below, instead of lime add gypsum at 2 Tbsp/5 gal, and add 30% sand. Allow to get very dry between each watering, although not quite wilted, provide bright light and humidity in winter, and use a fertilizer labeled specifically for citrus. If shoot tips start turning a water soaked looking brown and dying the root tips are not getting enough oxygen, reduce your watering frequency and/or make sure your potting mix has not become compacted.

**Vacciniums** (Blueberry, Lingonberry, Cranberry, and Huckleberry) all need an acidic (pH 4.5-5.5) well-drained yet moisture retentive soil mix for their fibrous roots. Rhododendron mixes work well, if they are very coarse you could add some extra peat moss. Or use 50-70% medium bark, 15-30% peat moss, and 10-20% perlite. Keep blueberry and cranberry evenly moist, allow lingonberry and huckleberry to dry between watering, their roots have a higher oxygen requirement. Use a blueberry or rhododendron fertilizer. Goji berry and Olive prefer a well-draining potting mix with a pH of 6.8-7.2 or higher, allow to dry between watering. Olive might not perform well with a fir bark based media, experiment with peat, sand, compost, perlite, and coconut coir.

Figs and stone fruits on peach rootstock also need a higher pH, 6.8-7.2. Since they generally will end up in larger containers their potting mix can have some larger particles in it, to maintain good drainage.

**Basic Potting Mix Recipe:** medium or medium/fine grade bark 30-50%, peat, peat/compost, or washed coconut coir 30-50%, 20% perlite,; for each 5 gal add 2 Tbsp lime/dolomite lime (2 parts:1 part), 1 Tbsp bone meal or rock phosphate, and 1 Tbsp kelp meal. The pH should be about 6.0-6.3. Use gypsum instead of lime for acid loving plants.

**Recommended Fruiting Plants by Final Minimum Container Size**

**10-20 gallon pot:** Citrus, Pomegranate, Goji Berry, Gooseberry, Currant, Sweet Bay, Sea Berry, Aronia, Dwarf Blackberry, Blueberry

**20 gallon (whiskey barrel):** Mini Dwarf Apple (M27 or Bud 9 root stock), Cherry on Giesela 3, Genetic Dwarf Peach and Nectarine, Fig, Olive, Everbearing Raspberry (elevate pot to see and clip off wandering roots), Dwarf Raspberry, upright habit Blackberry

**30 gallon (wine barrel):** Dwarf cherry on Giesela 5 root stock, Espaliered Apple, Pear, Plum, vines such as Grape or Kiwi

**Long narrow planter:** Strawberry, Dwarf raspberry, Lingonberry, Cranberry, other ground covers

**Shallow wide (or broad) container 15 gallon plus:** Blueberry, Lingonberry, Cranberry, Strawberry, Dwarf Raspberry.

**Edible Winter Indoor Plants:** 10 gallon pot, Citrus, Passiflora edulis (passion vines), Babaco Papaya, Pineapple Guava; 5 gallon pot, Lemon Grass, Sugar Leaf

For more information go to https://raintreenursery.com/growing-guide