



BULB LOG 38..... 19<sup>th</sup> September 2012



**Cyclamen mirabile**



How I love Cyclamen mirabile – if I had to choose to have just a single member of the genus this would be it. I have it flowering much earlier than I usually do for the simple reason that I placed the pots outside in July to get soaked which woke them from dormancy.

More Crocus are starting to appear in the sand plunge; like this hybrid between Crocus speciosus and C. kotschyanus.



Look more carefully and you will see that holes have been chomped in the flower by snails – it is a wonder that they did not cut down the flower by chewing through the tube at ground level. I am not alone in seeing a massive increase in slugs and snails in the garden this year. This population explosion is due to a combination of factors - a relatively mild winter allowed more to survive from last year followed by ideal breeding conditions - a cool very wet spring and summer. For the first time in years I have reverted to using slug pellets to protect some of the emerging bulbs. I literally place them individually and 10 pellets on this bed that is 1.8m by 0.6m is enough to affect a control and I check each morning to remove any bodies.



Snails are not the only problem on the emerging bulbs - some small holes in the sand plunge and the tell tale evidence of two Crocus shoots removed from the corm and left lying on the surface tell me that the mice have broken the garden rules. I am happy to tolerate them as long as they leave my bulbs alone but eat my bulbs and I will retaliate.



A form of *Crocus speciosus* raised from wild origin seed opens for the first time in the bulb house. Previously I have only ever grown forms that have been in cultivation for a long time or the subspecies *xantholaimos* which has a yellow throat, so it is good to now have some fresh material.



### ***Crocus speciosus***

I hope to get seed form these plants and start to build up a nice population that I can release into the garden.

Compare this flower with the one below which is a hybrid between *Crocus speciosus* subsp. *xantholaimos* and *Crocus kotschyanus*. The main features to note are the hybrid has both a yellow throat and white anthers. These hybrids arose in the bulb house a number of years ago and are proving to be robust garden plants

increasing well by offsets and also by seeds as they are fertile.



***Crocus speciosus* subsp. *xantholaimos* x *Crocus kotschyanus***



***Crocus vallicola***

I took a pot of *Crocus vallicola* out of the open frame into the bulb house to both enjoy the flowers and also pollinate it.



**Crocus vallicola**

The increased temperature quickly encouraged the flowers to open and when the pollen flows I will get out my paint brush. Once the pollen is on the stigmatic surface the added temperature of the bulb house helps it grow down the tube to fertilise the seeds. It is extremely important to encourage all your bulbs to set seed which you should sow to keep a steady supply of young healthy bulbs coming along. Even if the bulbs you are growing seem to be healthy and increase well each year you never know when you could suddenly lose them – it happens to us all. You think you have cracked the cultivation of a particular bulb with good numbers increasing each year and then you lose the lot. It could be to disease, poor conditions, rodents, whatever - having a young population is the best insurance you can have to keeping a healthy collection of plants long term.



**Muscari seedlings**

With two of the bulb houses started off now I am concentrating on getting the Fritillaria house ready for the storm by repotting or top dressing all the pots. Although it is mostly Fritillaria there are a number of pots of seedling bulbs like this pot of some Muscari species raised from collected seed – which, despite being completely dry, has small shoots emerging from the bubs



**Fritillaria rixii bulbs**

Seedling bulbs do not always grow at the same rate as you see the one on the left is bigger and has a more mature shape than the other two. I would expect it to flower next year and with good growing conditions the other two could flower in 2014.



### **Fritillaria rixii bulbs**

Seedling bulbs do not only show variation in appearance but also in their tolerance for growing conditions. While most of the seedling bulbs in this pot were healthy two obviously have not been able to tolerate our growing conditions and have died. This is another great benefit to raising plants from seed, they self select, with those that survive being most suited to your weather and growing conditions and the more seed raised generations you go through the more suitable to your garden they will become.



