

**Grimo Nut Nursery** 979 Lakeshore Rd Niaqara-on-the-Lake, L0S1J0

## **Seed Stratification**

Seeds must be stratified over the winter. If a seed is not exposed to sufficient moisture, proper temperature, and oxygen, the seed will not germinate.

The seed nuts you purchased are ready for stratifying. We have labeled the bags and recommend that you keep them labelled while planting so you can identify them later.

Some of the seeds will be mixed with peat moss, while other seeds will require you to add peat moss when you get them. You will also need to add water to the bags to moisten the peatmoss just to the point of saturation without allowing water to stand in the bag. Small holes punched into the bottom of the bag will help to drain excess moisture. Gently mix the seed and moistened peat moss and place it in the refrigerator or in a cold storage location. It is important to avoid freezing at this stage. Do not add any additional water to chestnut seed. Chestnut is prone to spoilage like potatoes, so they need to be kept lightly moistened in cold storage.

## **Planting**

Two months is the minimum time to refrigerate the seed in order to trigger the germination response. When the ground is ready for planting, possibly early May depending on your climate. Place the seed in the ground about 5-8 cm (2-3 inches) deep and lightly push the soil back over them. Do not plant them too deep. Orientation of the seed is not important because the seed will orient itself when it begins to grow. If the radical (white root) has emerged from the nuts at planting time, place it in the ground oriented downward. Be careful to not break this fragile root. After planting, water the area to ensure good seed to soil contact and to keep the seed properly moistened.

Seed will sprout when they are ready. Seed germination requires a balance of sunlight to warm the soil and appropriate watering. While some will sprout in just a couple of weeks others might take up to the middle of summer. In some varieties like hazels and black walnut it can occassionally take up to 2 years to sprout.

Mark the planting site carefully as weeds will grow before the stem pops above the ground. Squirrels, chipmunks, racoons, oppossum, mice, blue jays, grackles, and crows will find these newly planted nuts and sprouted trees. If these pests are a problem in your area, you will need to cover the seed with a hoop of chicken wire over the planted seeds to prevent these thieves. They will dig them up if they can gain access to your seed.

## **Planting in Pots**

If you decide to pot the seed, a tall container like a 2 litre milk carton is best. Cut out the bottom and open the top wide. Use a good commercial potting mix and moisten it well before filling the pots. Place a double sheet of newspaper on the bottom of the plastic bin to prevent the fresh soil from falling out of the bottom of the carton. We suggest using old milk crates, but any easy to manage aerated bin will suffice.

Remove the seed from the cold storage and keep in the plastic bag at room temperature. When a sprout shows, this is the root and should be gently placed downward in the potting soil in the milk carton, and gently cover.

Keep the trees in a sunny window at room-temperature or in a greenhouse to allow the seed to germinate and the trees to grow. When the weather improves and it is safe to put outside, at first in a shady location, be sure to protect the young trees from squirrels that will happily dig up the tree to get to the seed. Once acclimatized, place the milk crates on a surface that will allow 6 inches or more of air space under the milk case, so when the tap root forms, the trees will self terminate the tap root. We use concrete blocks spaced apart to accomplish this.

When the trees are grown and healthy, they can be planted in a permanent location in late June or July of the same year. Continue to provide protection from grass, weeds and vermin.

For additional help for your trees go to Plant Care Supplies at: <a href="https://www.grimonut.com/index.php?p=Products&category=plant-care-and-supplies">https://www.grimonut.com/index.php?p=Products&category=plant-care-and-supplies</a>

**Please note**: We carefully hand pick and select our seeds from our own test orchards. Planting and cool stratification of the seed is the responsibility of the buyer.

We offer no warranty on seed.

For commercial nurseries: It is very important that you do not misuse the parent name when selling trees grown from our seed. Seed stock is not clonally identical and the clonal name should not be used to identify the seedlings for sale. For example 'Gene' sourced seed trees could be sold as "NY hybrid hazel seedlings" and "Carmela" sourced seed trees could be sold as "Niagara hybrid hazel seedlings". We, at Grimo Nut Nursery, do not identify the parent seed source either, so that novice growers are not confused into thinking that they have the parent tree. We prefer to use the seed source of the parent rather than the clonal name and we expect you to use integrity too.

## Hypogeal First Leaves Epicoty) Epicoty) Seed

**SEED GERMINATION** 

Source: embibe.com