



BULB LOG 35.....27th August 2014



I continue to work through the repotting trying to get as much done before I water on the 1st September. These *Sternbergia greuteriana* bulbs all have two shoots appearing from the base before there are any signs of the roots.



It is not all good news as I always find a number of bulbs have suffered or as in this case completely died. The reason is not always obvious and sometimes bulbs that I have grown well for many years suddenly fail even though I have not changed my methods – this all adds to the interest and the challenge of growing bulbs.



Air pot

Since moving over to using plastic pots I have found that I need to water much less as the plastic pots retain the moisture longer – this suits many bulbs but I have had some problems with rot on a few bulbs that prefer better drainage. One method I have developed to combat this is what I call an ‘air pot’ – I noticed that it was the bulbs towards the centre of the plastic pots that were worst affected by the rot, the ones around the edges where the drainage was better and more air was present were fine. Placing a small clay pot in the centre and filling it with just gravel introduces better drainage and air into the centre of the pot so now all the bulbs enjoy favourable well drained aerated conditions. In the absence of small clay pots you could place a cardboard tube, such as you get in the centre of a roll of toilet paper, in the centre and fill it with gravel – the tube could be left in or carefully removed leaving a gravel core.



Sorbus poteriifolia berries

The warm summer of 2013 along with the favourable weather so far this year has resulted in the best seed set on many of our trees and shrubs that we have had. Sorbus poteriifolia always produces some berries and provided I get to them before the birds I can harvest a few seeds. I clean the seeds by first squashing the berries between newspapers then I carefully remove each individual seed. Despite the berries being nice and plump most only contain a single or perhaps two seeds.



Sorbus poteriifolia seeds

Once cleaned the seeds are still covered in a thin membrane as shown on the right- gentle rubbing the seeds between my fingers I found that I could remove this membrane revealing the shiny black seed shown on the left. I do not know if removing this membrane will give a better germination or not – I have sown half each way.



Sorbus poteriifolia



Leaf mould sharp sand and 6mm gravel

I know that I will not get all the bulbs repotted before I water them next week but one task I am determined to do is sow my bulb seed. The best time to sow many types of bulb seeds is now when the parent plants are starting to come back into growth is when the seeds will also start into germination.

