



BULB LOG 40.....7th October 2009



Bulb house

The first thing that I did when we returned from the SRGC Discussion Weekend was to go and look at the bulbs. It is incredible the change that has occurred over the four days we have been away enjoying ourselves.



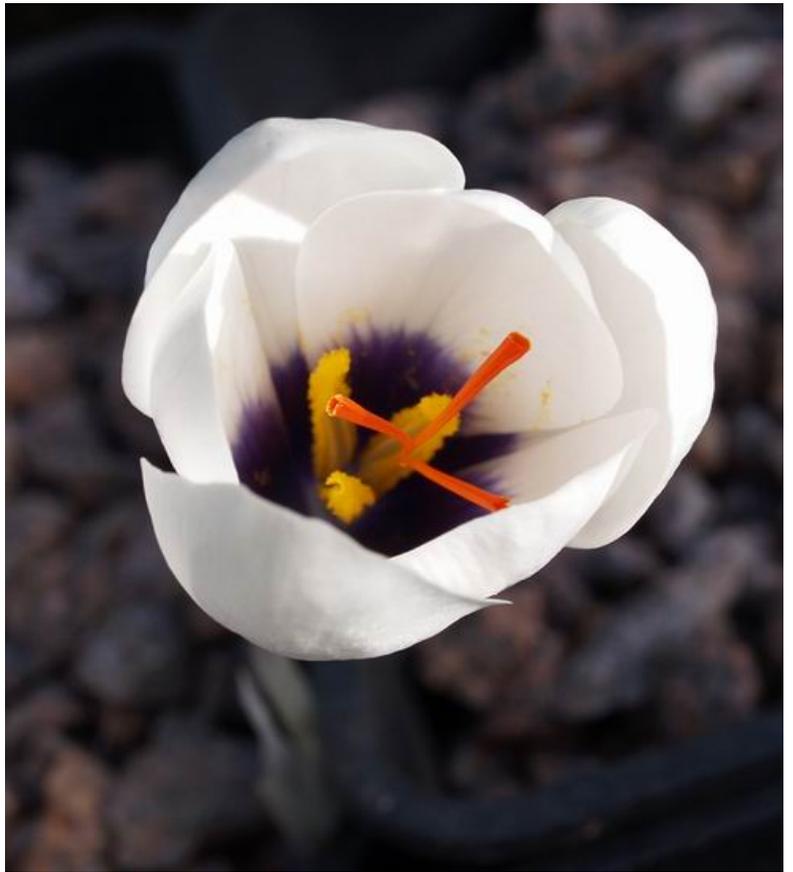
Crocus pallasii

There were no signs of growth in his pot of *Crocus pallasii* before we left and now many of the flowers have bloomed and faded.



Crocus asumaniae

A pot of *Crocus asumaniae* seedlings has a lone flower in it. I hope that more flowers may appear in the next few weeks or perhaps only one corm has reached flowering size this year and I will just have to be patient.



Crocus mathewii

The first flower has appeared from a pot of *Crocus mathewii* seed sown in September 2004. The seed was from my own plants which I originally got from the great man himself many years ago. I am pleased to see that it has retained the large area of deep purple in the throat. This species is very closely related to *C. asumaniae* above and I have tried pollinating *C. asumaniae* with pollen from *C. mathewii*.



Crocus serotinus salzmannii and Crocus hadriaticus

One of the long list of good reasons to grow Crocus is that the majority of them will produce a second flowering from the same corm. This is part of the plants' survival adaptation so that if the first flower appears in unfavourable conditions and fails to be fertilised, a second one will appear about two weeks later in the hope of finding better conditions. The second flowering is not conditional on the failure of the first one to get fertilised and will be produced whatever and if the conditions are good, both flowers will produce full seed pods in the spring. If you think you have seen this picture before, you are wrong, but I showed a very similar one of the first flowers from these two species taken on the 26th September in last week's bulb log. Look carefully above and you will see the shrivelled remains of the previous flowers lying on the gravel.



Prop house

This is a view across the 7cm pots in what was my mist unit in the propagation house which has now been taken over by bulbs. My mist unit is now on the ground level below this plunge. In the far left hand corner you can see the pots of *Crocus serotinus salzmannii* and *hadriaticus* pictured above.



Crocus niveus

When we first started growing bulbs and showing them on the SRGC show benches my aim was to beat the competition by getting as big a potful as possible in perfect condition to entice the Judges to give us the first prize.



Crocus niveus

I enjoyed showing for a number of years and hope to one day put further plants on the show benches but the competition that I enjoy now is with nature; where I am trying to grow as many species and forms as I can in our climate and growing conditions. This means that I am now perfectly happy with a 7cm pot of bulbs which to my eye looks absolutely fine but would look rather insignificant on the show bench. Using small square pots allows me to have many more pots in the same amount of space.



Crocus caspius

As well as variation in colour and shape when you raise plants from seed you will get a variation in when they flower. This is the earliest flower I have had on *Crocus caspius* which may be partly due to the seasonal weather conditions and partly due to natural variation in flowering time of different seedlings. Previously my stock of *Crocus caspius* had been increased from a single clone and they all flowered at the same time which, if you are growing for showing, means having all the bulbs in the pot flowering together is desirable. As I now want variation I do not mind if they flower one by one, days or even weeks apart.



Crocus cambessedesii

I am starting to suspect that the early flowering is something to do with the seasonal conditions because this is also the earliest that I remember *Crocus cambessedesii*.



