



BULB LOG 26 27th June 2012



Narcissus cyclamineus seed ↓

↑Nomocharis



Bulb log 26 shows me we are half way through the year already and we are still waiting for some nice warm weather. We are having the wettest June on record which has been great for many plants such as the Rhododendrons which are growing and enjoying the plentiful supply of moisture but it is not so good for those plants who want warm sunny days for their flowers to open. Fortunately Nomocharis are well used to growing in a wet environment and have developed downward-facing flowers that act like an umbrella to protect the reproductive parts. The unusual angle that I took the Nomocharis picture from may have you twisting your head to check the orientation. I took it by holding my compact below the flowers looking up into the Sorbus tree - as my compact does not have a flip out screen it took me two shots to get the framing correct – I love digital

cameras. I noticed that there were some nice ripe seed pods on the Narcissus cyclamineus which I harvested and sowed immediately as this is one of the species of Narcissus that prefer a moist summer so the seeds do not dry out completely. The white appendages on the seeds remind me that they are best sown at some depth in the pot.



Ipheion seedlings

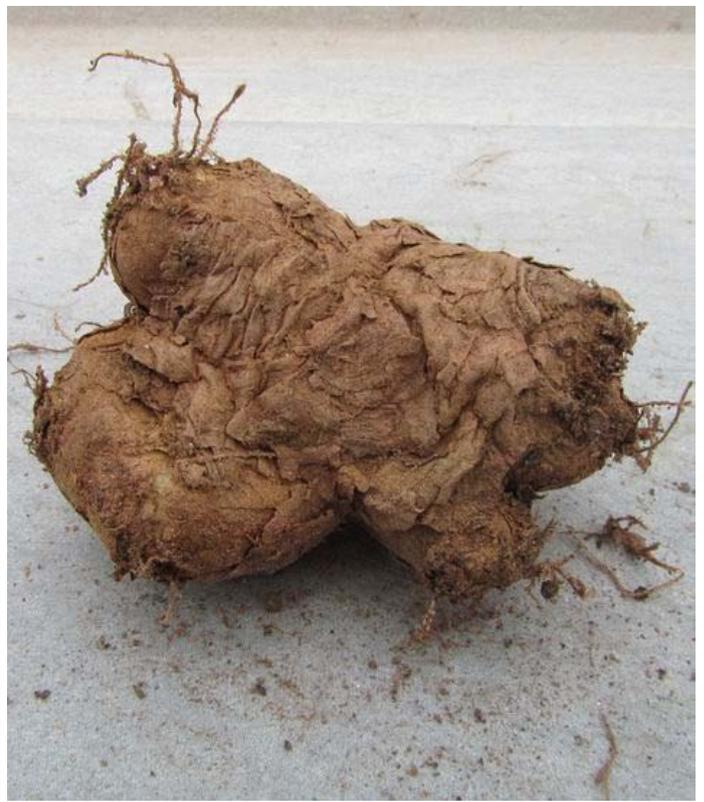
I determine whether to sow bulb seeds on the surface or deep by understanding the method that they have evolved to distribute the seed. Wind or mechanically distributed seeds have evolved to fall on the surface where they germinate by sending a 'root' down into the ground and the young bulb will form towards the bottom a number of centimetres below the surface. However in those seeds like the Narcissus above (that have evolved to be distributed by insects which take them underground) the young bulb forms right beside where the seed lies. So if instead of being sown deep it is sown on the surface it will stay there for the first year until the young bulb starts a slow



descent down into the ground starting in its second season of growth. This can be clearly seen in the picture above where I found a number of Ipheion seedling bulbs lying on the soil surface after I tipped of the thin layer of gravel. These are self sown seeds that must have dropped from a nearby pot into this pot of Narcissus last year.

With so many pots of bulbs to work on some do not get re-potted for a number of years and I often find surprises like the Ipheion above or this Tropaeolum tuber on the left, again self-sown into a pot of Narcissus. Earlier in the year the weather was so poor when many of the bulbs were flowering that I predicted it would be a poor year for seed and I can now confirm that. A few whose flowering period and seed set coincided with one of the few fine weather windows we had have set seed but the largest majority never achieved fertilisation. I always like to find the positive in any situation

and bulbs that do not set seed go dormant some 4-6 weeks earlier than those with seed. So that fact allied with the week of warm weather we did have in late May meant that most of our bulbs went dormant early this year. The positive part is that I can start to repot much earlier this year.



top

Corydalis oppositifolia subsp. kurdica tuber

bottom

I have always been fascinated at some of the extraordinary structures formed by bulbs, corms and tubers and none more so than this one, shown from the top and bottom.



