



SRGC

----- Bulb Log Diary -----

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BULB LOG 45.....11th November 2015



Includes a chapter from
Erythronium in Cultivation
on *Erythronium dens-canis*

Autumn can be short in our garden, 10 minutes after I took the cover picture of the birch tree with glorious golden leaves bathed in sunshine against a blue sky, the wind got up the skies went black and torrential rain ripped the leaves off.



I have been enjoying some good autumn colour such as on various acers as well if you would like to share some of the brief autumn colours I loaded this [Bulb Log Video Diary Supplement](#) a few weeks ago.



The rest of this week's Bub Log is another chapter from my book on Erythroniums in Cultivation this one looks at *Erythronium dens-canis*.

I have been asked if the book will be available for sale as a printed book. The answer is no: when I have finished I will combine all the chapters into a single PDF file which will be available to download free from the SRGC web site – this can be read using any tablet or computer - a PDF is compatible with IBook's, Kindle, Adobe and other readers. Anyone who wants a printed copy has my permission to print it out for their own personal use - I do not give permission for multiple copies to be printed for selling.

Erythronium dens-canis





Erythronium dens-canis, a native to Europe, is among the most readily available species for our gardens: it has been cultivated for hundreds of years during which time many selections have been made.



Erythronium dens-canis flowers

We have raised the majority of the plants in our garden from seed, resulting in a range of flower colours from dark violet through pink to white –this species is one that will naturalise in the garden if allowed to self-seed. The first characteristic we should note as a guide to distinguishing this species from the rest of the Eurasian complex is that the pollen is dark violet - the white forms of *Erythronium dens-canis* can sometimes be confused with the white flowered *Erythronium caucasicum* but it has yellow pollen.



Other details such as the shape of the filaments are among the characteristics that further separate this species from *Erythronium sibiricum* and *Erythronium japonicum* but once familiar with these species a good observant gardener will easily recognise their differences.

Above is a flower I have dissected, including the ovary, to reveal the finer details – this is something I do with all the plants we grow to better understand the wonderful structures that make up a flower. The dissection of the ovary clearly shows the seeds waiting to be fertilised when the pollen grows down the attached tube from the stigma.

Seeds



Erythronium dens-canis seed capsule and seed.



The seeds of all the Eurasian species, along with the Eastern North American species, have elaiosomes (fleshy appendages) a feature that is absent on the Western North American species.

It should be noted that the curled elaiosomes are on the opposite end from where the seed was connected in the ovary - this can be seen clearly in the picture of the dissected flower.

Leaf



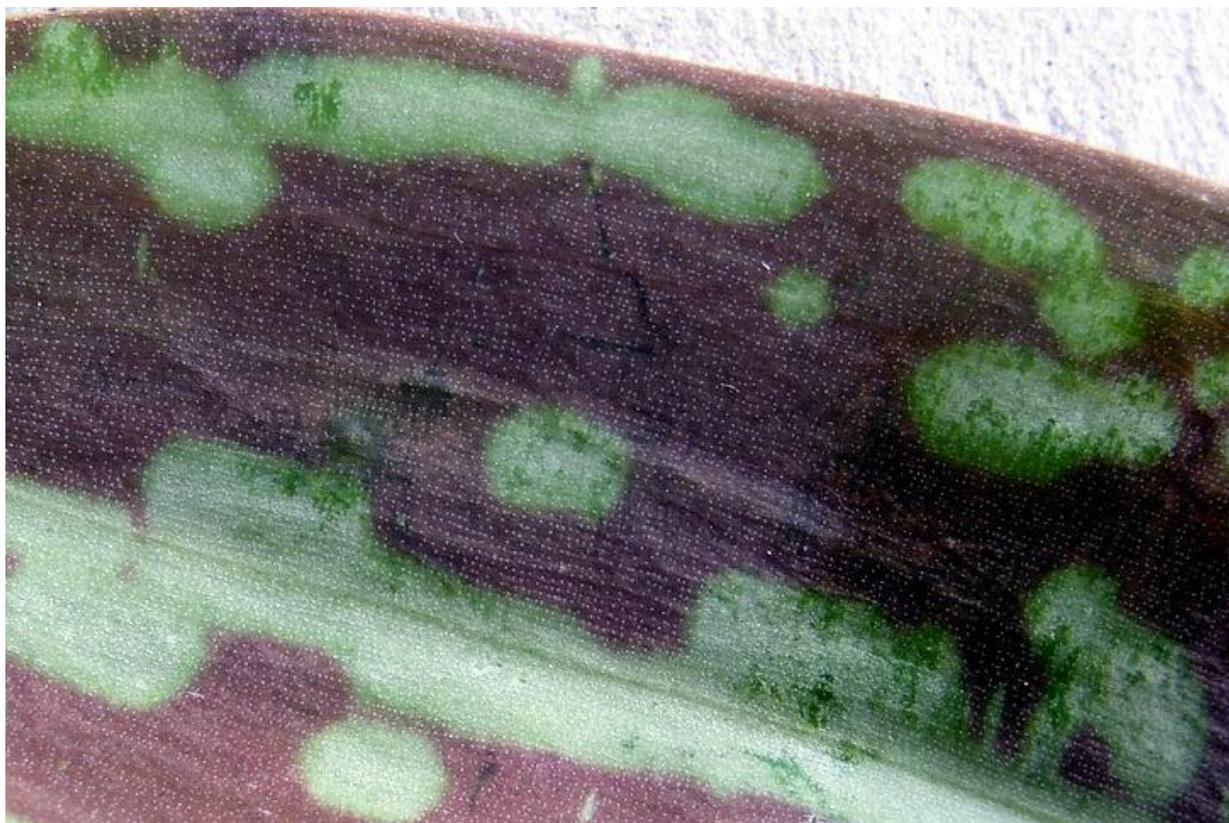
The leaves are mostly a mixture of green and brown often appearing as a brown background with varying degrees of green blotches or washes; some may also have pale almost silver highlights. The blotches are always in a random pattern, very different from any of the Western North

