



BULB LOG 32.....6<sup>th</sup> August 2014



**Allium kurtzianum**

You have to look hard to see this tiny *Allium kurtzianum* flowering in an outside sand bed especially as its flower stem bends over holding the flower against the ground. Like many *Alliums* the leaves appeared some time ago and are absent by the time the flower emerges – this is making me realise that I do not understand the details of the life cycle of *Allium* bulbs.

I decided that I need to grow more so that I can study the growth cycle and by a wonderful coincidence the next day I received an unexpected gift of a selection of seeds, including *Allium*, from a kind and generous friend in Belgium.

Obviously there are a large number of different *alliums* from different habitats and with very different flowering periods. Most spring bulbs form next season's flower and leaves before they go dormant – they remain in miniature supported by the bulb through the summer



rest period ready to spring into growth either in autumn or spring. I want to understand when *alliums* form their flower buds. Many lose their leaves before they flower so only have the flower stem to photosynthesise; so do they make the buds before or after dormancy. The new bulb of *Allium derderianum* forms beside the flower stem leaving a groove up one side of the bulb as the bulb above shows, not around it as in narcissus or fritillaria bulbs.



To further show my ignorance of this large genus I have forgotten the name of this small *Allium*, luckily there are many [onion experts in our forum community](#) who will be able to keep me corrected on the names.



### ***Crocus speciosus* corms**

The reason I love repotting the bulbs is that I get to handle and observe them in some detail and we can learn so much from doing that. One thing we can observe is that even though they are still completely dry some are already starting to push up a shoot.

