



HYBRID SEEDS EXPLAINED

What is an F1 hybrid?

An F1 hybrid is a variety that has been produced by the carefully controlled cross breeding of two parent plants specially chosen for their different desirable qualities such as vigour, flower power, disease resistance, uniformity, crop yield, unique colour and so on.

Bringing together these parent plants transfers these qualities to their offspring combining them to produce superior plants. This involves a complicated and expensive breeding programme by means of controlled flower pollination, often done by hand. A process which has to be repeated each year to create consistent hybrids as it is not possible to simply harvest the seed from F1 varieties. The offspring of F1 hybrids often have less stable and more varied characteristics and may or may not show any of the F1 parents' desired attributes, these offspring are known as F2 Hybrids.

Because of the costly production methods F1 hybrid seed can be considerably more expensive than 'normal seed'. However it is usually the case that the extra cost is more than made up for by the significant improvement in the plants' characteristics. Professional growers tend to use only F1 seed for this very reason.

What is an F2 hybrid?

An F2 hybrid is the offspring from an F1 hybrid. As mentioned above, the seed produced by an F1 hybrid can result in a much greater variety in their offspring. Although this is undesirable in some cases such as vegetables where often the selected characteristic such as uniform, high yields are all important or flowers where a precise colour or form is sought after, in other instances as with flamboyant flower mixtures this diversity can provide a real benefit. F2 hybrids allow a greater diversity and can often produce unique colour combinations that would not be possible from F1 or normal varieties and yet have a good chance of retaining some of the desirable characteristics of the parent plant. This variation can also mean differences in the rates that flowers or fruits mature which can have the added benefit of extending the flowering season or harvest period.

What is an O/P or Open Pollinated plant?

Those plants of the same type that grow together and then pollinate each other by natural, more random means are said to be 'open pollinated'. Most often this job is performed by pollinating insects such as bees or by the wind. New open pollinated plant varieties are selected for the appropriate characteristics by breeders or by natural selection in the case of wildflowers.

Selections are made as flowers of an open pollinated variety will sometimes show an appealing natural mutation, the seeds of this mutation or 'rogue' are collected by breeders and grown to maturity. Those offspring that show the same mutations are then selected and their seed also grown on, this process is repeated in the hope the mutation becomes stable and all offspring eventually show the same appealing mutation. The result is a new open pollinated variety that will pollinate amongst itself by natural means. In the wild these selections are made by the improved survival rates of those plants best suited to their environments and the needs of pollinating insects.