

# PLANTING CHESTNUTS

## DIRECT SEEDING VS. PLANTING SEEDLINGS

Decide whether to plant seeds or to plants seedlings. Before planting, be sure to keep your seed in cold storage (a refrigerator) away from apples and pears until you are ready to plant. The colder the storage, but above freezing, the longer the seed will keep. Typically, planting seeds is easier and less labor intensive than planting seedlings. Germination of “pure” chestnut species, as well as advanced hybrids, is very high, often 90%.

## DIRECT SEEDING CHESTNUTS

- 1) **Plant early in the spring.** In the spring, plant as soon as you can work the soil In Pennsylvania, this is usually about mid-March. Try to plant as soon as you can work the soil
- 2) **Planting the seed.** Most chestnuts will have sprouted by this time. Be sure to plant with the radical facing down. If the radical is not present, then plant with the flat side of the seed facing down.
- 3) **Clip the radical.** Often, the radical will be very long. One may clip the radical to ease planting, but clip as little as possible, and be certain not to break the cotyledonal junction between the radical and the nut.
- 4) **Proper planting medium.** When planting, use a 1:1:1 peat, perlite and vermiculite (PPV) mix. Some planters find this mixture too light. It is often good procedure to mix native soil into this mixture so that you have a final mix of 50% PPV and 50% native soil. Mix water in with this mixture so that it is wet, but not soaking wet.
- 5) **Don't plant the seed too deep.** Make a planting hole about 3-6 inches deep. Backfill the hole with the planting mixture. About 1/2 to 1 inch from the surface, place the chestnut, and then cover with the mixture. When placing the chestnut in the backfill, make a hole with your finder in the dirt to allow for placement of the radical.
- 6) **Make a good home.** Make a hole using a bulb planter, auger, shovel, or what you have available.
- 7) **Record what you do.** Be certain the planting position is well marked with identification elements.

## PLANTING SEEDLINGS

Starting seeds indoors is a very reliable method of propagating chestnuts. It can be easier to protect your stock from would-be seed predators. Still, starting your chestnuts indoors carries with it its own pitfalls. Be sure to keep these things in mind when planting your seed inside.

- 1) **Large enough pots.** Deep containers are necessary to grow seedlings well. It is recommended that pots of about 12” in depth and 4” in diameter are used. Of course, the longer you plan on keeping the material, the larger the pot should be.

2) **Type of pot.** Pots can be made from one or two quart milk or juice cartons. Provide drainage by punching holes in their bottoms, or by removing the bottoms altogether (the open bottom air “prunes” the roots, reducing coiling (J-rooting) and often stimulating the production of rootlets). Commercial options are available. D40 cells and 1 to 5 gallon tree pots are most often used.

3) **Proper planting medium.** The growing medium should contain plenty of fibrous materials to help preserve the root ball at transplanting time and should contain other amendments to provide for lots of aeration. Soilless potting mixes are better than potting soils. A mix containing lots of composted bark is a good option.

4) **Start seed early.** Start seed as soon as possible after receiving them in a greenhouse or sunny window. Generally, one can start their seed in January or February. Make sure you don't overwater the containers: keep the soil moist but not wet. Fertilize occasionally but with a dilute solution of a complete fertilizer.

5) **Harden Properly.** Seedlings started indoors will be ready for transplanting after the final frost of the season has past. At that time, begin to expose your plants to sun and brisk winds gradually. Introduce them to the outdoors by placing them under a shady tree or on a protected sunny porch. If you have a shadehouse available, try using 30-50% shadecloth for at least 2 weeks. Move them out into harsher environments slowly so they'll have time to acclimate.

6) **Carefully pluck the nut.** When outplanting the seedlings within the first few months of planting, be certain to remove the remaining nut from the seedling. Rodents will dig up the seedling in order to eat the nut.

7) **Prepare a good home.** When planting the seedling, make a hole at least 1.5-2 times as large as the root ball of the seedling you are to plant. Chainsaw or tractor mounted augers can make quick work of planting holes. Depending on the soil type, augers can “glaze” a planting hole, creating a hardpan like property in the hole. When planting the seedling, be sure to aerate the sides of the planting hole with a hand-held cultivator or plow.

8) **Water properly.** After transplanting, seedlings need lots of water. Water thoroughly for at least the first month after planting. For best success, water with 1 gallon per tree every week.

9) **Documentation.** Record everything you did! Especially note any changes made to a planting plan, if one was made. Label the planting hole properly. Before you plant, you'll need to determine what sort of maintenance regimen you'll be employing. Maintenance considerations include fertilization, watering, deer and other pest control, and weed control.

**Call or e-mail with any questions:**

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