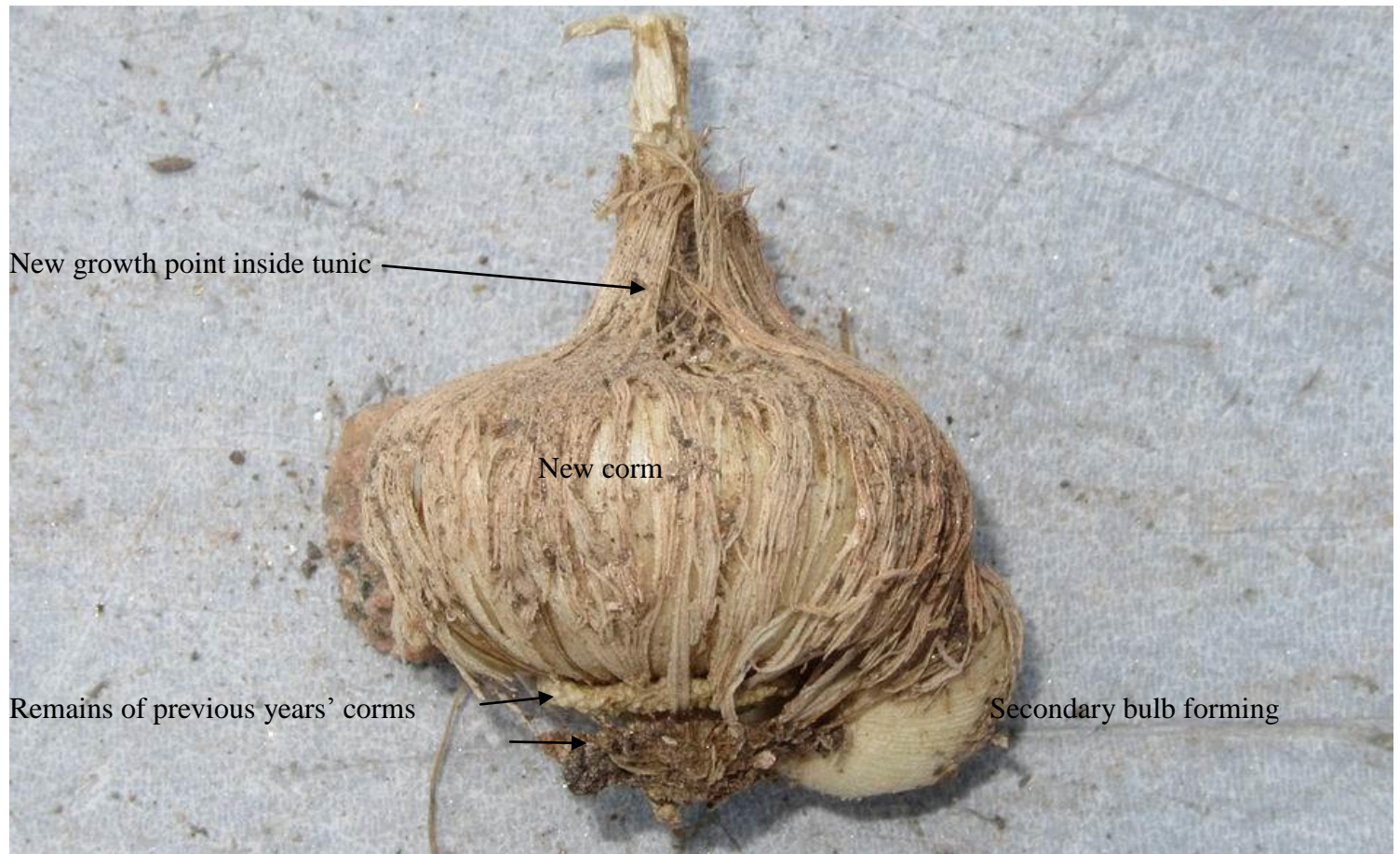


### **Crocus mathewii corms**

Cleaning and checking the health of your bulbs gives us clues to whether we are getting our watering regime correct or not and allows us to fine tune that regime for certain bulbs. While *Crocus mathewii* likes plenty moisture in its rapid growth phases it suffers if the corms do not dry out quickly as it enters the summer rest.



The main losses I suffer with this species is if I do not get them dried out quickly enough at the end of spring; the remains of the previous corm at the base starts to rot which can also spread to the new corm so I end up with a hole in the centre of the corm - the corm on the left above has been damaged in this way. With some types of bulbs, where the main growth arises from the base, this could be fatal but in corms next year's growth bud sits on the top of the food store and the roots and all growth arises from there so with a bit of luck and some careful watering this corm should grow normally.



### **Tecophilaea cyanocrocus corm**

The Tecophilaea corm above shows the remains of the previous years' corms dried out at the base, each year the growth arises from the top and a new corm forms there – additional buds can arise from anywhere on the corm resulting in extra smaller corms being formed. A corm is a compressed stem and like the stem of any plant the main growth bud is at the top but additional growth points can arise all along its length, normally in the leaf axils, in corms I mostly find the additional growth points forming around the widest point and below.

