



BULB LOG 50.....10th December 2014





Ipheion 'Alberto Castillo'

Narcissus 'Cedric Morris'

This week's title page shows again the small group of Narcissus 'Cedric Morris' growing below our south facing kitchen wall. This is what I describe as the hottest driest bed in our garden but that is relative to our climate – others may consider it neither hot nor dry.

Ipheion 'Alberto Castillo' also grows in this bed where the leaves can appear very early – often by late August – surviving everything our winters bring. We have had this plant growing in various locations around the garden for twenty or more years.



Ipheion 'Froyle Mill'

Under the protection of the bulb house Ipheions are among the bulbs that produce sporadic flowers at almost any time of the year with a peak flowering around May in our garden. Ipheion 'Froyle Mill' is one of the cultivars that we originally acquired and since then we have raised many seedlings both intentional crosses as well as found self-sown seedlings which often appear in adjacent pots.



The plunge of 7cms pots has lots of leaf growth, mostly from Crocus and Narcissus, some of these are also in bud. Watering at this time of year is a matter of careful judgment - none of the pots should be allowed to dry out completely – even if there are no leaves there will be root growth below so sufficient moisture must be available to support the growth.



In the frit house **Tropaeolum azureum** is exploring a pot of **Ipheion** seedlings – both are in active growth and should not be allowed to dry out.



Tropaeolum tricolorum is growing in the other corner of the frit house - the plan is that the pots with the tropaeolums are in opposite corners at the south end of the bulb houses where they can grow up towards the light without encroaching on other plants.



Bulb House



Crocus laevigatus

Crocus laevigatus continues to delight us by opening new flowers whenever the weather warms enough to encourage them. In the last week we have had some cold frosty days when we actually saw the sunshine - it just rises enough in the sky to hit the bulb house for a few hours lifting the temperature enough to open the crocus flowers. Over the last few months our weather has been fairly miserable for both us and the bulbs being very dark cloudy and wet. The air has been so loaded with moisture that instead of the plants leaves losing moisture by transpiring water is being deposited on them from the atmosphere. I cannot remember a year when I have not



watered the bulbs for so long at this time of year – basically the majority have not been watered since the beginning of October. I have only watered a very few pots with leaves, where the top dressing appeared to have dried out completely.

The main problem has been too much moisture - when the air is so wet water does not evaporate or get used up by the plants and grey mould becomes a major issue. Even the remains of the spathe that protects the Crocus shoots is coming under attack so we need to be very vigilant in checking all the pots. The only solution is to carefully remove as much of the infected tissue as possible.

Being a good grower is all about careful observation, correct interpretation and appropriate reaction - applying these

three basic principles will also mean you are continually learning.



On checking the seed pots outside I noticed some germination occurring such as this **Crocus baytopiorum** seed sown deep in February. Firstly I notice how the degradation of the leaf mould content of the compost has caused the level to fall, also the liverwort growth needs addressing. Because I sow Crocus seeds deeply it is easy to remove the layer of liverwort and top dress the pot, this is not so easy for seeds that are surface sown as you can easily remove any ungerminated seeds with the liverwort. Crocus seeds come up with a pointed tip, meaning they can easily push through the layer of liverwort – this got me thinking.



The pot of **Ornithogalum** seedlings, which were chewed by slugs, is growing nicely and should not suffer any long term setback but what I am now focusing on is the way the seed germinated. Those who have followed my writings will know that I take my guidance, on whether to sow bulb seed deep or on the surface, from the seed distribution strategy adopted by the plant. Seeds that are wind or mechanically distributed, such as Ornithogalum, are sown on the surface and those with elaiosomes, to attract insects, are sown deeply however there is another characteristic that I have until now not linked and it is visible in these last two pictures.



Crocus seedling

Another pot of Crocus seeds germinating shows how the young leaf uses its pointed end to push up through the ground with relative ease.



Allium seedling

Allium seed is surface sown, being mechanically distributed, and here is where it finally clicked in my mind that a feature I have observed many times has a common link to how the seed is distributed, where the seed would end up and so what depth I should sow it at. Notice how the new shoot of these seeds(like the Ornithogalum) come through the ground bent over so it is the blunt top of the bend that has to push through making it difficult to push through anything offering much resistance.



Early in my seed sowing experiments my instinct was that because Erythronium bulbs seem to take themselves to great depth the seeds would be best sown deep, however my further trials led me to understand the link to the seed distribution strategies and so I realised that the Western North American species, which are mechanically distributed, should be surface sown. However the seeds of the Eastern American and the Eurasian Erythronium all have elaiosomes and so my inclination is to sow them deeply. I have over tens of years conducted many trials to check this hypothesis such as the one done last year with *Erythronium sibiricum* shown above. The seed in the large pot on the left was surface sown and germinated well – I sowed the seed deeply in the other pot and like all my other trials I got no signs of germination.



***Erythronium sibiricum* seedlings**

The failure of the deeply sown seed to germinate has puzzled me for years challenging my hypothesis- I had failed to take into account that all Erythronium seedlings come through the ground bent over, shepherd's crook fashion, and not pointed end up. In May this year I tipped out the pot, with no signs of growth, containing the deeply sown seeds and did find some seed had germinated but because of the way the new growth is bent over the blunt edge was unable to push its way to the surface. This confirmed what I have been thinking for some time that we need to take both the method of seed distribution along with the way the seed germinates into account to decide how deep in the compost we should sow the seeds. All Erythroniums should be surface sown for best results.



Narcissus in bulb house



The flowers of all the *Bulbocodium* group of *Narcissus* continue to grow and expand after they emerge, I am completely fascinated how like an umbrella they unfurl and grow from a tight bundle to such an exquisite form – often changing colour as they go.



I have been aware I have a problem with something chewing at some of the Narcissus flowers so I have been extra vigilant in my inspections in search of the culprit.



My observations paid off as I found some tiny recently hatched baby snails hoping to grow big on my bulbs – this will not happen. As well as the chewing damage, snails, like aphids, can transfer any virus present between plants.



This flower has two problems the most obvious being the snail damage but also note the dark colour on the anthers.



Controlling the snails will be relatively easy but the cold and very damp air that is causing the pollen to rot on the anthers is something I have to accept to some degree. I do have fans but as long as the atmosphere is so wet there is no dry air to blow around.



Narcissus 'Craigton Chorister'

Even 'Craigton Chorister' has suffered from being chewed and from rot on the anthers.



Two mixed Narcissus seedlings, that have self-sown into a pot of Colchicum, show some of the range of colours from the deep yellows through pale yellow all the way to pure white.



Opening buds are often darker in colour the yellow fades out as the flower opens.



Two more *Narcissus romieuxii* seedlings to conclude this week's log.....