

## **Fruit Tree Planting Instructions - Bareroot**

The first few years of a tree's life have a big influence on its health and hardiness. It is important to unpack trees within a day of arriving and either plant or 'heel them in', until ready to plant.

On receiving bare-rooted trees, place the roots in a bucket of water for approximately 20 minutes in order to ensure they are fully moist before planting. If the site is not prepared, heel the trees into cultivated soil or compost outdoors, until the planting holes are ready. Ensure you heel in deep enough to avoid frost damage to delicate roots. Do not allow roots to be exposed to the open air as they will dry out. Roots may be kept moist in the damp environment of their packaging or in a bucket of water for an hour or two only.

### **Well-Drained soil**

Fruit trees do not grow well in wet or very acid soil. Before you decide where to plant, dig a test hole about 50cm deep and fill with water. If it takes any longer than 90 mins to drain then it is an unsuitable site.

If your soil is boggy or acid you can add wood ash or slow-release lime such as calcified seaweed. These will help to neutralize the soil acidity and also feed your young tree with nutrients needed for stable growth.

Plant the fruit tree in a raised mound for better drainage. The mound should be 6 to 10 inches high at its centre sloping gently to surrounding ground level for a radius of at least 1 metre.

### **Weed competition**

Fruit trees feed almost exclusively in the top soil. They do not have deep tap roots. Therefore they compete for nutrients with grass and other vigorous herbaceous plants. In the first few years of a trees life its root system is unable to compete with grass or vigorous weeds, therefore it is essential to keep a radius of at least 1 metre completely weed free around the young tree.

Dwarf trees must have weed-free conditions in their root-zone for all their lives. Standard trees may be able to compete with grass and weeds when in their mature stage (when they have reached their full height and come into good fruit bearing). But best fruit growing requires weed control and annual soil improvement through mulching and small nutritional additions.

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## **Shelter**

Apple trees are tolerant of moderate wind. For very exposed sites a shelter belt of trees or a hedge should be planted. Shelter should protect from turbulent wind **but not shadow** and **not create root competition**. Don't plant the tree close to other large trees or hedges; They will overshadow the apple tree and rob it of light & soil nutrients.

## **Staking**

Dwarf trees must be staked all their lives. Larger rootstocks may be able to grow without staking eventually. But staking is advisable in the first few years. Inspect and check how the young tree is coping with strong winds.

Position the stake on the side of the prevailing wind. Use a strong **round** stake, 6 to 8 feet high. It is best to put the stake in before planting the tree. Plant with the stem 3 to 6 inches from the stake.

Use a tree tie or other strong but moderately flexible material. Tie firmly. The tree tie should be inspected twice yearly and loosened as the tree grows thicker.

## **Soil Improvement**

*Too much nitrogenous nutrition is as bad as too little.* If a tree grows too fast (too much green growth) it may be susceptible to disease, canker in particular. The optimal growth is slow and steady. It is more important to keep the root zone weed free than to fertilize.

If soil is poor, you may add **well-rotted** farm yard manure (crumbly composted state). Add no more than two fork fulls - mix well with the top soil from the planting hole to create a fertilized, loose, crumbly soil. Annual minimal soil improvement through mulching and weeding is better than a once-off feed.

Other additions that may improve the balance of minor nutrients to the soil: one or two fistfuls of seaweed dust, or fish/bone meal.

## **Digging**

Plant the tree by digging a hole wider and deeper than the pot or root system. This helps to loosen the soil for future easy root establishment. If the topsoil is shallow, break up the clay or rock beneath the planting hole for better root penetration.

Always plant in dry weather. Be aware that a hole with loose soil is likely to drain water from surrounding water-logged or compacted ground, thus creating wet conditions in the trees root-zone. In this case

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it is best not to plant in early winter while the tree is dormant and not actively drawing up soil moisture – better to plant in spring time, when the tree is just beginning to commence transpiration.

Make a mound above the ground, as the loose soil will sink with time and you must avoid creating a ‘bowl’ effect which could fill with water.