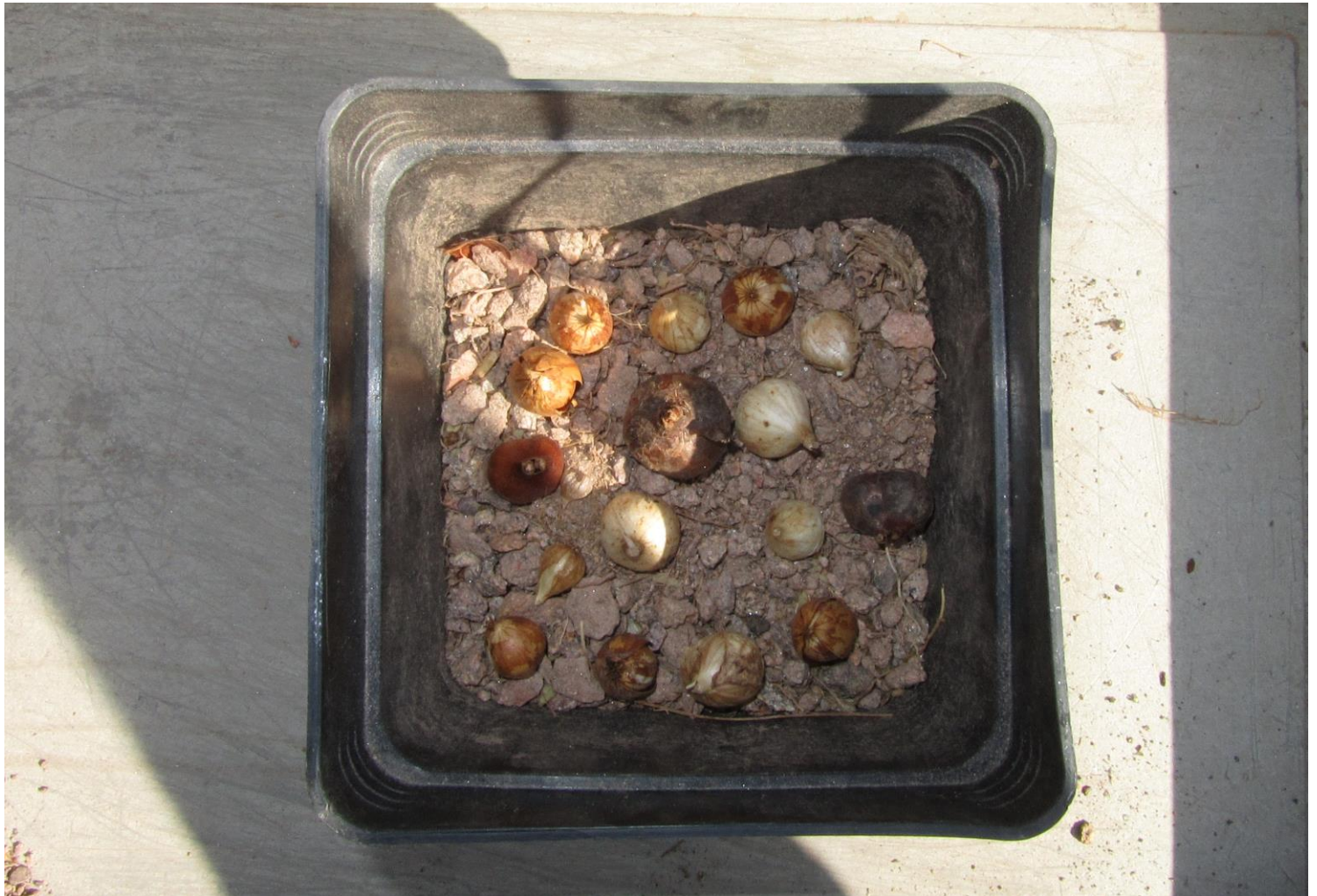


I can usually manage to tip off the compost above the bulbs without disturbing them, especially when the pot is full as in this pot of Tecophilaea cyanocrocus – this gives me the chance to decide if I need to repot completely or just to top dress. It is best practice to repot completely but we simply cannot manage to repot all our bulbs every year so it is quicker to tip off the compost above the bulbs and if all looks well mix in a small amount of bone meal before replacing it.



### **Tecophilaea cyanocroca**

The way I clean most corms is to gently rub them between my hands which separates the small corms and removes the looser outer corm tunics just leaving the more recent layers to protect the corm.



**Some pots hold surprises**



The pot above was originally for *Calochortus uniflorus*, centre bulb, but over the years when I did not replot it other bulbs have seeded in, *Narcissus* on the left and *Crocus* on the right. As they each flower at different seasons, the crocus in autumn, the *Narcissus* in winter and the *Calochortus* in spring I chose to keep them together in the knowledge that the very different types of bulbs can be easily separated in the future.



These bulbs are direct clonal descendants from the original JCA 805 collection of seed and as such are now very old bulbs. Even though many are 'new' offsets or divisions they are not 'new' bulbs they are of the same age as that original seedling grown all those years ago and carry all the problems of age with them. Just like us old bulbs are not as healthy or vigorous as they get older as they were when in their youth - this is one of the reasons that I grow as many bulbs as possible from seed.



This group of younger seedling bulbs show much greater vigour - flowering and growing better than many of the old clones we have. We should not really expect bulbs, some of which have been clonally increased for 100 years, to live for ever they will certainly lose vigour and pick up disease through their long life and the best we can do to take their genes forward is to take seed from them.

### **Narcissus romieuxii bulbs**

I have never worried about how many bulbs I grow in a pot- in fact with many bulbs it seems the more there are the better they thrive.

Losses due to wet rots are much more likely when a few lone bulbs are completely surrounded by damp compost rather than the drier conditions created by lots of bulbs crammed together in a supportive community as shown.





**Narcissus romieuxii** bulbs

While it is best to sit bulbs on their base it is not essential – I will place the larger bulbs carefully on their bases but then I will often just scatter the smaller ones around – it does not affect how they grow.



Sometimes I layer up the bulbs –this is the same pot as shown above.

When I get as many bulbs in as I can I will add a shallow layer of compost, just enough to cover the main layer of bulbs, then I scatter more of the smaller ones before filling the pot up.





