

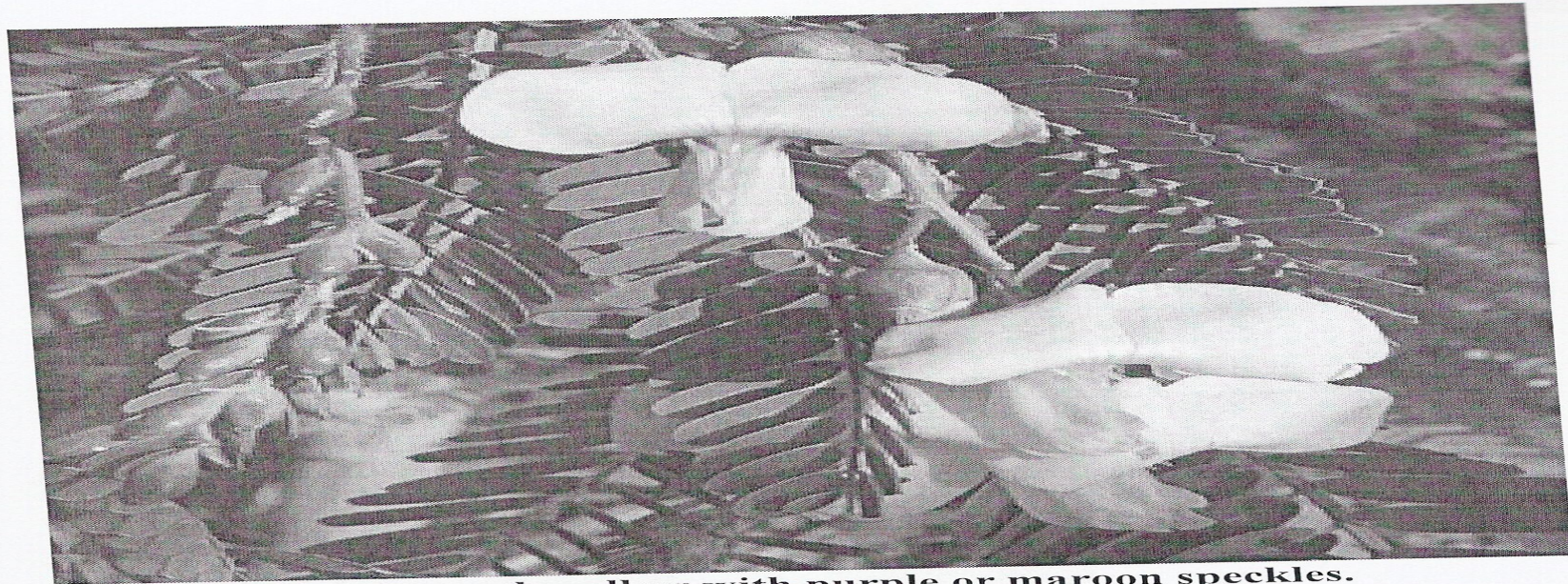


The flower

The corolla consists of five petals of three distinct kinds : 'standards' or 'banner' uppermost or outer petal, largest and most showy; two wing petals, with slender stalks called the claw , and an expanded portion; keel, two petals folded together, partially concealed by the wing petals, the expanded portions more or less united at the outer margin into a boat-shaped structure.

The calyx with five teeth forms a tube at the base of the corolla.

The keel encloses the stamens and pistil .The androecium consists of the ten stamens, the filaments of which may be united. The Staminal tube surrounds a superior ovary, an elongated structure comprising one carpel with one ovule or a single row or several ovules. A bent style surmounts the ovary and the stylar tip broadens into the stigmatic surface. The nectar resides at the bottom of the corolla tube.



The pea flowers are pale yellow with purple or maroon speckles.
Photo by R. P. Ellis courtesy Ecoport
(source URL: <http://www.ecoport.org>)



Habit. A soft wooded tree up to 6 m tall.
Photo by R. P. Ellis courtesy Ecoport



Fruit and Seed

- The ripened ovary forms a fruit of variable shape, called legume or pod. Some seeds shatters - dehiscent e.g *Macroptilium atropurpureum* and *Centrosema pubescens* while some are non-dehiscent e.g *Crotolaria* spp.
- Pods can the reserve food is stored in the cotyledons.
- be glabrous or covered with hairs. Each seeds is enclosed in the testa or seedcoat. Hilum marks place of attachment o the ovary walls. The legume seed has no endosperm, rather
- Subterranean parts
- The roots system of most legumes consists principally of an actively growing primary roots and its branches(_secondary). The primary roots may penetrate the soil to a depth of 6-8cm e.g Lucerne. The roots of many leguminous plants become infected by bacteria of the species *Rhizobium*, Which grows and multiply, forming nodules which differ in size, shape and arrangement on the roots.

Growth habit

1. **Bush – type** – a central stalk with side branches appearing along the main stem and with axillary branches developing *Cajanus cajan*; *Desmodium tortuosum*.
2. **Bunch – type**- a single crown from which several stems and new tillers arise, making it difficult to identify a main stems, stems can be erect or decumbents e.g *Stylosanthus guianensis* and *Medicago sativa*.
3. **Creeping** – the stems trail over the ground surface e,g *Calopogonium mucunoides*, *Macroptilium atropurpureum*, some *vigna* spp.
4. **Scrambling** – many of the creeping plants climb onto and grow over upright objects. Some are also twining and encircle upright objects e.g *Centrosema pubescens*, *Pueraria phaseoloides*.
5. **Rosette**- a vegetative form of some perennials developed after flowering or the onset of cool weather e.g *Medicago sativa* and *Trifolium pratense* at the higher elevations of the tropics.