Plant the tree to the same soil level as it was nursed – just above the root level. There is usually a colour difference at this point of transition from soil level to over ground level. **Keep the graft union above soil level** to prevent the variety from developing its own roots. If planting a potted tree sprinkle a 1cm layer of soil over the pot compost level to prevent it drying out (1cm layer is sufficient).

Spread out the roots in all directions. Fill the hole and stand gently on the earth to stabilize the tree and tie it securely to the stake. Water the tree well to enable the roots to make good contact with the soil. Be sure to regularly check that the tree is not suffering from a temporary drought – water if necessary – **You may even have to water during rainy weather** as the roots have not established good contact with soil moisture for at least the first 6 – 8 weeks.

### **Tree guarding**

Cattle, horses and deer should never be allowed to graze an orchard. In the case of deer, fence the entire orchard (height: 2.5-3 metres). Sheep should only be allowed to graze an orchard when the trees are established and their lower branches are high enough to be out of reach. Guard the lower trunk from bark stripping as described below.

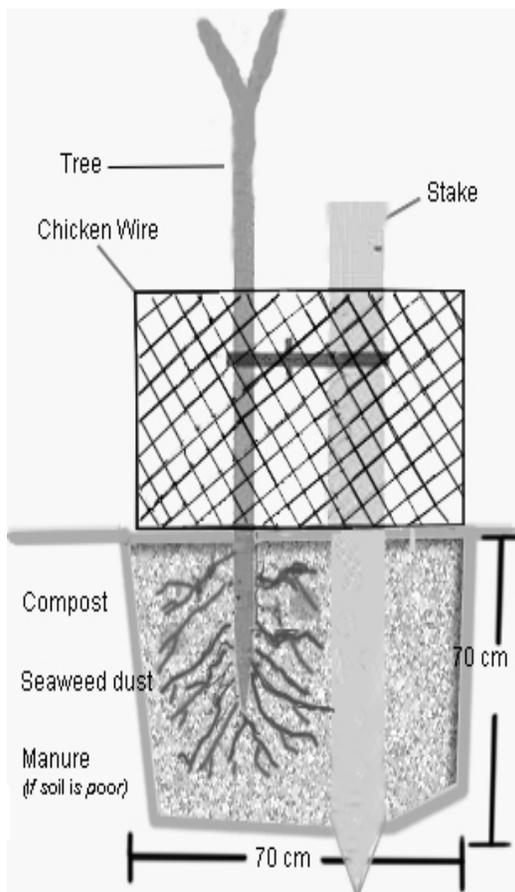
Use a tree guard or chicken wire to protect the lower trunk from strip barking by hares or rabbits. Necessary for the first few years of the trees life. Once the tree is well established (after several years) there may no longer be a need for this protection. Be careful that the tree guard does not cause damp conditions around the base of the trunk. Weed regularly to keep clean and dry.

**It is vital to keep the root collar weed free all its life** (stem of tree at ground level). This helps to keep the collar as dry as possible and less vulnerable to fungal rot.

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## **Companion Planting**

Certain plants are considered beneficial companions to your apple trees - climbing nasturtiums, horseradish, calendula and wild (ramson) garlic. They may be grown close to the trees. Remember to leave some room around the trunk for ventilation.



### **Suggested Further Learning:**

- Read a book on fruit growing
- Enlist the help of a knowledgeable friend
- Attend a fruit growing workshop

ISSA offer half-day and full day courses on fruit growing topics such as: 'Pruning', 'Grafting', 'Planting', 'Maintenance' ... plus many more.

[www.irishseedsavers.ie](http://www.irishseedsavers.ie)

(discounts for ISSA subscribers)

Courses involve both theory and practical demonstration. Participants practice their new skills on ISSA trees to improve technique and correct mistakes before going home.

## **Rootstock Information**

### **M9 - Dwarf**

Grow to 2.5m (8 feet) and fruit in 1-2 years. Plant 2.5m apart. Requires permanent staking and rootzone to be kept weed & grass-free.

### **MM106 - Semi-Vigorous**

Grow to 4.5 m (15 feet) and fruit in 5 yrs approx. Plant 5 m apart.

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