

How to Plant Chestnuts

Your planting mix should be mostly peat moss with some perlite for lightness and aeration. Also, and this is important for healthy growth, mix in some top soil/humus from a wooded area to provide the mycorrhizal fungi that promote root growth and nutrient transfer. Although the exact amount is not critical, add at least a handful of the forest-floor humus per quart of planting mix.

You have two choices: plant the nut indoors in containers and transfer the seedling outdoors or plant the nut directly outdoors. When you plant either a seedling or nut outdoors, mix some of the dirt from the hole into the planting mix you use to fill the hole. If the sides of the hole are smooth and compacted from the shovel, break up the smooth surfaces with a trowel so that the roots do not “hit a wall” and turn back but instead grow into the surrounding natural soil.

The final site outdoors should be sunny and well drained. Rocky, loose soil works well; heavy clay soil does not.

Besides picking a suitable site outdoors, the primary cause of failure is not what *you* do but what *rodents* will do; if given the chance they will dig up the nuts and kill the seedlings. They will do this in your house, in your garden, or on your lawn. Mice, chipmunks, squirrels, and other eating machines love chestnuts, even empty chestnut shells that remain months after the seedling has sprouted and is thriving. If you want to have a growing tree, please heed the precautions below.

Starting indoors and transferring outdoors

1. Keep the nuts in the damp peat moss (see preparation instructions below) in your refrigerator at 34 to 40 degrees F until late February/early March.
2. Fill an empty milk carton that has drainage holes, or a deep flower pot, with planting mix.
3. Lie the nut with the flatter side down, cover the nut with an inch of the planting mix, and pat it down. If the nut has sprouted, plant it with the root down. Make a hole in the center of the mix in the pot with your finger for the root, then cover the nut with an inch of planting mix and pat it down.
4. Water gently and put it in a room-temperature place to germinate. Germination may take 3 weeks or more. Keep the soil slightly moist, not wet, until you plant the seedling outdoors in the ground.
5. When a shoot appears, place the container in a sunny window.
6. After all danger of frost is over (late April or early May), acclimate the baby tree to being outdoors. This is the procedure: Put the container outside in the shade for a few days. (Starting for a few hours per day is more cautious.) Move it to a location where it gets an hour or two of sun for several days. Move it to a location where it gets more than several hours of sun but less than a full day's sun for several days to a week. If leaves begin to brown at the edges, move it back to more shade for a few days. When the baby tree is happily in full sun for a few days, it is ready to plant outside permanently. During this process, protect the seedling from marauding rodents! You may want to use a suspended platform or choose rodent-proof wire enclosures.
7. Transfer the baby tree to a permanent location in full sun. Hammer a stake into the ground and dig a hole next to it. Put some planting mix in the hole and mix in some soil. Take the seedling out of the container with as much planting mix as possible and put it in the hole. The seedling should be at the same level in the hole in relation to the level of the soil. Fill the rest of the hole, if necessary, with planting mix. After planting the seedling in the ground, put a tree tube or a cylinder of aluminum flashing (about 4 inches in diameter) around it. The tube should be about a foot tall. Push the tube or cylinder an inch or a bit more into the ground and use a tie to hold it to the stake. This will protect the roots and spent nut from digging rodents. Put a 3-4 foot tall wire or plastic mesh (about 1 or 2 feet in diameter) around it to protect it from deer (who love to eat chestnut leaves and twigs).
8. Remove the tree tube or cylinder in a year or so, before it interferes with seedling growth.

Planting directly outdoors

1. Keep the nuts in the damp peat moss (see preparation instructions below) in your refrigerator at 34 to 40 degrees F.
2. When danger of really long frosts is past (typically mid April), dig a hole outside in a sunny location and fill it with planting mix. Hammer a stake into the edge of the hole.
3. Fill the hole to within one inch of the original soil level with planting mix and some forest humus. Firmly push it down. Plant the nut with the flatter side down, cover it with an inch of the planting mix, and pat it down gently. If the nut has sprouted, plant it with the root down. Make a hole with your finger for the root, then cover the nut with an inch of planting mix and pat it down gently.
4. Put a tree tube (about a foot tall) or a cylinder of aluminum flashing (about 4 inches in diameter) around it. Push the tube or cylinder an inch or a bit more into the ground (if the hole is slightly larger than the cylinder, this will be easier) and use the stake and a tie to hold it in place. This will protect the roots and spent nut from digging rodents. Put a 3-4 foot tall wire or plastic mesh (about 1 or 2 feet diameter) around it to protect it from deer.
5. Remove the tree tube or cylinder in a year or so, before it interferes with seedling growth.

Preparation of peat moss for storage

Chestnuts will not germinate until after experiencing winter. Therefore, you must simulate winter for them to grow. The way to do this is to store them in damp (not wet!) peat moss in plastic freezer zip-type bags in your refrigerator after harvesting until you are ready to plant them in the spring. It is possible that there are some weevil larvae in the seeds and you may see their maggot-like bodies at the bottom of the bag when you take it out in the spring. (Note: There is a hot water method of killing the eggs and/or larvae before storing the seeds, but it is not really worth the trouble because the temperature of the water must be controlled for 20 minutes at above 118 degrees F to kill the weevil eggs and larvae but below 125 degrees F so as *not* to kill the chestnut seed.)

Combine 10 parts by volume peat moss with 1 part water. For a day or two, mix the damp peat moss so that the mixture is uniformly damp. It will not feel very damp, but if you add more water, the seeds may get moldy during storage.

Store the chestnuts in a zip type freezer bag in your refrigerator, preferably in the vegetable bin. If possible, monitor the temperature with a thermometer to find a good spot in your refrigerator where the temperature does not go below freezing but is just above freezing (aim for 34 degrees F). Too high a temperature (above about 40 degrees F) and too wet a peat moss mixture will cause the seeds to germinate too soon and they will be difficult to plant in the spring.

As a guide, I use one-gallon-size freezer bags and put about 150 seeds with peat moss in each bag.

YouTube video on planting chestnut seeds: <https://www.youtube.com/watch?v=-O8IRqOYrP8>
Although he is planting in pots in a greenhouse, the technique is the same for planting outside.

Good Luck!

Gary P. Carver
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