BULB LOG 44.....30th October 2013

Colchicum

In a previous bulb log I suggested that Colchicum could be a bulb, only to be told that it is a corm. I know that is the common consensus. I understood what I read but could not work out for myself exactly what part of the plant forms into the storage so this season I have been carefully observing them at different stages of growth.

Tunic removed to show the growth bud arising from the base.

A growth bud rising from the base of the previous year’s growth which forms a foot pushing the new bud deeper into the ground.

Dissection of the bud shows the complete plant in miniature, leaves, flowers, anthers, style are all formed in spring.

In the autumn roots and flowers emerge from the base at the side of the swollen food store.

The flowers can emerge and open even though there is no moisture present to encourage root growth but the plant will grow better if it can form roots.

Spring growth of a non-flowering plant shows roots and the new storage system forming from the base of the previous year's growth.

Dissection shows old plant with new storage and growth rising from the base. The fat contractile root is to assist the plant to get deeper in the ground as is the foot that extends below the previous growth. A leaf scale surrounds the swelling food store and grows upwards to become a leaf.

Further dissection of one half shows the surrounding leaf base that will become the brown tunic of the dormant plant.

At the end of the growing season the plants are fully formed and dormant. The centre specimen shows a secondary growth has formed on the shrivelled remains of the old plant.

For comparison I will now show some Erythronium bulbs. Some types can form several bulbs in a good year.

With the tunic removed.

Unlike in Colchicum the growth bud is contained within the plant surrounded by leaf scales.

New growth forms from the base at the side of the current stem.

Secondary growths can also appear from higher up on the plant.

At the end of the growth cycle these Secondary growths are now separate plants.

Erythroniums showing chains of previous year’s growth at the base.

Tulip

All the bulbous plants are fascinating and worthy of our close attention. I often think that the most interesting part of these plants is hidden underground.

Tulip

Tulip

Tulip

I have intentionally avoided using the terms bulb and corm as I wanted you to make up your own minds as to what these structures are. I believe it is easy to identify true Bulbs such as Allium and Narcissus from true Corms such as Crocus but I also think that many plants such as Erythronium and Colchicum cannot easily be placed into these over simplified categories. I have observed Erythroniums that could be a bulb with modified leaf bases, a corm as a swollen stem base and a rhizome in the form of a creeping underground stem consisting of the chains of previous year's growths.

However Erythronium and Tulip are considered bulbs while Colchicum is called a corm but it is best to use the term bulb in its widest sense to cover all underground swollen organs……..back home for next week.