Crocus kotschyanus

Difference in size is another variation found in pots of seedlings and you will see the much shorter form of *Crocus kotschyanus* at the front left of the group shown above.



Crocus pulchellus

Even though many of these *Crocus* grow perfectly well outside in the garden I still like to have a selection of them under glass where I can enjoy their flowers unhindered by the extremes of weather we get. In the few days we have been away Aberdeen was battered by gale force winds that did a lot of damage to buildings as well as blowing trees over, fortunately the only damage we have discovered so far is a small branch broken off a birch tree.



Crocus pulchellus albus

Above you will see the true *Crocus pulchellus albus* which is a daintier flower than the larger flower shown below which is so often sold in the trade as *C. pulchellus albus* but is in fact a hybrid involving *Crocus pulchellus* and *C. speciosus*.



Crocus pulchellus albus hort.

None-the-less this hybrid *Crocus* is an excellent plant for the garden or a pot.



Crocus speciosus

It is important to keep checking the identity of your bulbs every year especially the first time they flower for you. I picked these up at a bulb exchange labelled as *C. fleischerii* but obviously they are *Crocus speciosus* which I have now marked on the label. It could be that there are more than one type in the pot which I will watch for through the flowering season and then I will change the label appropriately when I replot them next year.



Crocus serotinus* ssp *salzmannii



Sternbergia sicula

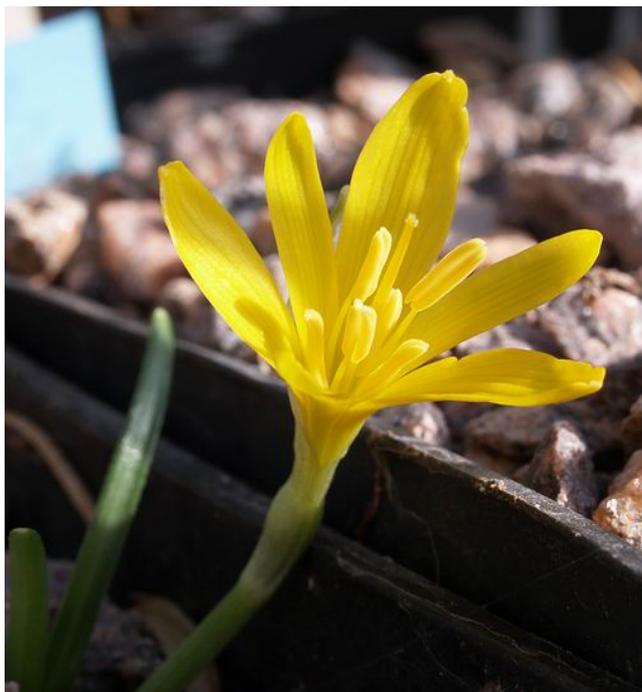
I want to return to the confusion in the names of Sternbergia between *S. lutea*, *sicula* and *greuteriana*. I have read the excellent paper ‘A morphometric study of species delimitation in *Sternbergia lutea* and its allies *S. sicula* and *S.*



greuteriana’ by Paul Gage and Paul Wilkin which merges the three species under *S. lutea* but I cannot accept its findings completely. The study is primarily based on morphology, the physical features of the plants, and is mostly based on herbarium specimen sheets which in my view is flawed or at least limited to the characteristics that survive the drying and pressing of the herbarium specimens. I mentioned in a recent bulb log that while I can accept that *Sternbergia sicula* can be seen as a variety or sub species of *S. lutea* I cannot accept that *S. greuteriana* is not a valid species. The *S. sicula* form above differs from some of the previous forms I showed in having a shorter more open faced flower that normally appears before the main leaf growth.

I can see that both these forms could be considered to be just variations within *S. lutea*. I think that further confusion has arisen by wrongly named plants in cultivation like the one below that I received as small bulbs a few years ago under the name of *S. greuteriana* – which it is not. I have called it *S. greuteriana* “Hort” for now.

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Sternbergia sicula greuteriana “Hort”

I can see no significant difference between this and the form of *S. sicula* I showed above except it has a slightly shorter stem.



Sternbergia greuteriana

This is where I now disagree with the above study as I see many differences in the appearance of the plant, shown left, that I understand as the true *S. greuteriana* as opposed to the horticultural form that seems to have been distributed.

One being that the stamens are long and held widely apart. Not being a trained taxonomist I find it difficult to put into words the exact features that make this flower appear substantially different to me.

To support my argument I will show the pictures below of *S. sicula* on the left and *S. greuteriana* on the right taken last night after dark when the temperature was around 4C. What do you notice?



Sternbergia sicula and *S. greuteriana*

Once the flowers of *S. greuteriana* have opened they **remain** open unlike those of *S. sicula* and *S. lutea* which close as the temperature and light levels drop. This is one of many important features that are lost in herbarium specimens. My own observations are not without limitation as I have to presume that the plant on the right is *S. greuteriana* and not some other species plus all my observations are from plants in cultivation and there is no question in my mind that the best way to sort out plants is by observation of the population in the wild.

Furthermore I have often speculated that if *S. lutea* and *S. greuteriana* shared a habitat somewhere and hybrids between the two species were possible then might they not look exactly like the plant we know as *S. sicula*? If you then looked at the variation of these plants you would expect to see a group of flowers from the two extremes of the larger *S. lutea* to the smaller *S. greuteriana* with the hybrids showing all the possible variations in-between, leading you to believe that they were all one polymorphic species.

To read more discussion on this topic visit the Sternbergia pages on the forum.