

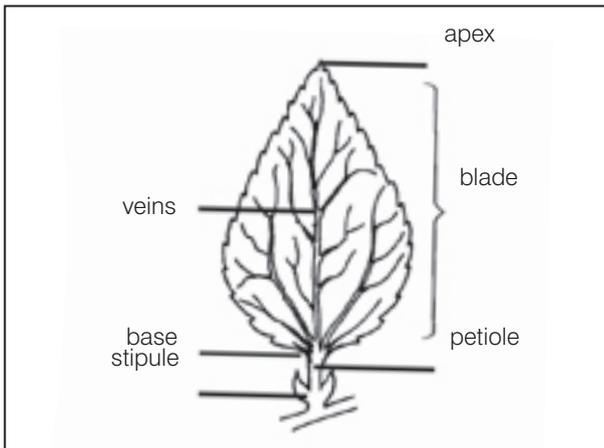


Conservation

MODULE 1

Leaf

Leaf structure varies in shape and size



Shape of the leaf blade

scales 	needle 	linear 	Elliptic /oval 	lanceolate 	oblong
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Apex (tip of leaf) shape

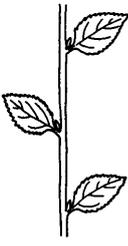
acuminate 	acute 	rounded
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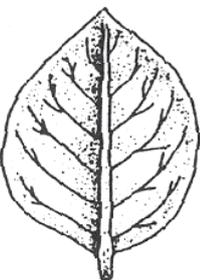
Base of leaf shape

Attenuate 	rounded 	arrow shape
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Margin (edge) of leaf

entire 	lobed 	serrate 	Dentate
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Attachment to stems					
alternate	opposite	irregular	single needle leaves	needles in pairs	needles in groups
					

Leaf Veins		
divided	reticulate	Parallel
		

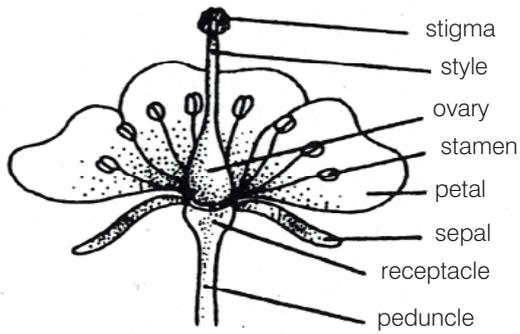
Simple and compound leaf	
	A simple leaf is attached directly to the stem
	A compound leaf is made up of many leaflets attached to a green stalk. All of these leaflets on their common stalk will eventually fall together. Stipules (leafy outgrowths) can often be found at the base of a compound leaf (see bean and rose leaves).



Conservation

MODULE 1

Flower structure



Flower structure	
single	grouped flowers (inflorescence)

Kind of inflorescence		
<p>raceme</p>	<p>Spike</p>	<p>corymb</p>
<p>umbel</p>	<p>capitulum (head of many flowers)</p>	

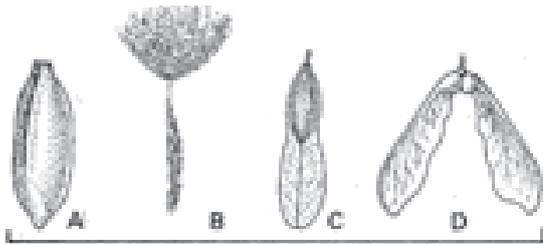
Corolla (petals)	
<p>regularly symmetric</p>	<p>irregular, bilaterally symmetrical</p>



