Taxonomy

Binomial nomenclature:

The Scientific name of a plant consist of two seperates words or epithet. The first word designate the generic name and the second word designate the specific name thus the system of giving two different name to a particular taxon is known as binomial nomenclature.

Principle of Priority:

This principle states that when two or more names compete for the same taxon or species, the oldest validly published name is correct. Each taxon with a given circumscription, position & rank can bear only one valid name, the earliest ie an accordance with the rules of nomenclature.

Effective and valid publication:

Publication regarding new name of a taxon is effective only when —

1) It is distributed in a printed form to the general Public or atleast 10 well established leading botanical ~~garden~~ institution with libraries accesible to Botanist generally.
2) The names must be published accompanied by a description of a taxon which is available to the public.
3) It must ~~be~~ not be a hand written description or description printed in a necessary catalogue or seed exchange shit.

A Publication become valid when —

1) It is effectively published.

2) It is accompanied by a diagnosis in a latin or by a reference to a previously effectively published diagnosis.

3) Its nomenclatural type has been clearly indicated.

4) Its intended rank clearly stated.

5) In brief it may be said when a name is published in accordance with the provision of the code becomes valid.

Typification:

A nomenclatural type is that element to which the name of a taxon is permanently attached either as a correct name or as a synonym. The principle of Typification does not apply to names of a taxa above the rank of family except for names that are automatically typified.

Following are some of the important nomenclatural type —

(i) Holotype:

It is the one specimen or the other element used by the author in the original publication as the nomenclatural type.

(ii) Isotype:

It is a duplicate specimen of holotype. When several branches of a plant are collected at the same time one is designated as holotype & others becomes isotype.

(iii) Lectotype:

It is a specimen or other element selected from the original material to serve as a nomenclatural type when no holotype was designated at the time of publication or as long as it is missing.

(iv) Syntype:

It is one of the two or more specimen cited by an author of a species when no holotype was designated as type.

(v) Neotype:

It is a specimen selected to serve as a substitute for the holotype when all materials on which the name of a taxon was based is missing.

(vi) cotype or paratype:

It is the specimen collected from the same plant from which holotype was collected.

(vii) Topotype:

It is the specimen collected from the same locality from ~~which~~ where the holotype was collected.

(viii) Iconotype:

A drawing or a photograph of the type specimen is known as Iconotype.

(ix) Allotype:

It is one type of a paratype of opposite sex to the holotype and originally designated to the author.