

Frost damage to Crocus

I said during our big freeze that it could be a number of weeks before I discovered if there was any lasting damage after the temperature dipped to -14C and the pots were frozen for over a week. Well here are the first casualties.



I first noticed the tips of these **Crocus hadriaticus** leaves turning yellow then brown; these are classic signs that something is wrong below ground. My worst fears were realised when I gave the leaves a gentle tug and they came away in my hand.



Base of leaves

Problems at the root can also cause this yellowing of the leaves but then the leaves remain firmly attached to the corm, so when they came away like this I knew that the corms had been killed by the frost.



Crocus hadriaticus corms

The plant in question is *Crocus hadriaticus* which had flowered very well in the autumn and it was growing strongly. I decided to go into the pot to see what could be saved as a few of the leaves resisted my tug - indication that they might be healthy. The outside two corms above are indeed still growing well while the middle one shows that the corm has been killed completely turning to a black mush. I have carefully replanted the healthy corms and hope that they will continue to grow. Interestingly the corms that survived were planted towards the outside edges of the pot and I do not know if this was beneficial to their survival or of if it is due to genetic variation giving different seedlings varying degrees of tolerance to freezing or a combination of many factors.



Crocus cambessedesii leaves

Less surprising as a casualty of the freezing is the Mallorcan Crocus cambessedesii which I am sure would never experience having its corms frozen in this way in the wild. I am sure that I have now completely lost this beautiful species which is one of my favourite autumn flowering Crocus and as it has never set seed for me I will have to seek out some seed to sow.



Crocus michelsonii

This lesson of how quickly we can lose a pot of bulbs is a good reminder of the importance of continually pollinating your plants in an attempt to keep a steady supply of seeds coming along – especially with plants like this rare and beautiful Crocus michelsonii.



Crocus michelsonii

We did have some brief spells of sunshine on Tuesday 9th and as the sun is now climbing off the horizon it warmed the air in the glasshouses enough to entice the Crocus flowers to display. I kept the doors closed after I had transferred the pollen to hold the temperature longer in the hope that the pollen would grow down the stigma tube and fertilise the seeds. When the flowers continue to develop like this it is a good sign that these corms have not suffered any damage from the freezing conditions.



Crocus michelsonii

Crocus michelsonii is among the most beautifully coloured Crocus species which rightly makes it so sought after. This picture looking up at the flowers shows the striking colour combination of the dark blue tube and the speckling up the outside of the floral segments.



Crocus biflorus issauricus

It is not just the rarities that are beautiful and desirable - this pot of *Crocus biflorus issauricus* shows plenty of the beauty that make all *Crocus* desirable and how lucky we are that some of them are readily available.



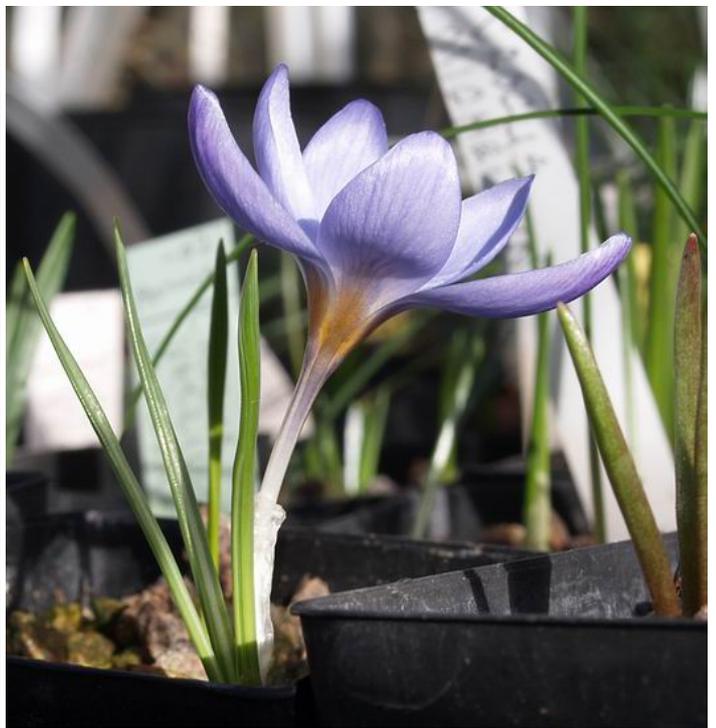
Sunshine



Shade

Crocus biflorus issauricus

The marvel of the human eye in conjunction with our brains continually compensates for the colour of the light that we see objects in so unless we really concentrate we are not aware how the colour of the same plant varies under different light until we see pictures to compare. The picture, above left, was taken in full sun and I moved to cast my shadow and shade the right hand one. It is very obvious to see the red cast coming through in the sunlight but our eye sees the bluer colour of the shaded picture which is the more accurate.