The bulbs will also indicate to us what depth they should be planted at. If your bulbs are bulbous in shape as on the left above they are happy at the depth they were grown - if they are elongated, right, they are seeking more depth. I have often been asked what depth to plant bulbs to which I answer that the bulbs are not seeking an optimum depth **but an optimum condition**. That condition is largely dependent on temperature and moisture levels which can vary depending on many parameters - these include your climate, your potting compost, your plunge depth and material, whether you use clay or plastic pots, the size of these pots, etc. so while I cannot answer this question, your bulbs can – **observe and respond to them**.



The bulbs also indicate when they want to come into growth. Even though still dry and warm these Narcissus bulbs are sending out root tips, probing and looking for moisture, they are ready to grow. When this happens will also vary according to your climate – as I believe it is triggered by a temperature gradient it will happen earlier in cooler regions than it will in warmer areas.

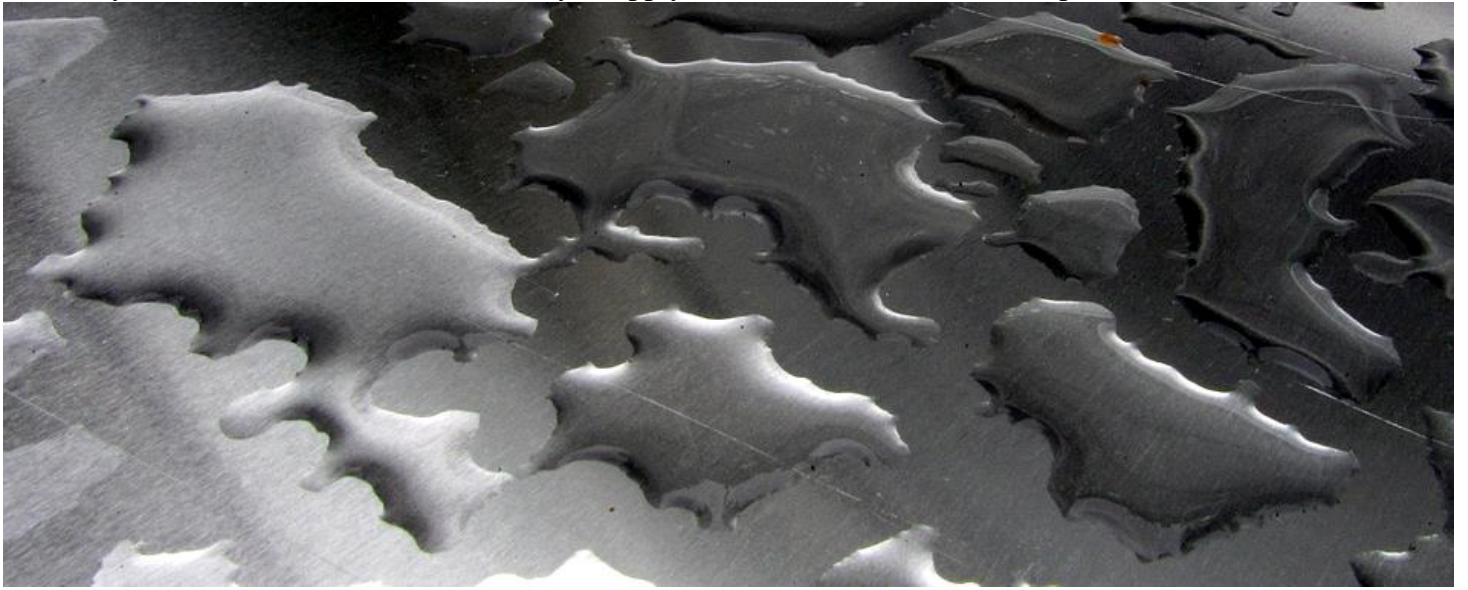


Two lily hybrid seedlings bring some welcome colour to our front garden.





The staging in the frit house is now complete – I will bring back the pots replacing the compost or topdressing as necessary over the next month so I am ready to apply the first Autumn storm in September.



While assembling the staging I had some of the glass out of the roof allowing the rain in. Irregular abstract patterns formed on the aluminium trays. These patterns are formed by water and oil resisting each other - the same principle is used in many forms of print making especially lithography.....