



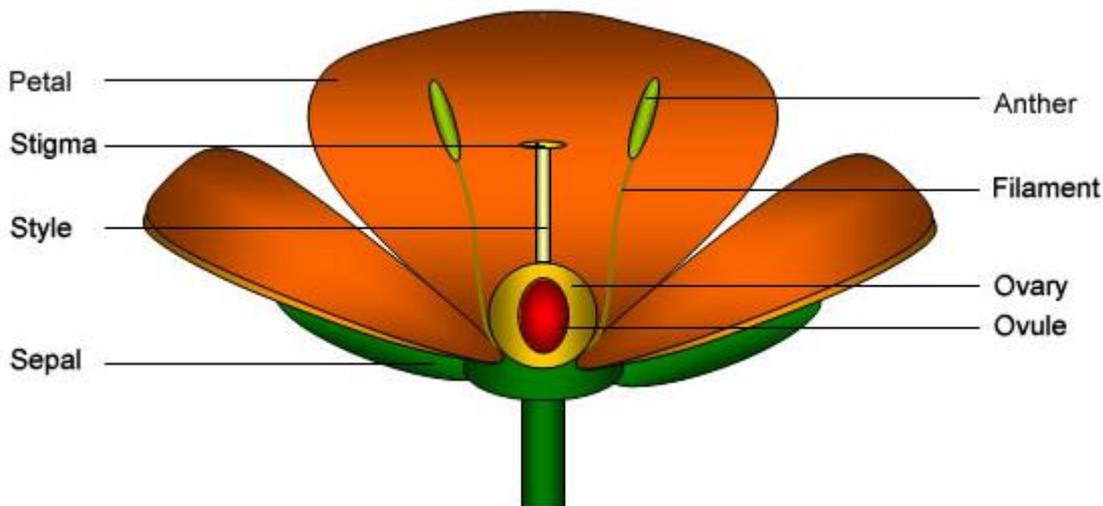
# Star Performers

## Introduction to the Series

The Star Performers series is designed to show the best of the best in bee plants. Each selected plant has been investigated in the field by our team and used extensively in our Demo Farms. They rank as star performers because they maximize nutrition by having any combination of one or more of these six great features:

1. The plant flowers at a time of pollen or nectar dearth (e.g. spring, autumn and even winter)
2. The plant flowers profusely with high density and large quantity of flowers per plant
3. Each flower delivers large quantities of pollen or nectar; such plants may have few flowers
4. The flowers deliver high quality pollen nutrition (e.g., crude protein content).
5. The flowers give bees easy access to pollen and nectar for bee foraging efficiency
6. The flowers are highly attractive and preferred by bees

We focus on the nature of the flower in relation to the bee's ease of access to the pollen and/or nectar so it is important to understand flower structure. A flower is arranged in concentric circles with the pistil in the centre surrounded by one or more whorls of stamens, then petals and then sepals. Any of these may be modified or absent as in unisexual flowers. The nectary can be anywhere -- at the base of the pistil or stamens or on the petals or even outside the flower. The nectar may be an obvious structure or inconspicuous and subtle. It is absent in flowers that produce only pollen and no nectar. The botanical terms required are illustrated as follows.



### Starting from the centre and working to the outside of the flower

**Pistil** – female part located in the centre, made up of stigma, style and ovary

**Stigma** – the receptive surface of pistil where pollen lands and germinates to produce pollen tube

**Style** – holds up the stigma; guides pollen tube to grow down to reach ovule, may be absent

**Ovary** – the female part that contains the ovules that are waiting for fertilisation to become seeds

**Ovule** – the egg awaiting fertilization from cells in the pollen tube, may be one or many in an ovary

**Stamens** – male parts surrounding the pistil, made up of the anther and filament

**Anther** – container that produces and protects pollen; on maturity it opens to expose the pollen

**Filament** – stalk that holds up the anther to promote pollen dispersal by wind or pollinators

**Nectary** – produces a sugary liquid that is carbohydrate fuel for flying insects, birds or bats

**Petals** – protect the sexual organs held in the centre and attract the pollinators

**Sepals** – outermost whorl protects flower bud, usually green, can be coloured to attract pollinators