I have grown this tuber of *Corydalis oppositifolia* subsp. *kurdica* for a very long time and it is only now that it is ready to split into two. I carefully peeled off the old tunics and found that it was almost ready to split into two and as I laid it down it did split apart. You can see that the two tubers both indicate how they will eventually split again. Before replanting them I dusted the split surfaces with some sulphur to discourage any rot.



Crocus serotinus subsp. salzmannii corms



Crocus serotinus subsp. salzmannii corms cleaned

Whether you leave the old corm tunics on to build up over the years or you remove them is an interesting question. The different types of tunics are important diagnostic tools for the taxonomists and have evolved in response to conditions in their natural habitat. Most likely they help protect the corms from excessive drying out in hot dry summers and insulate from the cold in winters among other things. In cultivation they can cause problems such as holding too much moisture in our cool wet summers so I tend to clean off the loose tunics by gently rubbing the corms between my hands.



Crocus laevigatus corms



Crocus laevigatus corms

Crocus laevigatus is among my favourites and I have several pots of it all raised from seed. I love the characteristic jagged shape to the bottom of the brittle papery tunics. Even after removing the loose tunic the corm is well protected by the most recent layer(s).



Crocus laevigatus corms

Removing the tunics also reveals problems - as you will see above all these were in the same pot and it was only when I rubbed them between my hands to clean them that I discovered that there were issues with some of the corms.



Sick Crocus laevigatus corms

When I find problems with the bulbs I always try and work out what may have gone wrong and when it happened - in this case these are old corms that did not grow last year.

The dark pits of rot may be the cause or may be a secondary infection so I can only speculate what went wrong here. As the majority of the corms in this pot were perfectly healthy I can assume that it is the genetic variation that caused these corms to suffer under some growing condition. Some possible explanations are they were too wet during last summer's dormancy allowing rot to attack the corm base or a sudden cold spell last autumn killed off the young roots. The truth is I may never know but what this does illustrate well is the advantage of growing from seed. If this was a pot of a single clone then I would have lost them all but because it was a batch of seedlings the majority of which were genetically geared to cope with our growing conditions, all is not lost.



Crocus goulimyi corms

Another thing we can learn when repotting our bulbs is very evident in this group of *Crocus goulimyi* seedlings.

The fat contractile root indicates that they are trying to take themselves down as they are not planted deep enough.

I made sure that they were planted deeper in the pot, the standard size of plant label indicates how deep down I have placed them.



Crocus kotschyanus corms

Ideally I would like to completely repot all my bulbs every year but time does not allow for that. When I tipped off the top layers of compost in this pot I could see that the corms were all perfectly healthy and growing well so I did not disturb them any more just adding a pinch of bone meal before I replaced the compost and gravel top dressing.



Crocus niveus corms

Some crocus form lots of tiny cormlets, you can see them in the previous picture of Crocus kotschyanus, others make reasonable sized offsets like Crocus niveus above – all of course are welcome but my favourite is still seed.



Crocus cancellatus

The beautiful netted tunic of *Crocus cancellatus* with the remains of the old corm removed from the base.



Tecophilaea cyanocrocus corms

It is easy to see why *Tecophilaea* got the name *cyanocrocus* both for the shape of the blue flower but also the similarity in the corms. These also get the same clean up treatment before they are replanted.



Tecophilaea cyanocrocus corms

The three elongated corms on the right indicate they want to be planted deeper - note also the remains of a contractile root, while the left hand three normal shaped corms have grown at a suitable depth.



Repotted Tecophilaea corms showing depth of planting



It may seem strange to see *Tecophilaea* in full flower now but these are corms that came from the southern hemisphere a few months ago, donated by a generous forumist to raise funds for the SRGC. Thanks, Bill! While a lot were auctioned off, some people were not keen on having to grow them out of season so I am growing them on and will offer them again in the autumn as dormant corms. The method now they are in flower is to feed them with extra potassium and keep the growing for as long as possible – this requires keeping them cool – not a problem in Aberdeen! The flowers are slightly chewed and battered by the weather. Heat will send them into dormancy.





I will finish off this week with another few pictures of *Nomocharis* flowers.