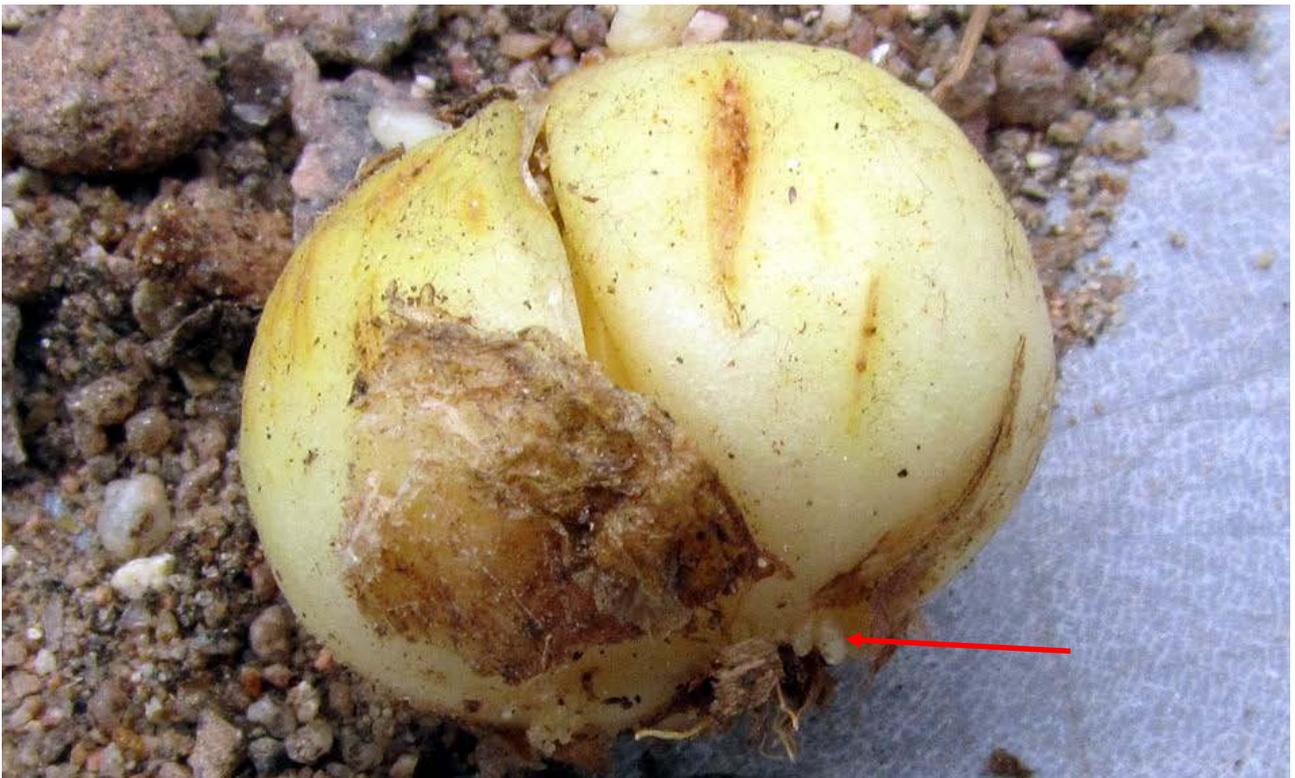
This is the first time I have repotted these bulbs and I can learn an important lesson from carefully noting the depth at which they have placed themselves. As I stated in a recent bulb log, bulbs move up and down in a pot searching for the most suitable condition not an optimum depth. These seedling *Fritillaria rixii* have placed themselves quite deeply, just 1cm from the bottom of this 7cm square pot. Obviously they found the moisture level and temperature at that depth to their liking and I will make sure that is exactly

the depth at which I will replant them.

