



Fact Sheet

Nuts:

Almonds, Hazelnuts, Chestnuts & Walnuts

There is a growing trend for gardeners towards planting nut trees. Most suburban gardens are suitable to grow almonds or hazelnuts however the larger growing types such as chestnuts and walnuts which also make excellent shade trees are really only suitable to large blocks. Most of the nut varieties can be purchased 'bare rooted' in winter or potted through the remainder of the year.

Almonds

Almonds are a stone fruit that are related to the peach. They are the earliest of all the deciduous fruit trees to blossom and therefore can be susceptible to frost. They prefer a cool—cold winter but need a warm dry summer to thrive. Plant approximately 6-7m apart (they grow around 5m x 3m) into a light well composted soil although they will tolerate heavier soil if the drainage is good. Summer moisture is also imperative.

The almond is surrounded by a shell which is in turn surrounded by a hull which will then split when it matures. There are 3 types of shell;

1. Paper Shell - easily rubbed off by hand
2. Soft Shell - firm but still able to be removed by hand
3. Hard Shell - like other nuts



Almonds are mentioned in the Old Testament. In one of the first recorded miracles Aaron's rod was made to blossom & bear almonds. During the great famine Jacob sent almonds to his son Joseph in Egypt.

Almonds are easily harvested and shelled and can be shaken off the tree. Harvest when the hull splits open which is then removed, spread the nuts to dry in the sun or any warm place. They are ready to store when the kernel has dried so it will bend not snap. Almonds crop on last years growth and on 2-3 year old spurs, they generally need a pollinator to ensure decent cropping, apart from one variety as mentioned below.

Main varieties: *All In One* - self pollinating, soft shell, most popular garden variety.
IXL - paper shell.
Chellaston - soft shell, main commercial variety.
Johnsons Prolific - soft shell.

Some almond seedlings produce poisonous nuts so grafted trees are recommended. The main problems are birds that will feast on the maturing nuts hence netting may be needed whilst the main disease problem, shothole can be countered by spraying with a copper based spray such as Kocide at leaf fall and bud burst.

Hazelnuts (Filberts)

Hazelnuts are the easiest of all the nuts to grow. They are shallow rooted hence need plenty of moisture, a well composted soil and will benefit by mulching to prevent evaporation. Hazelnuts prefer a cold winter and moist summers. When planted they can be either pruned to form a free standing single trunked tree or a multi stemmed bush like tree. They can make an effective hedge or windbreak. In winter the golden yellow catkins of the male flowers make an attractive display.

Plant about 5m apart however unless you want a hedge remove suckers. Some growers place plastic around the trunk to restrict suckering. Most varieties do best if pruned to a single main trunk though the variety '*Wanliss Pride*' does best as a bush with 4-6 branches from the base.

Hazelnuts bear at 3-5 years although it is ESSENTIAL to have another variety to cross pollinate. Hazelnuts have separate male and female flowers that appear in winter before leaves form. The male flowers are long catkins while the female flowers are inconspicuous purple flowers formed at the base of these catkins. Flowers on the same bush will not necessarily open at the same time. They flower in winter, after which the fertilised eggs remain dormant until spring then grows into the kernel inside the nut. The green fleshy husk matures, browns and fall off the tree. Remove the husk, dry in the sun or a warm place. Nuts in shells store well but without shells should be stored in the fridge. The main varieties we sell cross pollinate each other, these are:

1. ***Wanliss Pride*** (syn. American White) - high yield, large nut.
2. ***Cosford***—vigorous tree, large nut.



Propagation is usually by suckers. The main pest problem is usually aphids which a pyrethrum spray will control. Disease problems are usually bacterial blight which scars leaf stalks and causes twig dieback, use of a copper spray such as Kocide will benefit.

Chestnuts

Really a tree for a large garden the European or Spanish Chestnut grows into a large stately tree which when mature can carry hundreds of kilograms of nuts. They can grow about 12m x 12m and are best suited to a cool climate. They thrive in deep loamy soils and as they flower later in spring, frosts are generally not a problem. A well composted, well drained soil is ideal.

Chestnuts unlike hazelnuts are partially self fertile but will be more productive if pollinated by another variety. Wind pollination is the main cross pollination method. Their separate male and female flowers open in November. The male flowers are on long yellow catkins the insignificant female flowers form at the base.

We sell 2 types of chestnuts, the seedling varieties which are from known good fruiting varieties and make fast growing attractive trees however their bearing qualities are still uncertain. The grafted varieties have been propagated from trees bearing large and good quality chestnuts. These are reliable and will bear earlier.

To roast chestnuts slit the outer skin casing on the flat side. Spread each chestnut flat side up on a lightly greased tray and cook in a hot oven for about 20 minutes. Test for tenderness by prodding with a knife through the slit.

Harvest in autumn when the nuts turn brown and the burr splits open and falls. Pick up the burr (containing 1-3 nuts), wash the nuts, soak in changed water for 24 hours then store in a ventilated plastic bag in the fridge. If they dry out they will shrivel and harden. They can be peeled by cutting through the skin, a few minutes in boiling water remove and peel while hot, they will freeze well. They can be used roasted, ground to flour in cakes or used in desserts.

The main pest problem are birds, parrots especially and possums. The main disease problem is collar rot (phytophthora) which can cause sudden wilting, good drainage is therefore essential.



Walnuts

These are very large long lived trees which when fully mature can grow to 16m with a spread of 35 metres. They have similar climatic requirements to apples so need cold winters and dry summers. Walnuts have long tap roots so need fertile soils to perform well and good drainage is absolutely essential.

Plant walnuts in winter into well prepared soil. The roots of the walnut exude a toxic substance which limits the planting near each tree.

The Greeks called the Walnut 'The Persian Tree' & described the nut as "Karyon", Kara meaning head, because it looked like the convolutions of the human brain.

Walnuts are partially self fertile but for reliable pollination and cropping two compatible varieties are needed. The male flowers are arranged in long catkins on last year's wood while the female flowers develop on new shoots. The flowers are wind borne and in some seasons pollen production and female flower opening may not coincide.

Our most popular varieties are **Wilson's Wonder**, an early bearing tree with large tasty nuts and the late flowering grafted **Franquette** variety.

Walnuts are enclosed in a fleshy green husk which splits when nuts mature. Shake the tree to dislodge the nuts. Wash them to remove the tannins which can stain then dry them in the sun for a few days turning often. The nuts are dry when the kernels become brittle. Nuts in the shell will keep in a dry place for a year or more, kernels must be refrigerated.

The main pest problems are birds whilst disease problems apart from root rot caused by waterlogged soils are the dreaded walnut blight which can cause black areas on leaves, shoots and young nuts, this may even shrivel the kernel and dieback may occur. Prevention is through spraying with a copper spray such as Kocide when the tree is dormant.