PLANTING INSTRUCTIONS

Thank you for your order. Please read this before opening the plastic seal around the roots.

HANDLING YOUR TREES

Your bare root trees have been carefully spring dug, packed in a moist medium, and sealed to prevent drying of the roots. Since the trees are still dormant, they are not using much moisture, therefore a small amount of moisture is sufficient. This allows them to remain healthy during shipping.

As soon as you open your parcel of trees wet the roots fully with a hose spray or sprinkling can and place under a roomy wet blanket, or covering, so the trees can easily be separated for planting. Plant the trees immediately. **Tree roots must not be exposed to below freezing temperatures, bright sunlight, drying air or wind. Even short periods of exposure can kill roots.**

If the trees cannot be planted as soon as they arrive, gently sprinkle the roots with water, seal them up again and do not let the roots dry. Store the trees at above freezing temperature but below 10 degrees C (50 degrees F). Alternatively, they can be removed from the bags and heeled into light soil on the north side of a building until ready to plant.

CONSIDER YOUR PLANTING SITE

Choose a site with good drainage in a sandy loam or clay loam area.

Most nut trees will not grow well in poorly drained soil. Level soil with a slow run off is not recommended. If sites like this are all you have, plant the trees on raised planting sites. Make a square frame about 1 metre (three feet) wide using cedar 4 x 4's at the planting site & fill the area with topsoil. Plant the tree in the centre. This provides improved drainage & deepens the topsoil in the planting area.

Commercial growers can improve drainage by adding field tiles, ditch between the rows of trees, or plough the land to make ridges with ditches between the ridges, then plant on the ridges which are the high points. Do not plant trees in low lying land or frost pockets.

PLANTING BARE ROOT TREES

While you dig the holes leave the tree roots sealed in your plastic bag in a sheltered location or under a wet blanket protected from winds. Open the plastic bags containing the trees and again sprinkle the roots with water. Wetting them this way will help keep the roots alive during the planting time, when the roots can be at the mercy of the wind and sun. Many a fine tree has perished waiting beside its planting hole while the planter was preparing the hole.

1. Dig the holes wider than needed for the trees. Before planting the tree, mix one handful of bone meal or superphosphate fertilizer (0-20-0) with the soil. (As an alternate to bone meal we recommend using ***Root Rescue*** with the first watering to help your new tree adjust to being transplanted, to keep it stronger, healthier, and more self-sufficient in the weeks and years ahead.)

Do not include granular nitrogen fertilizers or animal manures as it may burn the roots. If you wish to, you may add liquid or water-soluble house plant type fertilizer when watering the trees every two weeks until mid-summer. If your soil pH is below 6.5, you should mix into the soil a handful of agricultural lime for all nut trees except chestnuts (lime the surrounding soil surface as well). A pH of 5.5 to 6.4 is fine for chestnuts.

2. Try the tree in the hole to be sure there is ample room for the roots. Spread out the roots and broaden the hole as needed so the roots can extend outward and downward. Do not cut off or bend roots to accommodate the hole. Do not dig a hole deeper than the tree needs. If the hole is dug too deep (with an auger for instance), the tree can settle with the soil leaving the tree too deep in the ground causing it to suffer and possibly die.

3. Plant the tree with the root crown just below the soil surface. The crown can be identified as the area where the stem broadens and becomes the root. Sometimes the crown is hard to identify, so then make the soil surface about 2 inches above the top lateral root. Our grafted trees have a visible seam (the graft) in the trunk approximately 6 inches above the crown. Be careful *not* to plant the graft below the ground level or the tree will smother from the inappropriate soil conditions.

4. Begin backfilling the soil, adjusting the tree height and the roots. Before much soil is added when you can still see the roots, drive a bamboo or fiberglass stake beside the tree to support it, and to prevent strong winds from causing mechanical injury to the roots. Planting the stake with the tree at this time will avoid root injury caused by driving in the stake later. Finish filling in the hole with granular soil, avoiding clumps, clods, and sods. Firm the soil gently with your feet.

5. Water the tree with a slow leaking pail of water to prevent the water from running away. If you are using **Root Rescue** you will mix it with the water.

6. Use mulch or **Weed Pro Mats** to help conserve moisture, encourage growth and control weeds.

SUMMER CARE

Three things need your attention during the first summer while your tree gets established.

1) Be sure to keep grass and weeds away from the trees. Competing weed and grass roots are almost toxic to a young struggling tree. A mulch or Weed Pro Mats help to keep the area clear.
2) Water the trees every 3-4 days giving each tree enough water to seep deeply through the roots 10-20 L (3-5 gallons). A pail of water with a several small holes and a rock in it to keep the empty pail from blowing away at the base of the tree is a good way to deeply water especially during drought. Keep an eye on the weather. If you get at least ½ inch of water in one rain, then you don't need to water them. Continue watering the trees until the hot weather is over around mid-September.
3) Monitor for pests such as aphids, caterpillars, and others that are causing damage to your trees. Losing too much leaf surface will make it difficult for your tree to photosynthesize. Spray if necessary.

WINTER/SPRING PROTECTION (zones3-5)

If you live in a zone where recommendations suggest that you protect your trees, hill up the trees 30 cm (1 ft) or more with soil to protect the graft from winter cold. The soil should cover at least 15 cm (6 inches) above the graft. The graft is the most sensitive part of the tree and should be protected for several years. If there is dieback, the tree portion below the ground is still safe and can re-sprout a new shoot above the graft.

Even in warmer climates a tree shelter (eg. **Plantra**) will help to reduce the effect of winter wind and keep mice, rabbits, and deer away. Remove the tree shelter or soil protection as growth begins in the spring.

PRUNING YOUR TREES

It is unlikely that you will need to do any pruning in the planting year. However, with grafted trees it is especially important that you prune off the suckers that grow below the graft. You will need to do this several times during the summer and possibly for a few years to ensure growth of the grafted portion.

Each spring carefully examine your tree. Early summer pruning is preferred over spring or winter pruning, particularly with members of the walnut family which tend to bleed sap during winter and spring. Prune your tree so there is only one leader. Straighten the tree, if necessary, using a tree stake. Always prune back to a branch. Do not leave stub that have no buds. Dead stub will interfere with the healing process.

Hazelnuts will send up sprouts from below ground which are called suckers. Tree-form hazels are often preferred for harvesting the nuts, in this case you should prune the suckers back to the ground once or twice a year. Without pruning, your hazel it will take on a bush form instead, which is fine. In Europe up to 3 stems is preferred. Northern hazels may do better with several stems, especially in cold regions.