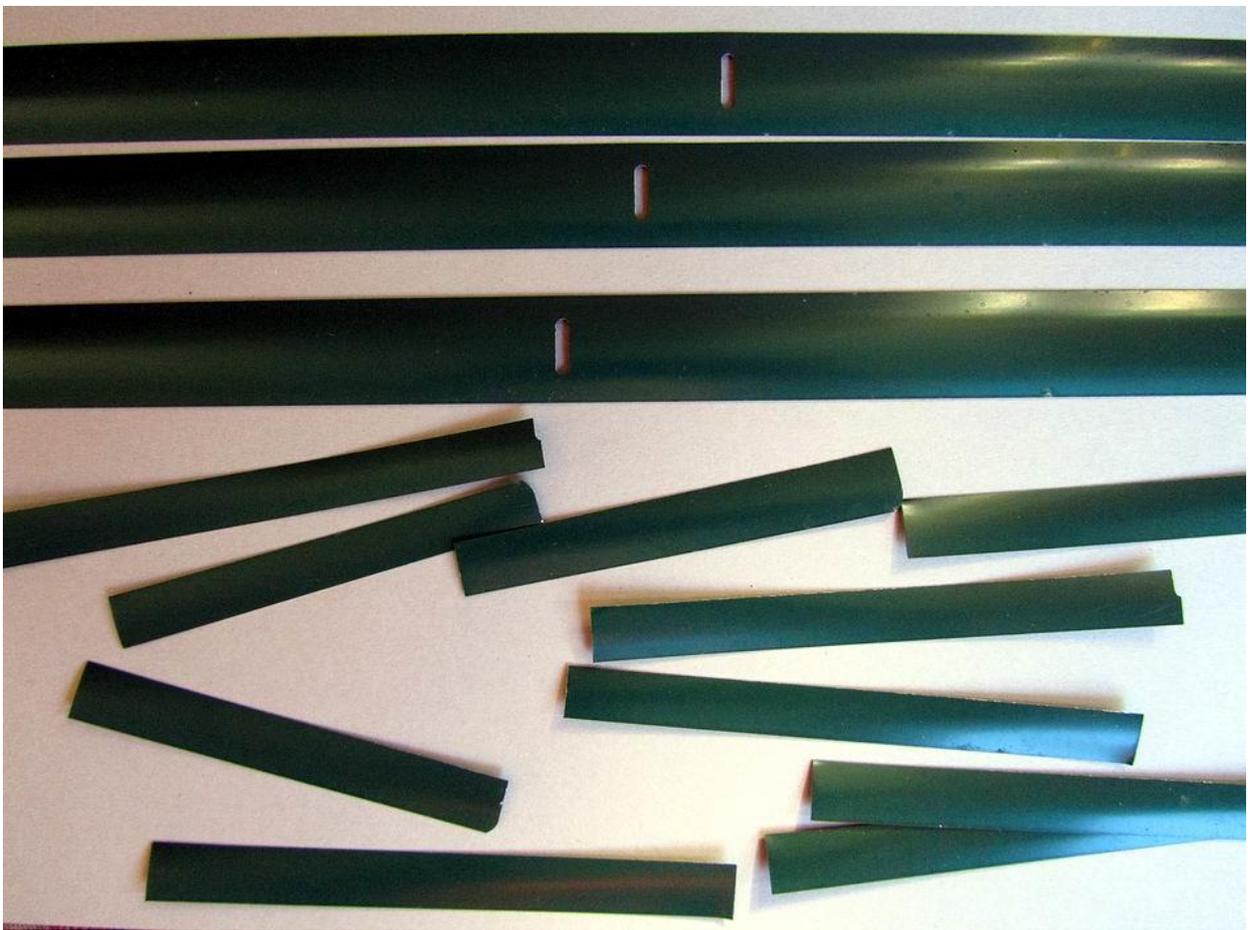


Potting mix

The first stage is to mix some potting mix to sow the seeds into. The mix I currently use is, by volume, one part leaf mould, two parts sharp sand and one part 6mm gravel to this I add a sprinkling of bone meal.

This gives me a nice open mix that allows surplus water to drain away quickly – it retains moisture and air - both essential to the healthy growth of plants. The bone meal adds a nice slow release of nitrogen and phosphorus to support the bulbs in their early stages of growth, I will add potassium in the spring to fuel the growth of the young bulbs.

I have varied my potting mixes many times over the years depending on what materials I have readily available. In my opinion as long as you create a mix that can retain both air and moisture and provide the essential nutrients you can use a wide range of ingredients.



The next essential for seed sowing is the labels – for this I use recycled aluminium slats from old ‘venetian blinds’. These come in a range of sizes and colours – the ones I am using here are quite narrow and when cut in half length ways give me two labels – I can make them any length I choose – they are easily cut with scissors but I use a paper guillotine.



You can write in pencil or marker pen but I prefer to engrave the name and date using a small hobby engraver. I have shown other engravers before but this is the best I have used – I just got it at Lidl last week. It is nice and solid but allows you to write quickly and easily in the small space on the label.



Fritillaria chitralensis seed

The first question we need answered is what depth should we sow our seeds at?



Traditionally most people would sow their seeds on the surface and cover them with a centimetre or two of gravel and that is the correct way for *Fritillaria* seeds and all similar types of wind distributed seeds. I would not sow summer flowering lilies such as *Lilium mackliniae* or *Nomocharis* until January as unlike *Fritillaria* they do not require a cold period and could germinate before the onset of winter.



Allium shelkovnikovii seeds



To decide what depth it is best to sow seeds at I am guided by the method the plant has evolved to distribute its seed. Alliums are clearly wind distributed – many of the seed heads act like tumble weeds blowing over the land shedding seeds as they go – so I sow them on the surface.



In many ways the ideal time to sow seeds is when they are shed just as would happen in nature. However we have to consider what the ground conditions and the climate would be when that seed is shed. For many Narcissus, and other bulbs, the seed would be shed into warm dry conditions and, as Narcissus seeds have elaiosomes, ants would take those seeds under ground to a warm dry summer. If you have the space to keep your seed pots warm and dry over the summer you can sow our seeds as they ripen, in late spring, into dry compost. I do not have that much space or dry compost at that time so I store my Narcissus and similar types of seeds in plastic pockets surrounded by dry sand to be sown ideally at the end of August.



Narcissus seeds

The Narcissus seeds are sown at least half way down in the pots, I just tip the seeds and sand in before topping the pot up with more of my potting mix. Other main seed types I sow deeply include Crocus and Tecophilaea.