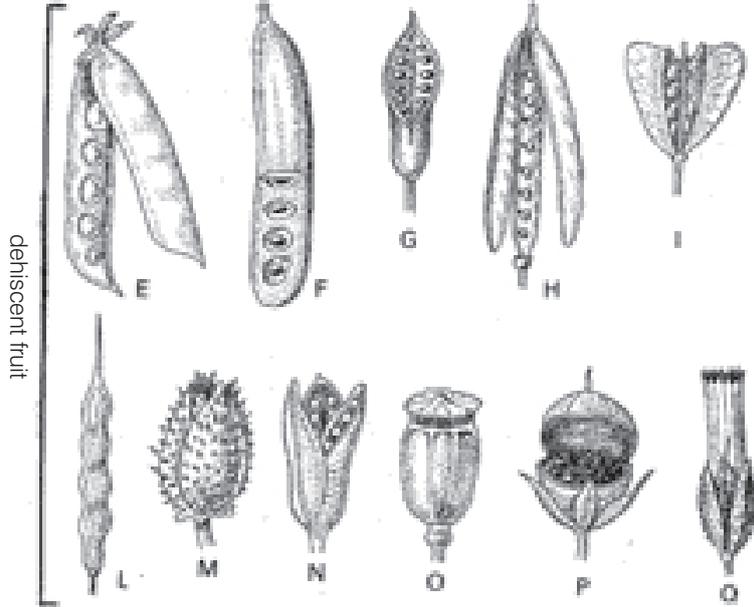
Conservation

MODULE 1

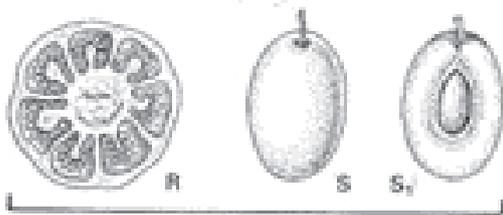
Fruits



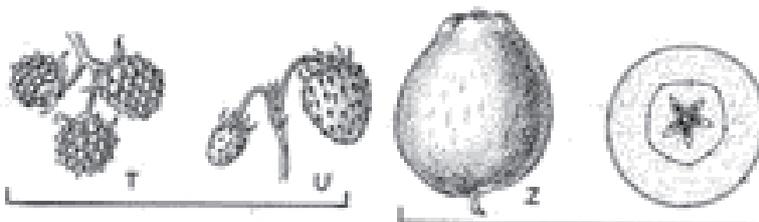
indehiscent fruit



dehiscent fruit

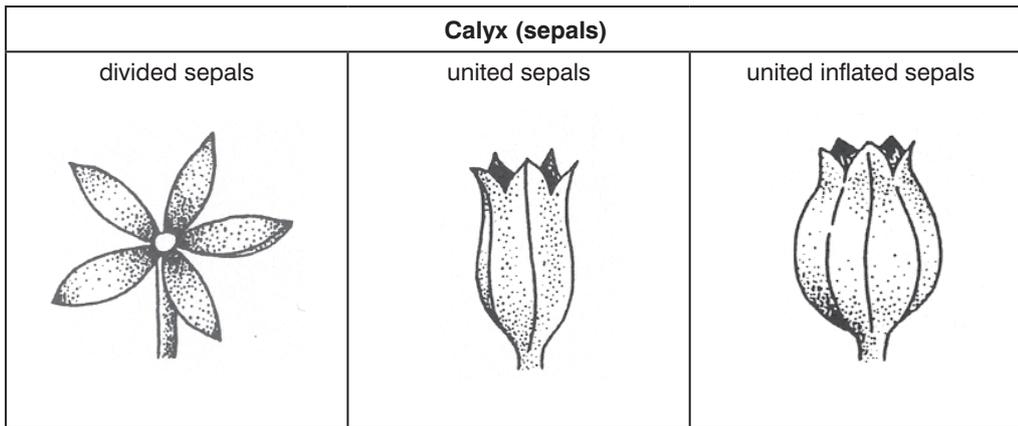


fleshy fruits



infructescence

false fruit



In flowering plants, after the ovules have been fertilised, the ovary which surrounds them develops into the fruit. The fruit protects the seed, provides a food store for the seed to use when growing and assists seed dispersal.

Fruits are divided into dry fruits and fleshy fruits.

Dry fruits (A-Q):

Dry dehiscent fruits (E-Q): the fruits split open at maturity to disperse their seeds, eg legumes (E,F) or poppy (O).

Dry indehiscent fruits: the ripe fruits do not open at maturity, e.g. oak (A); light seeds with a parachute, e.g. dandelion (B); winged seeds, e.g. ash and maple (C,D).

Fleshy fruits (R,S) can be divided into:

Drupes (S) – a single fleshy (edible) fruit surrounding a woody kernel or stone that contains the seed, e.g. peaches, almonds and cherries. Berries (R) are like drupes, without a stone. They have many seeds contained in a fleshy or gel-like covering, e.g. tomatoes and grapes. Hesperidiums are typical citrus fruits, made up of a lot of juicy hairs.

A third group is the:

False fruits (T-Z):

Which may be made up of leaves and other parts of the flower. Some examples are the infructescence (T,U) which is a mass of small fruits e.g. strawberry or a raspberry.

Conifers do not produce fruit. They generally bear their winged seeds in woody cones. Cones can also have a fleshy part e.g. yew, whose black seed is covered by a red coloured fleshy part.