



It is the time of year when my thoughts turn to repotting the bulbs. We used to repot every single one every year but that was when we had a fewer pots or containers of bulbs - now we have to rationalise and aim to repot most bulbs every second or third year. I still believe that you get the best results and rate of increase if you can repot every year. Last year we worked through all the *Erythronium* that we grow in plunge baskets so they can be left for two years before we notice any decline. In fact next year they should flower better than ever and that fact has often lead people to the wrong conclusion that bulbs grow better when they are not repotted. This is a simple misinterpretation of the evidence – the reason they will flower better next spring is not because they were not disturbed this year but because the bulbs have grown in fresh compost this season with all the extra nutrients.



### ***Erythronium dens-canis* chains removed 2013**

Now for an update on the *Erythronium dens-canis* chains that I removed and planted last year – see [Bulb log 2913](#)



### ***Erythronium dens-canis* chains removed 2014**

There was no growth above the ground during this spring but this picture shows that there was growth underground, where the majority of the chains have formed new growth buds that will send up a leaf next spring then reach flowering size after another year or two of growth.



### **Broken Erythronium bulb with new growth bud**

Another point I often make is that if you accidentally break an Erythronium bulb, and this is easy to do as they are very brittle, plant all the parts. The part with the growth bud will grow on as normal the following spring and the other parts should form a new growth bud as shown above. This is the top half of a broken bulb just like the chains it did not have any above ground growth but below ground a new bud was forming – sometimes you can get a number of buds.



### **Erythronium bulbs**

I have been repotting some of the smaller, 9, 11 and 13cm, pots of Erythronium as they can get overcrowded quite quickly and also I just love to study the bulbs carefully. The two on the left have not formed any offsets but the right hand one has a good sized secondary bulb formed at the base also note that a smaller offset bulbil has formed on the flower stem.



The group of long bulbs to the left are taking themselves deeper while the fat two on the right have found the depth they are happy growing at.



I still struggle to grow **Crocus scharojanii**. On the left you can see a small corm forming on top of the remains of the two previous years corms. If this plant grows properly the old corm would pass its entire store of food on to the new corm but our climate does not allow this and the plant goes into a premature dormancy before this pass-over of nutrients can happen.



### **Allium species bulbs**

I have started repotting in the Frit house where I don't just grow Fritillaria. I have raised these Allium species from seeds and now many of the bulbs are of flowering size.



### **Allium species bulbs**

One of these did flower and it is interesting to note that the flowering stem arose from the side of the bulb and not through the centre



### **The Fritillaria house**

The fritillaria house is in an even bigger mess than usual just now as I prepare to replace all the staging. First I have to move all the pots and then remove the sand before I cut out the old staging out and build up the new plunges as I have already done in the other bulb houses.



