



BULB LOG 41.....11 October 2011



It is not just the growers who are attracted to the beautiful Crocus flowers: there are masses of flies of varying types around. I love to see these pollen laden insects moving from flower to flower pollinating the stigmas as they go. Successful pollination is essential for the production of seed which regular readers will know is my favourite way of growing bulbs.



Sowing seeds is among my tasks this week as I have just received a lovely present of some bulb seeds and there is no better time to sow them than now. Many of you know that I sow some at depth, that is at least half way down the pot, and others on the surface just covered with a centimeter or two of gravel but how do I choose? After much experimentation and observation of the actual seeds and the early germination process I have come to the conclusion that the best guide is how the seed is dispersed. Seed that is directly windblown such as *Fritillaria* or indirectly like the tumble weed action of many *Alliums* have evolved to be shed onto the surface and in the initial stages of germination they send a root downwards, towards the bottom of which the new bulb will start to form. This way the young bulb is planted and is not exposed to the greater extremes and variables of temperature and moisture at the surface. In subsequent years the young bulbs will continue their journey down into the soil until they find the optimum depth that provides the best growing conditions. Other bulbs that rely on insect activity for dispersal such as *Crocus* and *Narcissus* have evolved a different germination sequence in that the young bulb forms exactly beside the seed on the basis that an ant or other insect will have taken the seeds underground.



Muscari seedling bulbs

This is well illustrated by these *Muscari* seedling bulbs. Last year this pot produced some seed which I surface sowed back into the same pot as the parent bulbs and as you can see with the gravel layer tipped off the young bulbs sit on the surface right beside the now empty seed husk.

If we sow this type of seed on the surface the young bulb stays on the surface just protected by the layer of gravel for its entire first year and most of its second year of growth before it elongates and forms contractile roots to pull itself down into the soil. By sowing these seeds about 5cms deep the young bulbs form in a better environment and you get much better results. My experiments are not in any way exhaustive and have been limited to the types of bulbs that we grow but to date they all support my hypothesis that the best indicator of what depth to sow bulbs is to work out the method of distribution that seed type employs.

Interestingly you cannot rely wholly on genus, as the *Erythroniums* of Western North America are wind/ catapult dispersed and should be surface sown while those of Eastern America and Eurasia are ant distributed and are best sown at depth. One can speculate that such a significant evolutionary difference should indicate that these types diverged so long ago that splitting into two genera would be in order. There is so much still to learn and understand about bulbs.



Crocus longiflorus

While I am working in the bulb house sowing the seeds I am enjoying a wonderful strong honey scent given off by the pots of *Crocus longiflorus* which are responding to the rare warmth we are getting from the sun.



Many Crocus have lovely scents for us to enjoy but the main reason for this is to attract the insect pollinators. You would think that these striking colourful flowers would be sufficient to attract any passing insect but the plants are more determined than that producing such a glorious scent to attract insects that may be out of visual contact of the flowers.



***Crocus mathewii* 'Dream Dancer'**

A few weeks on from when the first flower opened, the others have now opened. Two flowers rise from a single sheath while each corm may produce two or more growth points each of which can produce flowers and leaves. With good growing conditions these additional growths should result in additional corms.



Crocus laevigatus

I cannot remember having this many *Crocus laevigatus* flowers out as early as this in recent years.



Ornithogalum leaves

While we all suffered losses to our bulbs last winter the positive view that we can bring to this is that we discover the plants that are more tolerant of our conditions. I was surprised that all the Ornithogalum species that we grow survived unscathed by being frozen on the aluminium tray that resulted in many of our losses. I would never have thought that these bulbs, many from Greece, would not only have survived but increased in size and numbers.



I have now applied the second storm giving a second thorough soaking to all the pots in the bulb houses plus I have watered the Fritillaria house for the first time, having admitted defeat and realized that I do not have time to replot them all this year.



I will remove the remains of last year's leaves and stems over the next few weeks to prevent them attracting rot and mildew and when the rapid spring growth appears I will watch to see if the leaves show any evidence of a lack of nitrogen and, if they do, that will be easily rectified by applying a dilute liquid feed.



Spider and daddy long legs

It is amazing how many small spiders get flushed out by the rush of water into the pot – they all survive as they climb up the label but this one was reluctant to desert its newly trapped prey as it fought to subdue it.



A red admiral butterfly attracted in by the scent of the Crocus perhaps is enjoying the warmth on its wings.



Corydalis flowers

Out of season flowers appear on many plants, like this Corydalis hybrid, when the season has been cool and wet through the summer.



Allium stems and Crocus speciosus

The tall stem of *Allium wallichii* capped by their slowly ripening seed heads tower above the *Crocus speciosus* flowers. Apart from one original clump where I planted out the seed pot of this *Allium* all the others are the result

of the plants self seeding with a little help from me to assist the distribution.



This planting is now almost in permanent shade and the resulting low light does not help keep the *Crocus* flowers short and compact so they need to grow up through dwarf shrubs to help support their floppy tubes.

Crocus speciosus



Autumn planting

At the other end of the garden the plants get more sun at least for short periods as it penetrates the tree and shrub canopies. You can see from the chewed leaves on the *Eucomis bicolor* that we have plenty of slugs and snails but

also notice how they leave the *Cyclamen* pretty well untouched.



I am also pleased to see that I am getting a few seed pods developing on the *Eucomis*.

Eucomis bicolor



Crocus hybrid

When the sun does shine enough to warm the air the garden Crocus also open their flowers and attract flies to feed on the nectar and pollen.



Fly