

Gardening Articles for week ending 17th October 2015

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GOING TO SEED

Plants have one objective in life and that is to reproduce.

Reproduction is mostly done by seeding (spore in ferns) but can be also achieved through division, suckering, cloning, producing bulblets or pups.

The desire to reproduce is their strongest attribute which is one that can make gardening very difficult at times. (weeds, suckers, oxalis)

There are two basic forms of plants, one is called annuals because they germinate, grow, flower, seed and then die. The other type are perennials which live for a number of seasons or in the case of some trees thousands of years. There are inbetweens such as bi-annuals which for our purpose here we will not worry about them.

Perennials are fairly straight forward, they live, they flower, they produce seeds, they may produce off sets, suckers (new plants from their root system) all while they live for more than one season.

They can have their foliage removed and survive to generate more foliage unlike an annual plant which if their foliage is removed the root system dies.

It is the annuals that we are going to talk about because as far as I am aware they only reproduce naturally by seeding. (They can in some cases be grown from cuttings which in Nature if a bit of their foliage falls onto a suitable bit of dirt they could produce roots and become a clone of their parent plant.)

Annual plants are very aware of the current growing conditions and as far as I can figure they have a reasonable insight on what the conditions are likely to be in days to come.

Seeds will not germinate in Nature till the conditions are right which means temperatures in both soil and air along with adequate moisture.

If the temperatures are right in summer but its too dry to germinate nothing happens till the soil moistens up sufficiently. A day of rain changes the moisture level and the seeds laying dormant germinate (which includes weeds)

Two possible events may occur then; one is that further rain or your watering follows and the plants/weeds grow up tall and strong and when maturity is reached they produce flowers and seeds.

The other possibility is there is no more rain and the soil dries, the plant/weed has only grown a few inches and it will realise that it is becoming too dry and immediately mature, flower and set seed before it dies.

This is where you will see lots of baby weeds in dry areas flowering their hearts out to seed before

they wither in the dry conditions.

Their seed falls on to the dry dusty soil to wait for the next moist time to germinate and start the cycle all over again.

From this we learn that annual plants or ones we call weeds when they encounter stress or checks in their growing they will feel that their lives are threatened and go to seed. We call this 'Bolting' and you will see the term bolt resistant which means the particular species will tolerate a bit of stress before going to seed.

When it comes to non fruiting vegetable plants we want them to reach maturity without going to seed prematurely. So our cabbages, lettuce, silverbeet, celery etc will produce good plants to harvest and eat.

If left after maturity they will eventually go to seed.

What we don't want is the same plants to go to seed before they reach maturity.

Some vegetables are very prone to bolting unless the growing conditions are perfect from the time they germinate to the point of maturity. One such plant is Pak Choy which I have found easily bolts at the merest check of growth.

Thus we have the gardening problem of bolting. If we are growing our own seedlings for planting out and we nurture the plants from germination to planting out by giving them adequate direct sun light, sufficient moisture for sustained growth (not drowning them) and we prick them out without damaging the roots after 'hardening off' and provide the young plants with good growing conditions we have great success.

If we fall down and the plants get into stress then later on they will likely go to seed.

We call this a 'check' in their growth it could have been caused by becoming too dry, too hot, too cold, too soft and insufficient direct sun light.

When we buy vegetable seedlings we don't know if they have suffered stress or not during their short lives to date. The nursery that grew them don't usually make mistakes as it's their income that suffers if they do so. Instead they give the plants optimum growing conditions and then harden them off before transporting to a retailer.

Hardening off is very important; when grown in a glasshouse where every thing is controlled the foliage of the seedlings is soft and if shoved straight out into the real world they are likely to die or suffer stress.

To overcome this the seedlings are transferred to special houses where they are protected but gradually exposed to the elements. Alternative is to spray them with Vaporgard to protect the soft foliage and they can then be hardened up quickly.

When the seedlings reach a retail outlet they are often placed under cover where they can become soft again. Watering is a problem if they don't receive sufficient for their needs.

As the seedlings are bigger now and they have large root zones filling the cell pack or punnet they can dry out very quickly and may require watering more than once in a day. The chances of being stressed before they are planted out in your garden have increased. If the plants are indoors out of natural light or in bundles they are soft and stressed.

You plant them out and they lay down on the soil like left over road kill and they struggle to stay alive and grow. Then you wonder a few weeks later why they have gone to seed before they were ready to harvest.

Vegetable plants that produce fruit such as tomatoes and capsicums there are no problems as you want them to seed/fruit and as long as they have not got too old in the pots they will likely be fine.

With flower plants the bigger the better and no worries about whether they have been stressed or not.

When purchasing foliage type vegetables try to buy nice small young plants in cell packs (least root disturbance) so you can take them home and grow them on to plant out later.

A day before planting out spray the seedlings with Vaporgard over and under foliage this acts as a stress guard and reduces transplant shock, protects the plants from the elements and reduces moisture loss through foliage.

Instead of laying down you plants will sit up and start growing much quicker in their new situation.

If you place Crop Cover over them with hoops you will protect the plants from birds, cats, insects and the elements. They will grow just about twice as fast which means you will be enjoying your own home grown vegetables much sooner.

This allows you to re-plant and have more harvests during the growing season.