American species where the pattern is often bound by the veins of the leaves.



Generally but not exclusively it is the plants with the darkest flowers whose leaves are darker having more brown while the pale and white flowered forms tend to have more green than brown. The brown markings are strongest when the leaves first emerge, the colour fading as the season progresses.

Looking closely at the leaves you will see that lines of white pores cover the surface, this feature is shared with all the Eurasian species as well as with the Eastern North American species such as *Erythronium americanum*.



Bulbs



The bulbs are white, possessing little in the way of a tunic, and elongated in shape similar to the canine tooth of a dog as the specific name, *dens-canis*, indicates and indeed the common name of Dogs Tooth Violet. The main part of the bulb replaces itself every year leaving just a small amount behind attached to the base of the new bulb like the links of a chain, sometimes two bulbs will grow allowing plants to form clumps.



On the left is a typical bulb with three links of the chain being the remains of the previous three years bulbs – the links start to lose moisture and shrink away after three years. The links of the chains all have the ability to form new growth



buds but are inhibited from doing so as long as they remain attached to the dominant main bulb. Above you can see that I have removed a chain from a bulb – this can be further broken down into individual links each of which will form a least one new bulb if planted and grown.



One year on from planting the old links have formed new bulbs supported by the food stored in the fleshy chains – these will take a further two years to reach flowering size.



Erythronium dens-canis is relatively easy in cultivation growing in a wide range of soil types from the sandy soil enriched with organic matter that we have to heavy clays. Like all in this genus the flowers have evolved to react to the weather; closing to protect the anthers and stigma in cold wet conditions then reflexing pagoda style when it is sunny and mild. Peak flowering in our garden can be any time from mid-March to mid-April depending on the season. It is happy growing up through other early spring flowering plants such as *Anemone x seemanii* or standing alone before or as other plants emerge.





Raising plants from seed will give a wide selection of forms with different flower colours as can be seen in the group of self-sown seedlings above – these will also have variable leaf patterns.



This selected white seedling has formed a clump after about five years.
Note how the leaves of most white forms are also paler in colour, often with a silvery green wash.



Erythronium dens-canis is quite easily grown and when happy it will slowly form clumps, these are best lifted and divided every three to five years certainly before they become so congested that flowering diminishes. We once received some small bulbs described as a 'clumping form' which I never managed to get up to flowering size bulbs – no matter what I tried they just increased, forming more immature bulbs every year – eventually I got rid of them from the garden. It seemed as if they had got into a bad habit that could not be broken so it is always best to split clumps before the flowering diminishes.

It should not be difficult to acquire this plant as there are many cultivars of *Erythronium dens-canis* available commercially however I think it is best to raise all plants from seed and especially collecting and sowing any seed produced in your own garden. Raising them from seed will ensure that you have young vigorous healthy plants with each subsequent generation of garden collected seeds becoming more adapted to growing your garden conditions.