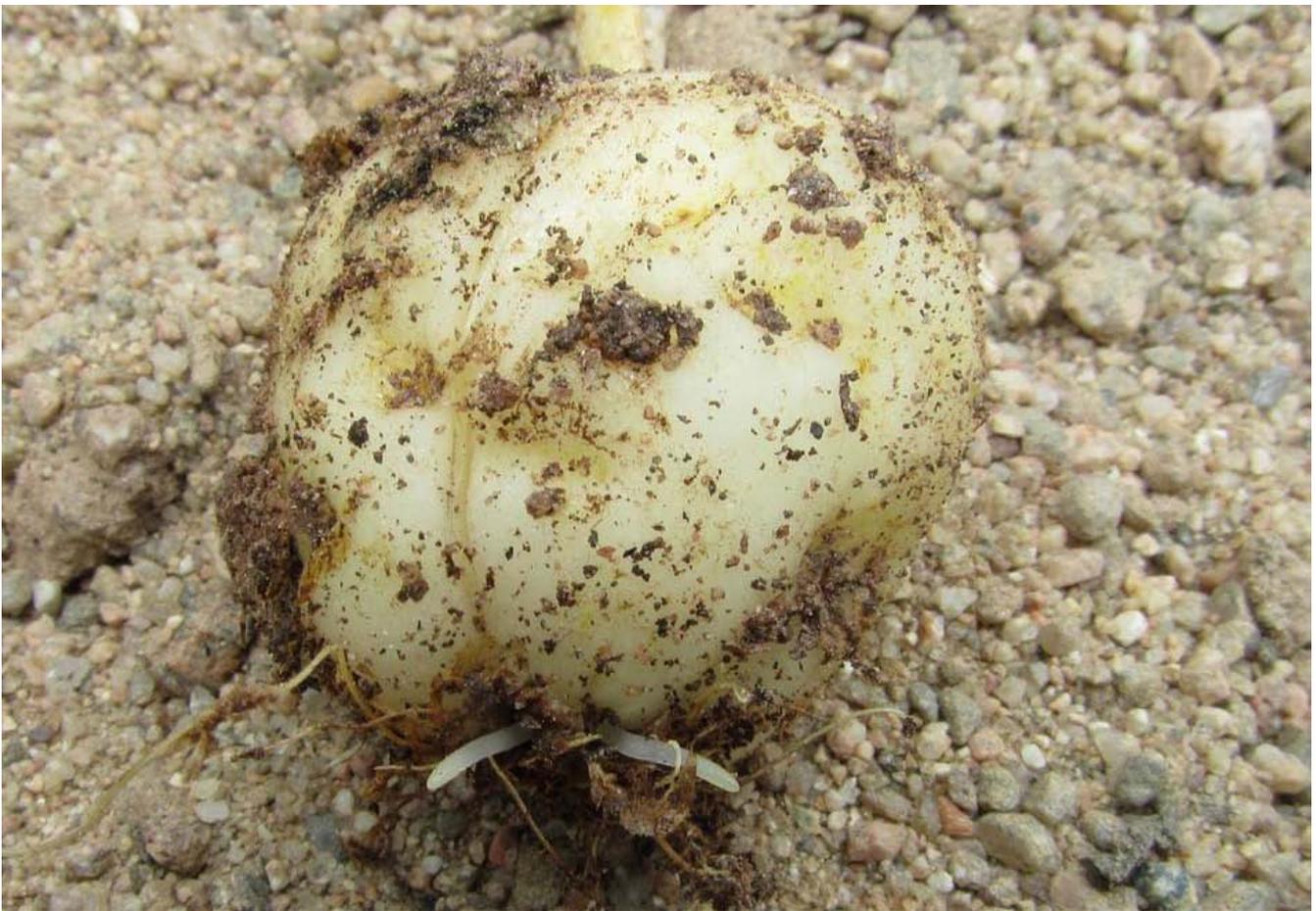


### ***Fritillaria affinis* bulb**

Many fritillaria bulbs produce copious quantities of rice grains making them easy to increase while also providing a good way to spread them around other growers –but still my policy is to raise from seed alongside this clonal increase.



The bulbs are reminding me that many are ready and waiting to receive the first soaking of the season - you can just see the root tips starting to probe in search of moisture.



In other pots, which sit under a drip from the roof, there are traces of moisture in the compost and the roots extend.