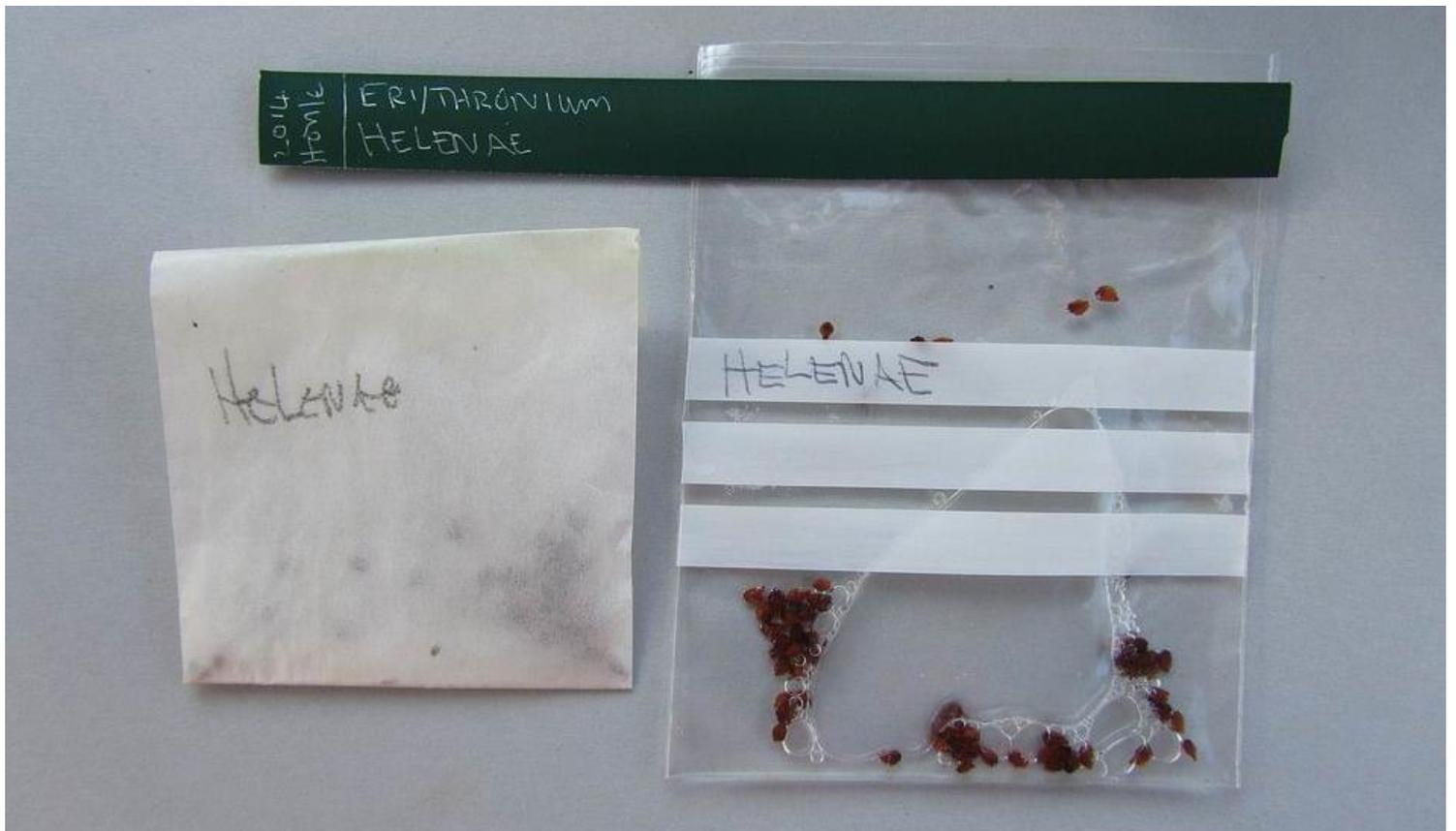




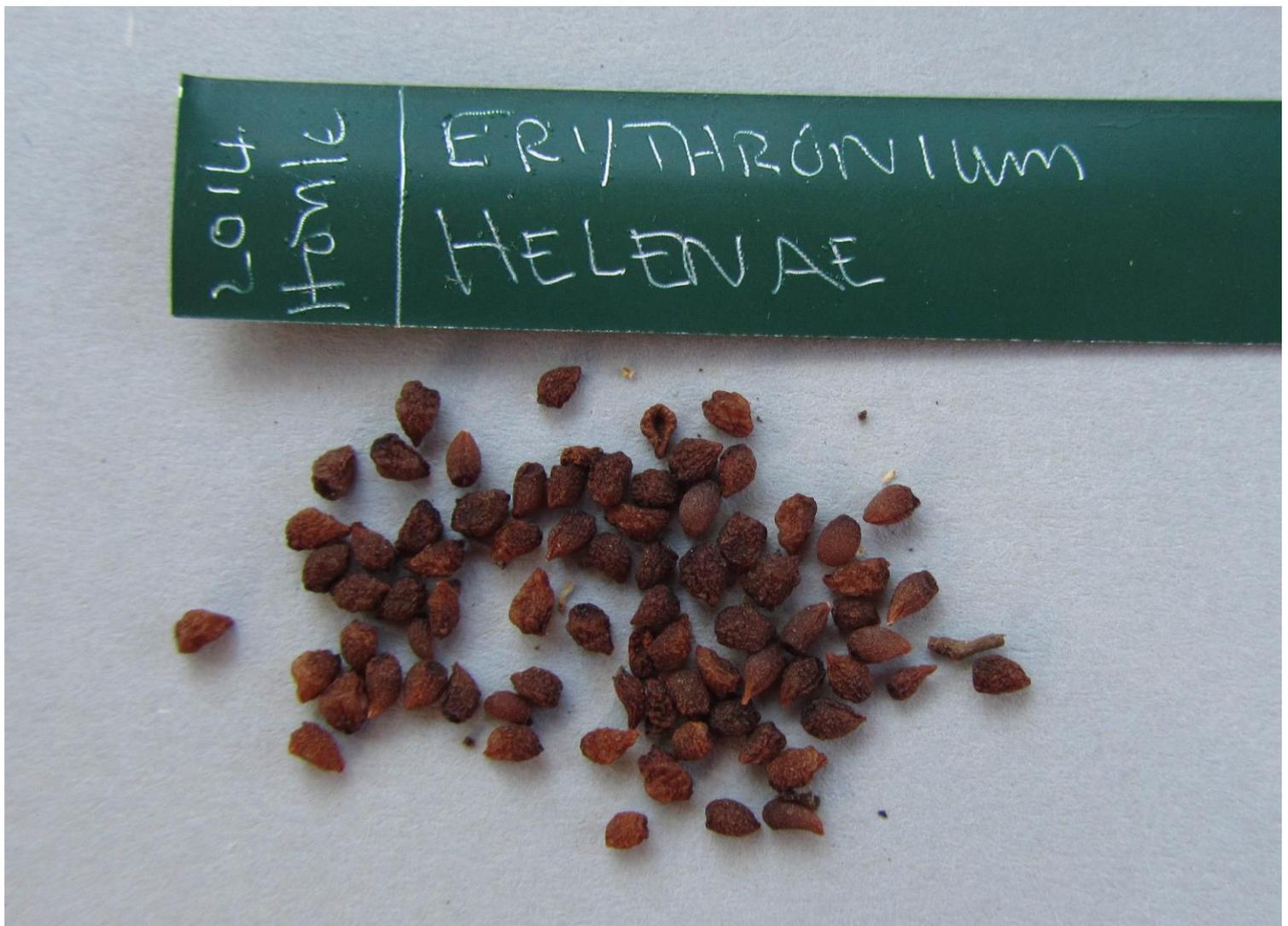
The top three pots are of Narcissus with the seed sown deeply and the lower three are Allium where the seeds sit on the surface, you can see them if you look closely.



All pots are now topped off with a layer of 6cm grit and placed into an open seed frame where they will stay until the first signs of the leaves appear.



I have stored my *Erythronium* seeds in dry packets over the summer and now is the best time to sow them but before I do that I like to soak them overnight in some water. I do this by transferring the seeds into a plastic packet and add some water to which I have added the smallest amount of soap - just enough to break the surface tension.



Dry seeds of *Erythronium helenae* – I could just sow them as they are.....

2014
Holt | ERITHRONIUM
HELENAE



These are the same seeds of **Erythronium helenae** that have been soaking overnight so they are all now nicely rehydrated and will, in my experience, germinate better in the spring.



Here is the direct comparison of Erythronium seeds all have been stored dry in paper packets since I collected them in the spring. Those on the left are as left dry those on the right have been soaked overnight to rehydrate them – which would you prefer? I do allow many Erythronium to self-sow in the garden and as a result we get many seedlings appearing - so why do I not sow my Erythronium seeds into pots immediately they are ripe? I have tried that and found that many seeds succumb to rot in our cool wet summers and the germination rates were poor – storing the seeds dry over the summer, then rehydrating and sowing them now gives me a near 100 percent germination rate. Of the thousands of seeds that we allow to be shed in the garden a small percentage will germinate and survive - even a 10 percent germination rate will give us hundreds of plants from a thousand seeds.



Soaking the seeds also helps sort out the good seeds from the bad as those that are not fertile tend to float while healthy seeds will sink to the bottom.



I sow our Erythronium into 13 cm deep pots as they do like to go deep – also they will stay in these pots for at least two maybe three years before we tip them out. As these seeds are distributed mechanically by being shaken from the dried seed pod they should be sown on the surface, see below, then covered with a layer of gravel. with a layer



Erythronium seeds sown on the surface.

