

BSc. Botany (Hons) – 2ND Year
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Units of Classification of Plants:

The species is the unit of classification. All individual plants, which resemble one another in important vegetative and reproductive characters and differ visibly from other plants, constitute a species. All the plants of a species are thus supposed to have descended from the same ancestor. eg.

All banyan trees have similar characters, no matter where they grow. So they form a species, say banyan species. Similarly pipal forms a species; fig forms a third species. Plants belonging to the same species may show variations in minor characters due to environmental conditions and hybridisation.

Banyan, pipal and fig plants bear the same type of reproductive organs. They form a genus (pl. genera). Thus a genus is a collection of species having similar reproductive characters. Allied genera constitute a family or natural order; natural orders are again grouped into cohort, cohorts into series; and so on, till plant kingdom is reached.

Nomenclature of Classification of Plants:

Plants identified and described must be named. Though almost all the plants have common names but they do not serve our purpose. For proper co-ordination amongst workers names should be internationally acceptable. Linnaeus introduced 'binomial system' of nomenclature which has been followed all over the world. Every name has two parts, the generic part and the specific part.

The generic part of the name is written in capital and the specific part in small initial letter. Both the names as a rule are indicated in italics and the name of the author in Roman script. Banyan is *Ficus benghalensis*, pipal is *Ficus religiosa* and fig is *Ficus hispida*. So all the three belong to the same genus *Ficus* but form different species.

The abbreviated name of the author or the person who first published the name of the plant with a suitable description, is put after the specific name. Pea is *Pisum sativum* Linn. Here Linn indicates that Linnaeus was the author.