

Pruning Tip Bearing Apple Trees

What is a tip bearing apple?

Just when you thought you had the care of your apple trees all sorted out you learn that one of your trees is a tip bearing variety. This is where many of us just give up and go back to the supermarket, however understanding a few principals may lessen your worries.

Most apples produce fruit buds on two year old or older wood, called spurs. The stems of these buds are usually short, stubby and wrinkled. The majority of apple varieties belong to this spur bearing group.

Tip bearing apples fall into two groups. There are the "partial tip bearers" that bear their fruit spurs in the same way as regular spur bearing trees and also on the tips of their branches. Generally these are pruned in the same way as other spur bearing trees. The second group are the true tip bearers. These varieties produce fruit buds at the tip of slender shoots that grew last year. The fruit bud will be considerably larger and more swollen than a vegetative growth bud. It is not uncommon to find the odd spur on a tip bearing tree, but they tend to be sparse.

The growing habit and appearance of tip bearing apple trees tends towards the rather leggy and willow like, old unpruned trees congested with long whippy growth.

Winter pruning a tip bearing apple variety.

When pruning a tip bearing variety of apple, the general rules apply. As always the 3 Ds are observed – dead, diseased and damaged wood should be removed, a fourth D could be added – distance, overlapping and crowded branches are also removed.

Trees trained in "Central Leader" style should their leader pruned back every year. The central leader is the highest, most vertical branch of the tree. Generally it continues with the line of the trunk. After it has been identified and any competition with it has been removed, it is a good idea to head it back (shorten it) by anywhere from a half to two-thirds of annual growth. This will help to promote the growth of lateral (side or horizontal) branches. *A good rule is to cut vigorous growth less than week growth – remember, the more you cut the more it grows.*

Trees trained in open challis style need to have the inside of the challis kept clear annually for good air circulation and to help sunlight reach and ripen fruit. Whether central-leader or open challis, the remaining branches should be thinned for air circulation and light penetration. This should be familiar, where pruning tip bearing trees differs from spur bearing varieties is that attention must be paid to the young shoots that grew off the main branches last year. Those less than 9 inches in length can simply be left untouched to bear their fruit next year. The shoots longer than 9 inches can be shortened to 4 or 5 buds, these buds will develop shoots the following year and fruit the year after. The long term aim is to keep the tree within a useful (pick-able) size and as productive as possible.

The “Solen System” for tip bearing apple varieties

It is impossible to train a strictly tip bearing variety as a cordon – all the laterals would be shortened annually so removing the flowering buds but the Solen System offers a way to grow tip bearers in a controlled form -

If you are planting a young tree, there is a training system that lends itself well to tip bearers. The Solen System was developed by Mr J.M. Lespinasse at the INRA Fruit Breeding Station in Angers, France. It gives a tree of low domed appearance and tends to have bent drooping branches.

The young tree is left unpruned for the first 2 years after planting, then, 2 strong branches at 1.2m to 1.5m on the trunk are bent and tied onto wires. The rest of the wood on the tree is removed. This aggressive pruning will delay fruit production for another 2 years. But if a controlled form is required this system will prove worth the wait.

The 2 main branches are pruned each year to encourage new shoots and to thin the short fruitful shoots.

Summer Pruning

However you chose to grow your tip bearers they will benefit from summer pruning. The main aim is to permit more light to penetrate the tree and so allow the apples to colour and sweeten. Simply thin out vegetative growth that shades the maturing fruit – you will direct more of the trees energy into the maturing fruit rather than into producing vegetative growth. In the north, summer pruning is best done during the second half of August or into September. At that time there should be little or no re-growth.