2014
HOME | ERYTHRONIUM
ELEGANS



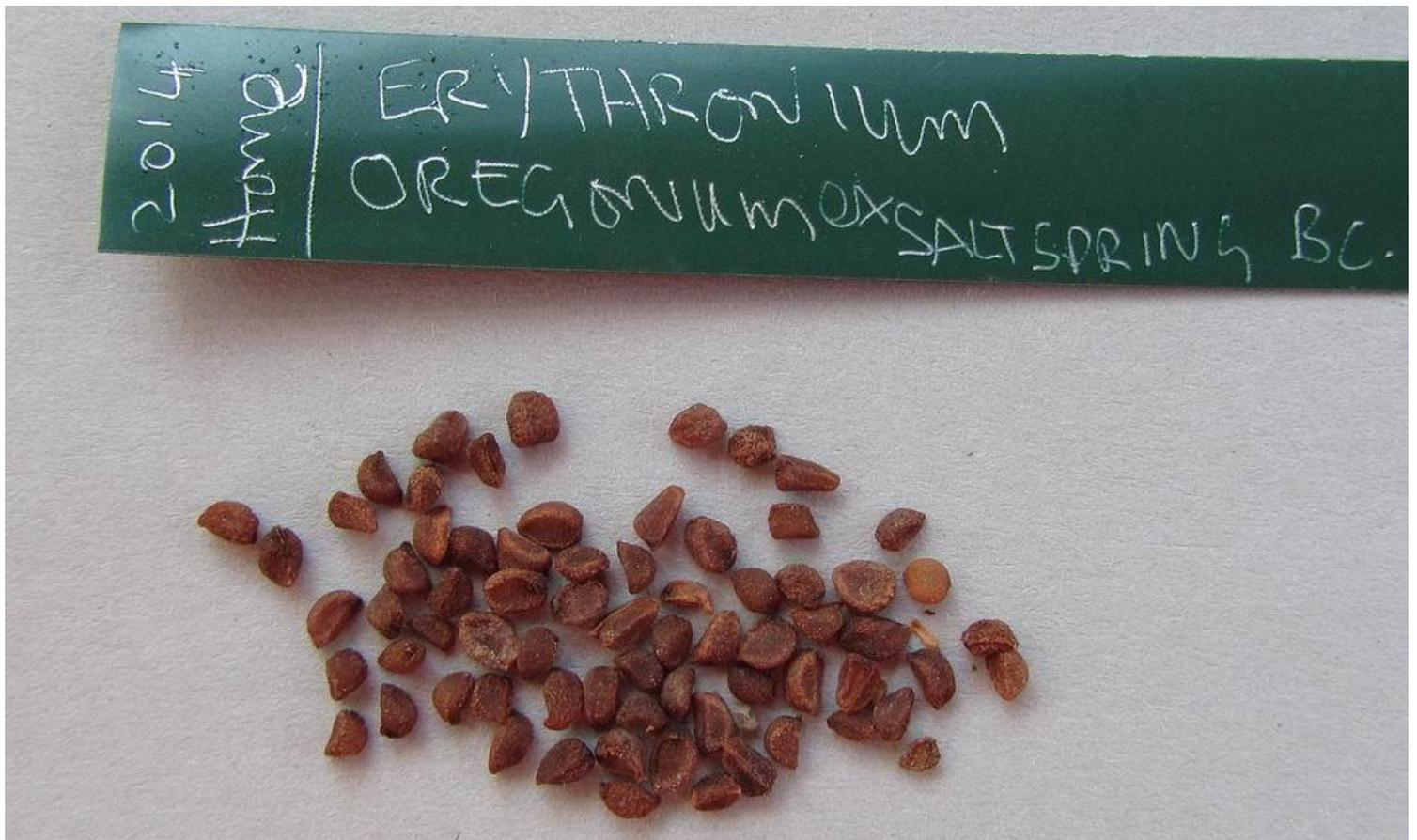
Erythronium elegans seeds dried

2014
HOME | ERYTHRONIUM
CITRINUM



Erythronium citrinum seeds rehydrated.

As part of my ongoing study of Erythronium I am recording pictures of all their seeds – freshly collected, then dried and also rehydrated. Looking at the seeds in detail I think in most cases we could learn to identify the species from the seed.



I will bore you with just two more this week, first Erythronium oregonum .



The last seeds are of an as yet undescribed yellow species collected on Mount Prevost , BC , that is similar to E. grandiflorum – we have grown it for a number of years but this is the first time we have had our own seed.