### **Fritillaria bulb and seeds**

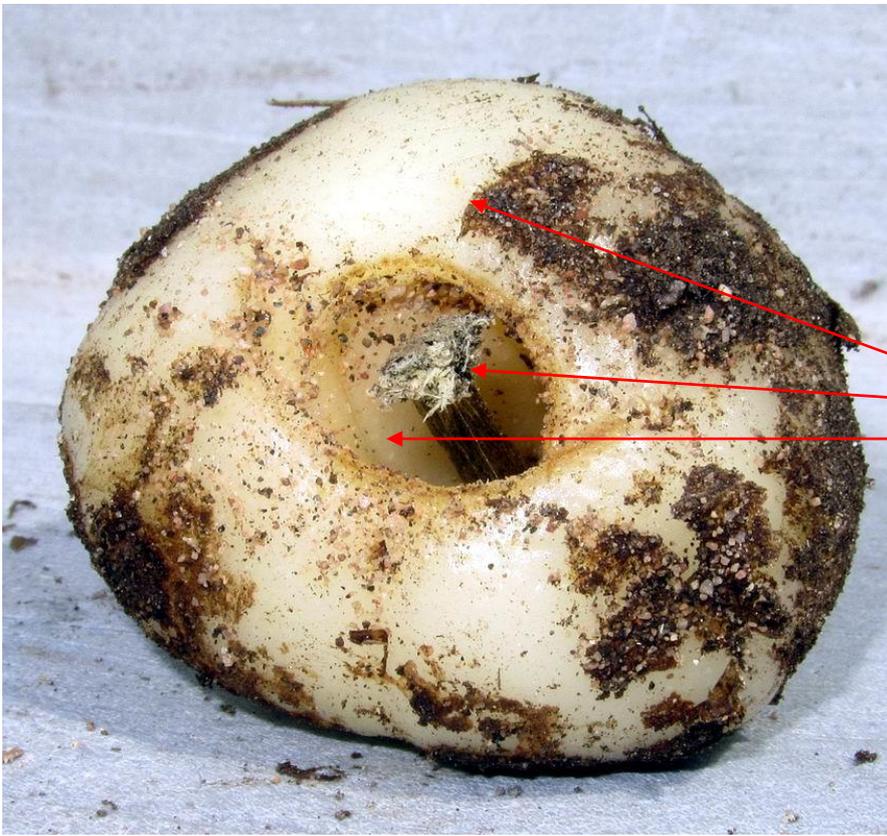
Sometimes I only start with a few seeds and so do not get many bulbs – two in this pot is not a bad result from the average of 5 good seeds that you often get from seed exchanges. My main task with any bulb I grow is to get it to flower and set seed which I can then sow to build up our stocks. A commonly traded myth is ‘not to let your bulbs set seed as it weakens the bulb’ this is total nonsense as any bulb that is setting seed will grow on for an extra 4 to 6 weeks after those that are not in seed have gone dormant. In my experience bulbs that have set seed are often larger than those that have not.

## **Fritillaria bulb**

The classic fritillaria bulb consists of two scales, which are modified leaf bases, loosely attached at the bottom with a growth bud at the base.

When you look at a frit bulb you will see the two scales form around the remains of the old flower stem and just visible in the centre is the shoot that will be next year's growth.

These scales are completely replaced each year as a new bulb forms at the base of the new stem if the plant produces two flowering stems then two new bulbs will form.



## **Fritillaria persica bulbs**

Fritillaria persica bulbs showing the dried out flower stems rising through the centre of the scales with the old roots attached to the base of the flower stem, the new roots will emerge from the base of the growth bud. The withered remains of last year's scales remain on the outside of some species.



### **Fritillaria meleagroides bulbs**

There is a secondary bulb forming at the base of the left hand bulb and I have circled all that remains of last year's bulb in the right hand one.



### **Fritillaria stenanthera bulbs**

I often think that nature has hidden the most interesting part of these plants under the ground and we should take the opportunity to study them very carefully when we get the chance handle them.



Rice grains in the European fritillaria form on the old bulb and so are unattached when we repot them unlike the North American ones where the rice forms on the new emerging bulb and so are attached to the bulb when we see them.



**NZ flat worm egg, left and Snail eggs, right**

We should not mistake the frit rice for snail's eggs as shown above. I do not find snails eggs in the dry pots in the bulb houses but I do find them in some of the pots that are outside – these are very recently laid eggs deposited in a cluster just below the surface.



### **New Zealand flat worm egg**

I recently showed a picture of a New Zealand flat worm I found as I moved a trough - here is an egg. The egg on the left looks like a shiny berry and is quite brittle – inside is not one but many young flat worms.



Below a snail makes a feast of a leaf.





**Hypericum reptans**

It was only as I was taking this picture of *Hypericum reptans* that I noticed the slug feasting on the flower.



