



BULB LOG 32.....11<sup>th</sup> August 2010



**Cyclamen purpurascens seedlings**

Sown last year around this time, these *Cyclamen purpurascens* are just germinating now. So often you will find that seed germinates around the same time of year as the parent plant would flower and many of the autumn flowering species germinate in the autumn. The message is not to be too impatient and give your pots of bulb seed at least two years before you decide that nothing is going to germinate even then it is best to scatter the contents of the seed pot onto a suitable bed where any dormant seed might yet find the conditions to germinate.



**Liverwort- *Marchantia polymorpha***

One of the big invaders of seed pots, especially the ones that have to sit for a year or two is Liverwort. I do not like using chemicals and as far as I know there is no effective chemical control of this nuisance so the best way is to remove it by hand as soon as you see it appear. If you leave it for any length of time it will form little splash-pots all over its surface which are full of tiny plantlets. When it rains or you water the bed these plantlets are splashed out and will soon establish and colonise all adjacent areas – then it becomes a mighty problem to get rid of.



### **Crocus scharojanii**

In case you think I am losing it and have forgotten that I showed you this *Crocus scharojanii* a few weeks ago I can tell you that this is another flower in another pot sown at the same time as the last one! Oh what a pity they did not flower together so I could cross pollinate them – I do hope that as I did not clean the brush I pollinated the last one with and I have not used for anything else since there might just be some viable pollen grains still attached. As I write this I am reminded of the way that great plantsman Jim Archibald used to have a separate brush in each pot of bulbs that he wanted to pollinate. With a brush dedicated to that species he was more sure of getting good true and viable seed. How sad I was to learn of his death this week – the world of plants has lost a great master grower, collector, distributor, writer and lecturer. The gap that Jim has left can never be filled but we will always remember him not least for the many outstanding plant introductions that bear the JJA or JCA number. Fond condolences are sent to Jenny, with whom he worked so well and to their family.



### **Bulb Bed**

A group of plants that we make a lot of use of in our 'time share' beds are the dwarf shrubs. The fact that they do not go dormant at any season may sound contradictory to my explanation of ideal bed partners from the other week but they are forgiven because they are very low and bulbs can easily grow up through them. Being evergreen means that they can provide year round interest which can be enhanced even further by flowers and fruits.



***Gaultheria pyroloides* and *Gaultheria depressa* var *novae-zelandiae***

Ideally suited to growing around the edges of the beds are the ground hugging Gaultherias – they all provide an element of support to the fragile tubes of the autumn flowering Crocus that grow up through them. The nice reticulate leaves in the foreground are those of *Gaultheria pyroloides* while the fruits are of the *Gaultheria depressa* var *novae-zelandiae* which has the tiny leaves you can see.



***Gaultheria depressa*  
var *novae-zelandiae*  
fruit**

I have used the term fruit and not berry as while we tend to call them all ‘berries’ just like we generally call all the underground storage organs ‘bulbs’ but look carefully and you will see they are not berries. The fleshy part is in fact a swollen calyx which expands on fertilisation of the flower to enclose the seedpod in the centre. It never closes completely always staying open at the mouth which I have photographed the opening seed pod through. You can see the seed is stored more or less dry inside the seedpod.

## **Vaccinium praestans**

Compare the above fruit with the fruit of *Vaccinium praestans* on the right and you should see a number of differences. Firstly *Vaccinium*s are berries where the seed is fully enclosed and encased in the fleshy body: also notice the scar left by the base of the corona (flower) on the red *vaccinium* berry this tells us that this plant has an inferior ovary. That is; the ovary is not contained within the flower but sits “below it” - between the corolla and the stem. The opposite is the case with the *Gaultheria* fruits where you saw the seedpod was in front of and surrounded by the swollen calyx- as it had been by the flower – so these plants have a superior ovary. These are important diagnostic features used in the taxonomy of plants.



***Trillium erectum* hybrid seed pod**



**Trillium grandiflorum seed pod**

On the subject of fleshy fruits I noticed that the Trillium fruits have ripened to the extent that some of the Trillium grandiflorum fruits have fallen off the plants – so I have harvested them.



**Trillium seed pods**

The seedpods are very colourful and attractive in themselves and have quite a variation of colour and form.



**Trillium seeds**

I have removed the seeds from the pod along with much of the pith that surrounds them but I do not attempt to remove the eliasome – the white fleshy appendage. I have read that some people believe that leaving the eliasome on can inhibit the germination of the seed but I have never found that to be the case.



**Trillium seeds in leafmould**

To further clean and prepare the seeds I have rubbed it in some of our own leafmould and this year I have decided to give it a period in the fridge. I have never bothered doing this before and I often have to wait two years for the seeds to appear above ground.

## Trillium seeds in leafmould

I have placed the seeds complete with leafmould into a sealed plastic bag and have put this in a fridge at 4C.

I intend to leave it there for four to six weeks then take it out for a similar period at an ambient temperature then I will sow it in my normal way and see what happens.

I know that there has been a lot of experimental work done on this – our friend Kristl Walek is an expert- but I like to try it out for myself and I will share my results with you in the future.



## Erythronium plunge bed

I repotted all the Erythroniums in the plunge beds last year and while they grow and increase best if they are replanted every year I simply do not have enough time to do it. Or should I say I grow far too many bulbs in pots!!



**Erythronium plunge basket**

However I do have a need to get some bulbs of a few of the Erythroniums. That is the beauty of this kind of bed it is so easy to lift one of the baskets without disturbing the rest.



**Erythronium bulbs**

This is what I was after: some nice healthy Erythronium bulbs. Notice the two outside bulbs have a reasonably sized offset still attached to the main bulb. The two in the centre also had good sized offsets which fell off as I tipped them out of the basket but you can also see that they have second smaller offsets still firmly attached to the base – these will produce a large offset next year. When growing well some Erythroniums can produce three bulbs.



### Replanting Erythronium bulbs

While replanting the Erythronium bulbs I take the chance to refresh the nutrients. I place around 2 cms of the old compost into the base of the basket then a sprinkling of bonemeal, this is followed by around 2cms of leafmould. I find Erythroniums love leafmould in the compost and I have grown plenty successfully in pots with nothing but leafmould.



### Planting Erythroniums



When I place bulbs into rectangular pots and containers I always follow a set procedure. First I place the biggest four bulbs at the corners, next I place four in the middle of the sides and one in the centre then I can fill out the gaps with the increasingly smaller bulbs until I have as many in as I have or can get. I follow this procedure because I have in the distant past filled boxes from one end to the other and instinctively you tend to pick up the larger bulbs first so when the container flowered it was all one sided with the large flowering plants at one side. Once the bulbs are in place I add another layer of leafmould before I fill the basket to the top with the old compost.



### **Poppy and Lily**

Lily –right- has often featured in the bulb log and Poppy-left and below- was complaining that she has been with us for about five months now and has not featured yet. We re-homed Poppy at 13 from the same dog charity that we got Lily from some three years ago and she has settled in and gets on with Lily very well.

