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BINOMIAL NOMENCLATURE

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Nomenclature deals with the application of a correct name to a plant or a taxonomic group. The naming of plants should be in such a way that it can be used internationally. This is done to overcome the problems raised by common names, which vary from language to language, and even from dialect to dialect.

The binomial nomenclature or the binomial system of nomenclature was employed by Linnaeus (1753) in the first edition of his Species Plantarum, although this system was also used to some extent by Gaspard Bauhin as early as 1623 in his Pinax. According to the binomial system of nomenclature the name of a plant consists of two Latin or latinised words, the first generic name followed by a specific epithet. For example, the name of onion is Allium cepa, Allium being the generic name and cepa being the specific epithet. The binomial nomenclature was adopted because earlier (for several centuries), the names of plants appeared to be polynomials, - long descriptive phrases, often difficult to remember e.g., Sida acuta (a member of Malvaceae) was named as Chrysophyllum folios, ovatis superne glabris parallel striatis subtus, tormentosomitidis.

The International Code of Botanical Nomenclature (ICBN) is the supreme body which governs the names of plants or a taxonomic group. The naming of genera and species follows certain rules —

Generic Name:

The generic name is usually a noun and singular, which is written with a capital letter. A generic name has different types of origin -

- (i) A genus may be named in honour of a botanist or may be a patron of botany. For example, Linnaea has been named in honour of Linnaeus.
- (ii) Some generic names are of poetic or mythological origin. For example Nymphaea denotes the lovely water-nymphs.
- (iii) Many generic names denote some characteristic feature of the plants e.g., Liliodendron or lily plant is named after the shape of the flowers of the tulip.
- (iv) Some generic name is aboriginal in origin i.e., the name existed in the land where the plant was discovered but later such plant was given Latin name. For example - Betula is an old Greek name of Birch.

Specific Epithet:

The specific epithet is often an adjective and is written with small initial letter unlike the generic name. Like the generic name, a specific epithet may also have several origin.

- (i) It may be in honour of a person.
- (ii) It may be derived from special characteristics of the plant.
- (iii) It may be derived from a geographical location where the plant grows.
- (iv) It may originate from an old common name.
- (v) It may originate arbitrarily.

How to write scientific name?

Both the generic and specific names are underlined separately, if printed it is in italics.

e.g. Mangifera indica.