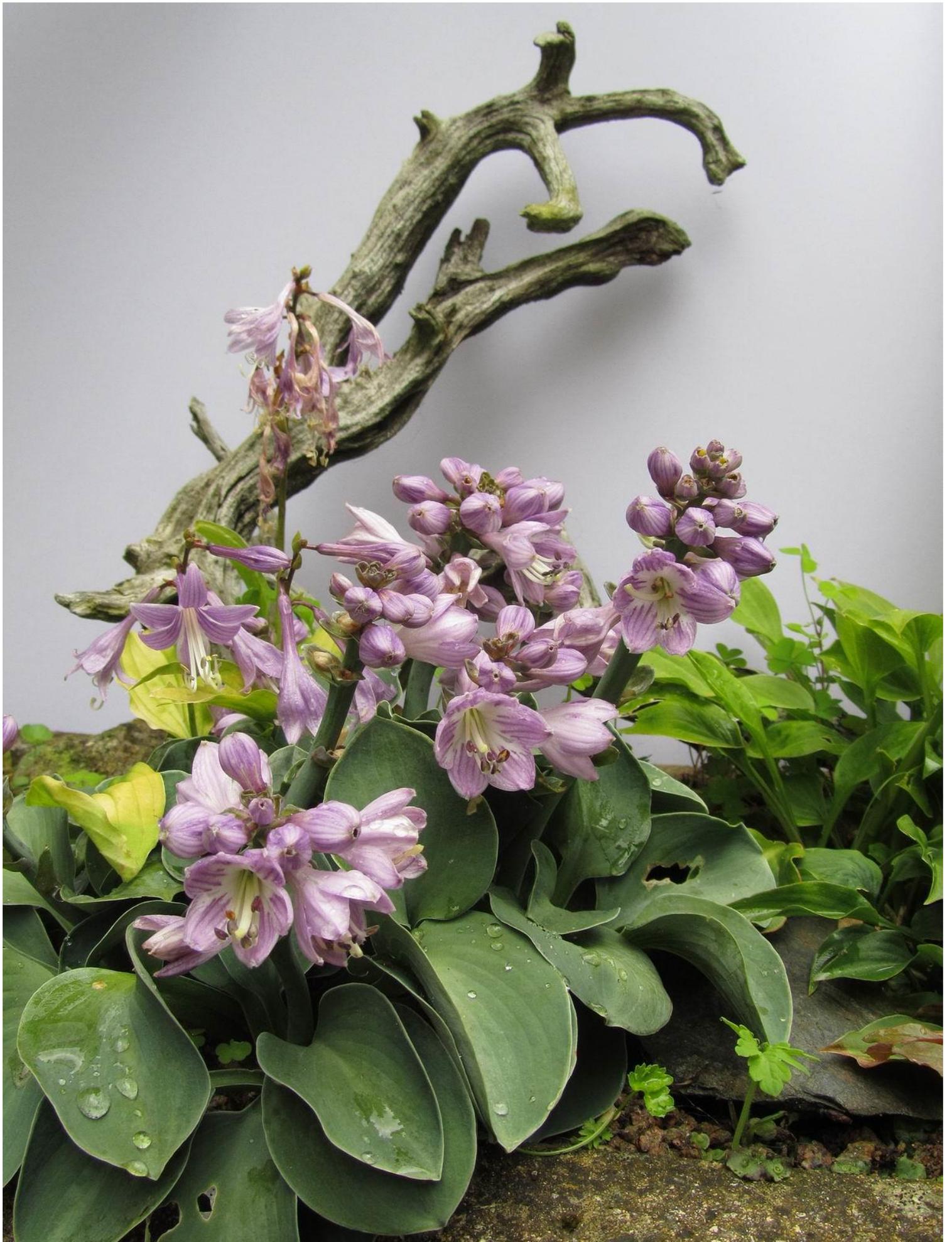
**Eucomis schijffii** J&JA 3.230.800 Sydafrika:KwaZulu-Natal, Drakensberg S. of Sani Pass



### **Campanula nitida alba**

Campanula nitida alba was among the very first plants we bought from Jack Drakes Nursery way back in the early 1970's – we used to have the blue and the white forms but now just have the white one. It is mutation of Campanula persicifolia that causes the plant to become a dwarf congested form. It set seeds most of which revert to the species producing blues and white flowered stems growing up to a meter tall. A small percentage of the seedlings are this compact form and can usually be identified at a very early stage by the deep green waxy nature of the foliage. Below is one of the tall forms but notice that one flower has an extra petal giving it a flat faced flower rather than the typical campanulate form.





I have been completely won over by this dwarf **Hosta 'Blue Mouse Ears'** that we were given as a gift a few years ago. It is most striking with a profusion of flowers held on the most rigid of stems over the lovely foliage –we have almost managed to keep the snails off of it.....