

## Flower structure I – Microscopy

A flower is a reproductive structure of a plant. The following illustrated diagram shows the main features of a flower but different species have different arrangements of the parts.

The conspicuous part of many flowers consists of the petals which are white or brightly coloured. The petals serve to attract insects which help pollinate the flower.

The sepals are usually small and green. They protect the flower when it is in the bud.

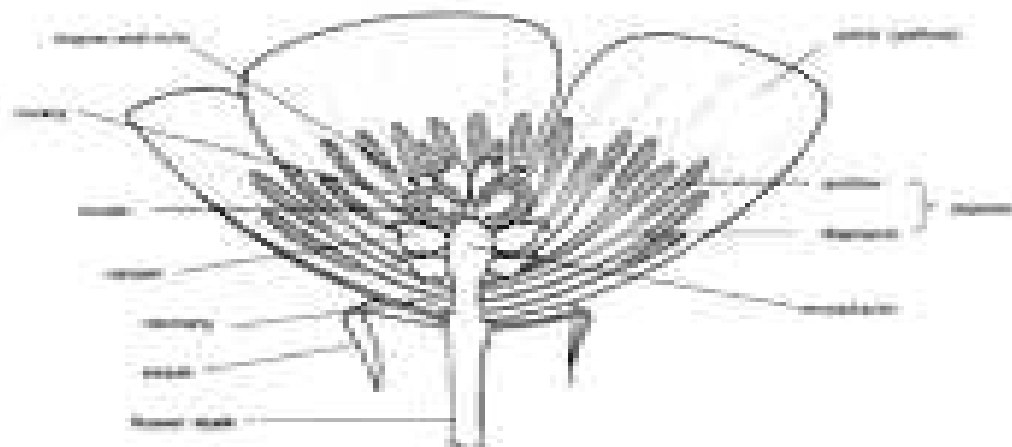
The main part of the flower consists of stamens. The male of the stamen is the filament. At the end of the filament is an anther which contains pollen grains. The pollen grains contain the male reproductive cells (gametes).

The female part of the flower consists of carpels. Each carpel consists of an ovary which contains an ovule which is the female gamete. Extending from the ovary is a style which ends in a stigma which receives the pollen from another flower.

The ovules which fertilised will become seeds, while the whole ovary will be the fruit.

The receptacle is the expanded part of the flower axis. All the parts of the flower are attached to the receptacle.

Neotomas are swellings, often at the base of the ovary or on the receptacle, which produce a sugary solution called nectar. Insects visit the flower and drink or collect the nectar.



Flower structure – Full flower of the Bluetree

### The half-flower

A drawing of a half-flower is a convenient method of representing flower structure. The flower is cut in halves with a razor blade. The surface of the cut surface is smooth, and the structures visible behind them are filled in.