Crocus sp.

I was sent the seed of this *Crocus* a few years ago as just an unidentified species now it has its first flower it looks very like a *Crocus biflorus* to me – I must attempt to key it out.



Crocus fleischeri

It is no wonder that we get so excited about the Genus of *Crocus* with so many beautiful and dramatic colour combinations that they display. There is something very striking and elegant about the orange-red much branched style rising above the golden yellow pollen all enclosed by the pure white petals of *Crocus fleischeri* and just to add to its charms the reverse of the petals have varying degrees of deep purple feathering that runs all the way down the tube. I placed a sheet of grey paper behind this pot to both isolate it from the clutter and to neutralise the colours of the background.



Crocus fleischeri

Here is basically the same picture without the grey background ; both pictures show how important simple changes to the way the light falls on the flowers we are photographing can dramatically change the look of the picture. It is after all, not the flower that we see but the light that reflects off of it.



Crocus baytopiorum

Blues are often the most fugitive and difficult to capture photographically but not this stunning shade of porcelain blue of Crocus baytopiorum. It does not seem to matter what temperature of light it is bathed in, the colour always comes out true in photographs.



Crocus danfordiae

I have never managed to keep *Crocus danfordiae* going for very long I do not know if it is how I am trying to grow them or if they are just a short lived species – I would be interested to hear your experiences. I now have a few pots of seed raised corms, all are yellow, that have flowered for the last few years but never seem to bulk up.



Prop House

A section of the plunge in the Prop. house shows a number of *Narcissus* and *Crocus* species growing happily side by side in what used to be my mist propagation unit – hence the reason I call this the Prop. house even though it has now been taken over by bulbs.

As long as I see their flower stems and leaves actually growing I am fairly confident that the bulbs have not been damaged by the recent freezing conditions.



Narcissus albidus kesticus SF10

And now for a beautiful Narcissus that I received many years ago under the name *Narcissus albidus kesticus* SF10. It is pure white very similar to *N. cantabricus* with the distinguishing feature of strong green tips to the petals which sometimes extends as a line running down the back of the tube. The more that I look into the naming of these wonderful plants the more confused I get – there is a definite need for an updated book for growers giving us a guide to the latest taxonomic position.



Narcissus seedling

I will not even attempt to put a botanical name on this self sown seedling that I recovered from our sand plunge a number of years ago. It is a very attractive compact flowering plant with upward facing almost white flowers and as it was open pollinated and I discovered it growing in the plunge I do not know what either of its parents are.



Galanthus 'Mighty Atom'

Showing you this pot of Galanthus 'Mighty Atom' growing in among the Narcissus and Cyclamen in the Prop. house may damage my reputation regarding Snow Drops. I do not grow many in pots most are put straight into the garden but I was given a single bulb of this some years ago and have grown a few in a pot ever since then.



Eranthis hyemalis

Out in the garden we are reminded that despite this being the coldest winter we have had for 60 years or so the early flowering species such as Eranthis hyemalis are coming into growth now and they respond very quickly. As a bulb grower I enjoy flowers all the year round but I have to admit that seeing these new shoots and flowers emerging through the semi frozen ground of the open garden make this a very magical season.



Eranthis hyemalis seed germinating

I started this week's bulb log with a sad story of the death of some of my Crocus caused by the freezing conditions but the disappointment is short lived when I see these self sown seedlings of Eranthis hyemalis starting out on their new life in our garden. You have to be philosophical when growing plants as there will be losses along the way but as long as you know the reason why they died and you learn that lesson then all is not lost. I do understand the lesson regarding trying to grow plants that are not fully hardy, such as Crocus cambessedessii, without giving them frost free conditions but I cannot afford to heat the glasshouses beyond the

simple soil warming cable that I have installed but I will continue to take that risk. The fact is that hopefully this is an exceptional winter and many plants will survive and give us pleasure in gardens over a number of years until that once every ten year winter comes along to test their hardiness – and our resolve!



I forgot last week to give you the identity of the mystery seed question I ended bulb log 4 with.

These seeds are so unusual for the genus that I was confident that no one would get their identity.

Paul Cumbleton, author of the Wisley Log, correctly identified them as *Fritillaria* seeds of some of the unusual Japanese species: in this case they are **Fritillaria ayakaona** seeds.