



BULB LOG 33.....13th August 2014



Gardening by its very nature is cyclical but it is not repetitive - every season brings variation. Every year in our gardens some plants will die while others thrive, plants grow, spreading into and competing with each other highlighting the impatient nature of the gardener in planting too many too close in the first place. These variations are what keep us hooked on gardening and plants and, to a degree, in tune with nature. I have never seen so many seeds on the Acers in our garden before –*Acer griseum* is hanging heavy with seed which is set off beautifully by the silver backed leaves, in the picture below.

Acer griseum



Now anyone who has tried to grow this *Acer* from seed will know that a large proportion of the seed that we get is infertile – so I cut some of the seed cases open - some were empty but others did contain a small pea-like seed – I will sow some to check their viability.



The reason we are seeing so many seeds on trees and shrubs this year is because they flowered so well in the spring and the reason they flowered so well is because we had a warm summer last year that allowed the wood to ripen fully, forming flower buds. Of course there are many more factors to getting viable seeds; most importantly the weather at flowering time has to suit the pollinator - also to allow the pollen to ripen then grow to fertilise the seeds. When you think about it each plant just needs one seed to grow successfully in its lifetime to maintain its population, two successes would see the population double. Plants face many hazards to survive and have evolved successfully over thousands of years and one of their strategies for survival is to produce masses of seeds.



Corydalis mucronipetala

Seed of *Corydalis mucronipetala* sown in February this year has germinated well – the first to germinate producing the most advanced plant. *Corydalis* seed has a reputation for losing its viability if not sown fresh – this seed was stored in damp sand showing us that if we store it carefully, so the brittle seeds are not crushed, and keep it moist we can expect a good germination.



Narcissus watieri first year seedling bulbs

Another success from the same seed source and also sown in February this year is *Narcissus watieri*. I did soak this seed over night before sowing and have 100% germination. I do not know why four of the seedlings have no brown tunic – it may be those were the last to germinate and so did not grow for long enough or if other factors are involved. I do know that I will be lucky to grow all 10 bulbs to maturity – each will be genetically adapted to have different tolerances to environmental factors primarily temperature and moisture levels some will undoubtedly die - the survivors will be those that can best stand the cooler moister growing conditions that we get in the bulb house.



Sternbergia sicula bulbs

In January I showed the picture below where as well as the mature leaves and fat seed pods of *Sternbergia sicula* you also see the slim first leaves of seeds that I had sown back into the pot when I repotted the parent bulbs last summer – above you see the results - as well as the mature bulbs I also have 14 seedling bulbs.



I will grow these young seedlings with the parent bulbs for another year but I will sow the seed from the two pods above into a separate seed pot this year.



Sternbergia sicula bulbs

Sternbergia sicula bulbs also increase by division where new buds emerge from the base as can be seen on the bulb above left – the bulb on the right shows how they will look one year on. These new divisions will take around three growing seasons to reach flowering size.

Sternbergia sicula bulbs

If the small side bulbs come away easily I will separate them so they can be better spaced around the pot, if not I plant them together.

Here is another pot of bulbs with side bulbs removed ready of potting.

Keen eyed readers may have spotted that flower shoots are already growing from the top of some of the bulbs. There are also the early signs of root growth around the bases.





Calochortus uniflorus bulbils

Some types of bulbs can produce bulbils on other parts of the plants such as these bulbils that form on the stems of *Calochortus uniflorus*.



Corydalis maracandica tuber

Corydalis maracandica forms a large single tuber with multiple growth points as shown above, sometimes small tubers can break off and become independent.



Corydalis maracandica tuber

After a number of years these extraordinary structures will split into groups of tubers as has now happened with this one.



Corydalis oppositifolia subsp. kurdica tubers

For many years this Corydalis oppositifolia subsp. kurdica remained a single tuber: this year it has split into two - you can clearly see where the division occurred. In theory you could cut these tubers up so long as each section had a growth bud but you will stand a high risk of losing the tubers to rot so I remain patient and leave them to split naturally.



Crocus caspius seed

Every year I only find the *Crocus caspius* seed when I go to replot the corms and tip the gravel off the surface – they have never been pushed above the ground by the stem.



Amana edulis

Amana edulis is a fascinating plant to me as it is one of the closest relatives to *Erythronium*. Sometimes it is included in *Tulipa* and indeed the hairy tuniced bulbs are more similar to that genus than they are to *Erythronium* bulbs



Allium yosemitense bulbs

Here are some Allium yosemitense (correct spelling not as on my original label in the picture) bulbs as I start to build pictures of allium bulbs at different stages of growth so I can try and understand their growth better – these do not have the grooved side where the stem was, as I showed in Allium kurtzianum last week.



Asphodelus acaulis – when is a bulb a bulb?



Narcissus bulbs with early root growth.

I have discussed before that I believe that it is a temperature gradient that stimulates the first signs of root growth in many bulbs – I am finding many Narcissus and other bulbs in this state even though they are completely dry. My hypothesis is that sudden falls in temperature trigger this growth - it could be the difference between daytime and night time temperature or a sudden dropping of the temperature as the seasons change. Now we have had a relatively sunny warm period often with mild nights so where is the temperature gradient? Our glass houses are small and when the sun hits them the temperature goes up rapidly - as night comes they cool down, not to become cold but cool relative to the artificial high of the sunny day and so there is the temperature gradient and trigger. Your location and your growing conditions can all affect when this trigger will occur but as a general rule the further north you are the earlier it happens.



Narcissus romieuxii bulbs

I spoke previously of the depth at which to plant bulbs and how this will vary according to species and the conditions that you grow them in. These are *Narcissus romieuxii* bulbs and I used to plant them at twice this depth when I grew them in clay pots – now I use plastic pots I find this species prefers to be planted in the upper third of the pot.



Cyclamen purpurascens



The beautifully scented flowers of **Cyclamen purpurascens** are appearing all around the garden.....