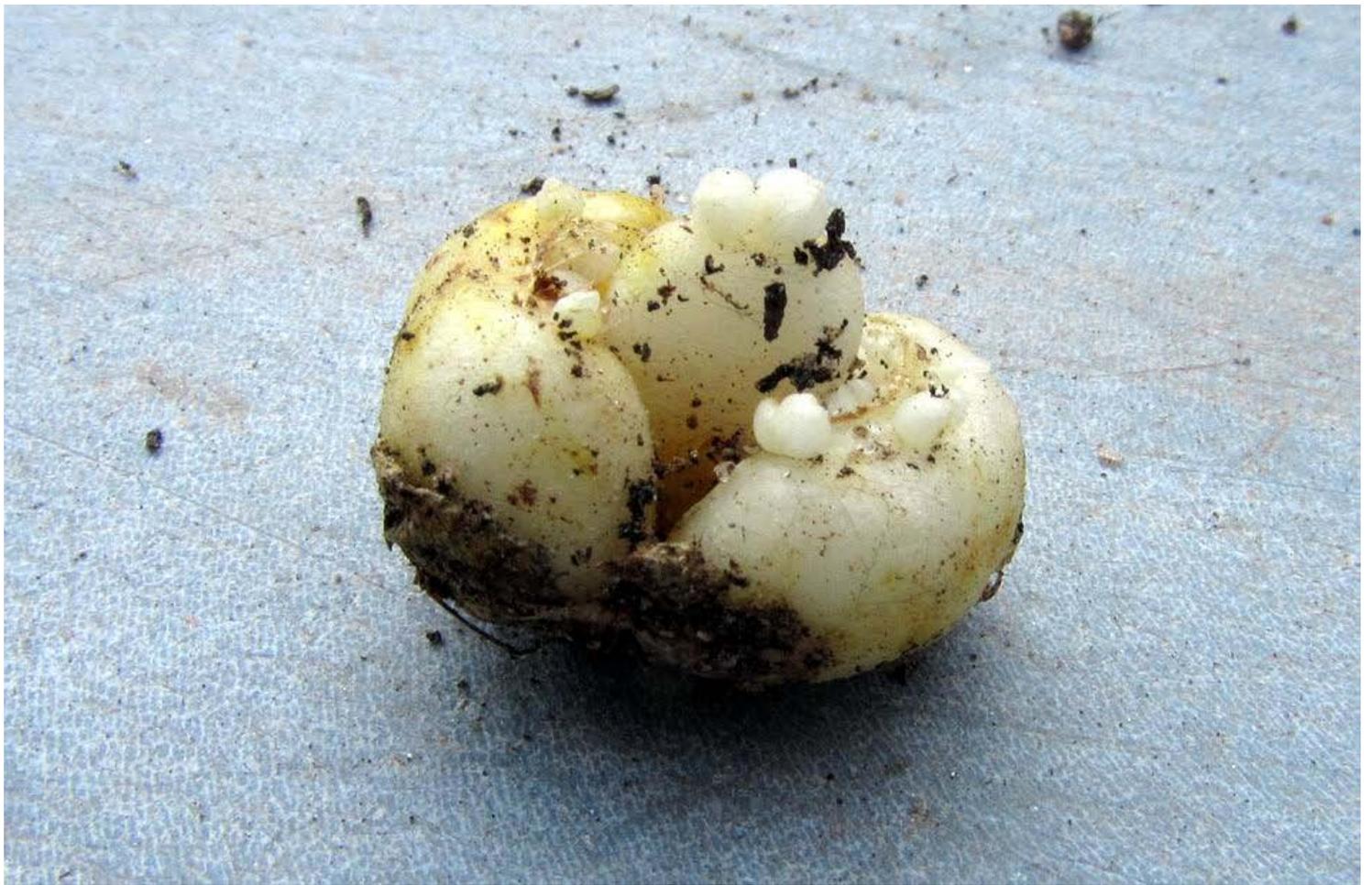
Many Chinese species like **Fritillaria tortifolia** look to root early and I often find the roots well extended even though the compost is dry. The roots of many the Asian species have roots that branch – you can just see the start of branches forming on some of the roots above. I have never observed this in Mediterranean or North American species whose roots are un-branched.



***Fritillaria thunbergii***



Another difference you will notice in many of the Asian species such as ***Fritillaria thunbergii*** is that their bulbs are more complicated than the typical twin scaled bulb we see in the more familiar species. Many Chinese frits have bulbs consisting of several scales closer to those of Lilies.



### **Fritillaria whittallii bulb**

Fritillaria whittallii has, what I was referring to as, the typical twin scaled Mediterranean style bulb with a central growth point that forms the shoot. Notice that this species is producing rice grains on the upper surface of the scales now.



**Fritillaria affinis bulbs** produces rice grains on the new bulb as it forms in late spring. Classic bulbs such as Narcissus are perennial adding extra layers each year all fritillaria bulbs are annuals, replacing themselves completely each year with a new one that forms at the base of the growing stem.



Compare *Fritillaria hermonis amana*, left, where the rice grains form on the old scales as they shrink, passing what is left of their food reserves on to the new forming bulb - therefore we find their rice grains attached to the remains of the old scales. *Fritillaria pudica*, right, is similar to *F. affinis* in that the rice grains grow with and are attached to the new bulb that grows each spring - the shrivelled remains of the old bulb are attached to the base.



### ***Fritillaria persica* bulbs**

The only way I can keep *Fritillaria persica* is to grow it in a pot - it has never survived more than a year in our garden. I know it is totally ungainly seeing one of the largest of species reduced to growing in a pot but it is the only way I can enjoy its beauty.