

## PRIMROSES: PIN-EYES AND THRUM-EYES

The Primrose's name celebrates its early appearance – they are the 'prima rosa', or the 'first flower', of spring. (Though of course they aren't really – their main display is preceded by snowdrops, daffodils, celandines, daises etc). There are often a few in flower at the start of the New Year, and even in December, hence this article, but by April primroses are at their finest in woods and on hedge-banks across the British Isles.



Pin-eye

Thrum-eye

Primroses (*Primula vulgaris*) flourish in our mild, damp Atlantic climate. There are some particularly splendid displays in the thick old hedgerows of Devon and Cornwall and of course, in West Wales. They prefer heavier soils that retain moisture and are less common in sandy places. They are currently not doing at all well in the drier eastern counties.

True primroses carry their flowers on single stems, but you often see plants with several flowers on a single stem; if these are slightly deeper yellow, they are probably hybrids with cowslips, known as false oxlips.

You may also find pink or pinkish-yellow primroses, either on single stems or in small clusters. These can be the result of cross-pollination by insects which have visited the red and pink hybrids of *Primula* or *Polyanthus* garden plants, before visiting wild primroses. The result is a rather washed-out plant which is half-way between both parents. These pinkish primroses also seem to arise naturally and often occur far from gardens.

Next time you see a primrose flower, have a careful look at it. There are two different types of primrose flowers: some have a pin-eyed stigma which rises above the pollen-bearing anthers, which are half-way down the flower tube, while in thrum-eyed flowers the stigma is below the anthers which are at the top.

Long-tongued insects like butterflies and bee-flies visit the flowers to reach the nectar at the base of the flower-tube.

When they visit a thrum-eyed plant, the pollen from the anthers, which are near the top of the tube at the entrance, attaches to the top of the insect's proboscis.

When it visits a pin-eyed flower and probes deeply for nectar, the pollen is in a perfect position to be transferred to the higher stigma of this flower.

An insect visiting a pin-eyed flower first collects pollen from the lower anthers on the middle of its proboscis, which it then transfers to the stigma in a thrum-eyed plant, which is positioned lower down the flower tube. It's an ingenious adaptation which ensures that primroses will be successfully cross-pollinated.

Rosemary Royle