

## Quadrant II – Transcript and Related Materials

**Programme:** Bachelor of Science (First Year)

**Subject:** Botany

**Course Code:** BOC 102

**Course Title:** Biodiversity II (Vascular Plants)

**Unit: Unit 7:** Botanical nomenclature

**Module Name:** Valid Publication, Rejection of names

**Module No:** 54

**Name of the Presenter:** Pratibha Prabhugaonkar

---

### Notes

#### Valid publication

The publication becomes effective or valid by distribution in printed form, through sale, exchange or gift to the general public or at least the botanical institutions with libraries accessible to botanists generally. It is not affected by communication of new names at a public meeting, by the placing of names in collections or gardens open to the public. The publication in newspapers and catalogues (1 January 1953 onwards) and seed exchange lists (1 January 1977 onwards) is not an effective publication. Publication is considered valid on or after 1 January, 1953, only if it carries a statement of its publication or an internal evidence (e.g. an ISBN, or a commercial publisher). Publication of handwritten material, reproduced by some mechanical or graphic process such as lithography, offset, or metallic etching before 1 January 1953 is effective. On or after 1 January 2012 of electronic material in Portable Document Format (PDF) in an online publication

“online” - accessible electronically via the World Wide Web. In order to be accepted, a name of a new taxon published on or after 1 January 1996 must be accompanied by a Latin or English description or diagnosis or by a reference to a previously and effectively published Latin or English description or diagnosis. For groups originally not covered by ICBN, the Code accepts them as validly published if they meet the requirements of the pertinent non-botanical Code, but are now recognized as organisms covered under botanical Code. According to XVI International Botanical Congress (St Louis, 1999) new names of plants and fungi would have to be registered in order to be validly published after the 1st of January 2000. Publication - rank of family or below on or after 1st January, 1958 is not considered valid if type is not indicated. Name below rank of a genus is not validly published unless the name of the genus or species to which it is assigned is validly published.

### **Rejection of Names**

The process of selection of correct name for a taxon involves the identification of illegitimate names, those which do not satisfy the rules of botanical nomenclature. A legitimate name must not be rejected merely because it, or its epithet, is inappropriate or disagreeable, or because another is preferable or better known or because it has lost its original meaning. The name *Scilla peruviana* L. (1753) is not to be rejected merely because the species does not grow in Peru. Any one or more of the following situations leads to the rejection of a name:

1. ***Nomen nudum*** (abbreviated ***nom.nud.***): A name with no accompanying description. Many names published by Wallich in his *Catalogue* (abbreviated *Wall. Cat.*) published in 1812 were ***nomen nudum***. These were either validated

by another author at a later date by providing a description (e.g. *Cerasus cornuta* Wall. ex Royle)

2. Name not effectively published, not properly formulated, lacking typification or without a Latin diagnosis.

3. **Tautonym:** binomials with identical generic name and specific epithet constitute **tautonyms** (e.g. *Malus malus*). In botanical nomenclature tautonyms are rejected. The words in the tautonym are exactly identical, and evidently names such as *Cajanus cajan* or *Sesbania sesban* are not tautonyms and thus legitimate. Repetition of a specific epithet in an infraspecific epithet does not constitute a tautonym but a legitimate **autonym** (e.g. *Acacia nilotica* ssp. *nilotica*).

4. **Later homonym:** Just as a taxon should have one correct name, the Code similarly does not allow the same name to be used for two different species (or taxa). Such, if existing, constitute **homonyms**. The one published at an earlier date is termed the **earlier homonym** and that at a later date as the **later homonym**. The Code rejects later homonyms even if the earlier homonym is illegitimate.

*Ziziphus jujuba* Lam., 1789 had long been used as the correct name for the cultivated fruit jujube. This, however, was ascertained to be a later homonym of a related species *Z. jujuba* Mill., 1768. The binomial *Z. jujuba* Lam., 1789 is thus rejected and jujube correctly named as *Z. mauritiana* Lam., 1789. Similarly, although the earliest name for almonds is *Amygdalus communis* L., 1753 when transferred to the genus *Prunus* the name *Prunus communis* (L.) Archangeli 1882 for almond became a later homonym of *Prunus communis* Huds., 1762 which is a species of plums. *P. communis* (L.) Archangeli was as such replaced by *P. dulcis* (Mill.) Webb, 1967 as the name for almonds.

5. **Later isonym:** When the same name, based on the same type, has been published independently at different times by different authors, then only the earliest of these so-called 'isonyms' has nomenclatural status. The name is always to be cited from its original place of valid publication, and later 'isonyms' may be disregarded. Baker (1892) and Christensen (1905) independently published the name *Alsophila kalbreyeri* as a substitute for *A. podophylla* Baker (1891) non Hook. (1857). As published by Christensen, *Alsophila kalbreyeri* is a later 'isonym' of *A. kalbreyeri* Baker, without nomenclatural status.

6. **Nomen superfluum** (abbreviated as **nom. superfl.**): A name is illegitimate and must be rejected when it was nomenclaturally superfluous when published, i.e., if the taxon to which it was applied—as circumscribed by its author—included the type of a name or epithet which ought to have been adopted under the rules. *Physkium natans* Lour., 1790 thus when transferred to the genus *Vallisneria*, the epithet *natans* should have been retained but de Jussieu used the name *Vallisneria physkium* Juss., 1826 a name which becomes superfluous. The species has accordingly been named correctly as *Vallisneria natans* (Lour.) Hara, 1974. A combination based on a superfluous name is also illegitimate.

7. **Nomen ambiguum** (abbreviated as **nom. ambig.**): A name is rejected if it is used in a different sense by different authors and has become a source of persistent error. The name *Rosa villosa* L. is rejected because it has been applied to several different species and has become a source of error.

8. **Nomen confusum** (abbreviated as **nom. confus.**): A name is rejected if it is based on a type consisting of two or more entirely discordant elements, so that it is difficult to select a satisfactory lectotype. The characters of the genus *Actinotinus*, for example, were derived from two genera *Viburnum* and

*Aesculus*, owing to the insertion of the inflorescence of *Viburnum* in the terminal bud of an *Aesculus* by a collector. The name *Actinotinus* must, therefore, be abandoned.

9. ***Nomen dubium*** (abbreviated as ***nom.dub.***): A name is rejected if it is dubious, i.e. it is of uncertain application because it is impossible to establish the taxon to which it should be referred. Linnaeus (1753) attributed the name *Rhinanthus crista-galli* to a group of several varieties, which he later described under separate names, rejecting the name *R. crista-galli* L. Schwarz (1939) listed this as ***Nomen dubium***, and the name was rejected.

10. **Name based on monstrosity**: A name must be rejected if it is based on a monstrosity. The generic name *Uropedium* Lindl., 1846 was based on a monstrosity of the species now referred to as *Phragmidium caudatum* (Lindl.) Royle, 1896. The generic name *Uropedium* Lindl. must, therefore, be rejected.