A. G. ROBYNS


# International Botanical Congress

## Cambridge (England), 1930

## NOMENCLATURE

## Proposals by British Botanists

LONDON:
PRINTED UNDER THE AUTHORITY OF HIS MAJESTY'S STATIONERY OFFICE
BY WYMAN & SONS, LTD., FETTER LANE, LONDON, E.C.4.

1929

# CONTENTS.

# .—PROPOSALS BY THE SUB-COMMITTEE ON NOMENCLATURE, APPOINTED BY THE IMPERIAL BOTANICAL CONFERENCE, LONDON, 1924.

The undersigned have the honour to propose to the International Botanical Congress, to be held at Cambridge (England) in 1930, that the International Rules of Botanical Nomenclature be amended as follows :

(1) That the Articles and their examples be replaced by the Articles and examples given in the subjoined Memorandum (International Code).

(2) That the Recommendations be retained with the omissions, alterations and additions specified in the subjoined Memorandum (Amendments to Recommendations).

J. RAMSBOTTOM (Brit. Mus.).
A. J. WILMOTT (Brit. Mus.).
T. A. SPRAGUE (Kew), Convener.
E. M. WAKEFIELD (Kew).

2946. Wt. 10992—17. 250. 8/29. Wy. & S., Ltd. Gp. 2.

## Introduction.

EXPERIENCE of the working of the International Rules of Botanical Nomenclature during the last 24 years having suggested that certain modifications were desirable, the Sub-Committee has prepared the following proposed " International Code of Botanical Nomenclature," which represents a revised and amended edition of the International Rules. It differs from the latter in the following respects.

(1) The *type method* is explicitly introduced into the Code (see Art. 17, 55, 56). The principle of applying names by reference to nomenclatural types was accepted at the Brussels Congress (1910), and a new Recommendation (XVIII bis) referring to types was then inserted, but the reformulation necessitated in various Articles was not undertaken. This has now been carried out.

(2) A *Latin diagnosis* is no longer made *compulsory* for names of new groups. We believe that botanists should be strongly recommended to supply diagnoses in Latin, when they publish descriptions of new groups in a modern language, but that it is quite impracticable to reject the innumerable new names, which were unaccompanied by such diagnoses, published since 1907.

(3) *Tautonyms* (" Duplicating binominals "), i.e. names of species in which the specific epithet is exactly the same as the generic name, are no longer rejected. We dislike tautonyms, but their rejection has resulted in endless disputes as to the correct specific epithets to be used for the species concerned. We need mention only such cases as *Calamagrostis* (*lanceolata* or *canescens*) and *Cydonia* (*maliformis* or *oblonga*). Hence we believe that to accept tautonyms is the less of two evils.

(4) All *later homonyms* are now rejected (unless they are Nomina **generica conservata**), except where the earlier homonym was a **nomen nudum**. Under the Rules the name of one group frequently **depends on the** taxonomic validity of another group. But it is **unreasonable to expect** a South African botanist, for example, to undertake a critical research into European species of *Senecio*, in order to determine whether the name of the South African *Senecio barbareifolius* Turcz. is or is not invalidated by the prior homonym *S. barbareifolius* Reichb. This source of instability in nomenclature and of waste of time is now removed.

(5) An attempt has been made to remove various sources of ***ambiguity*** in the Rules. This necessitated a considerable amount of **re-wording**, and finally led to the re-drafting of the Rules as a whole. **Owing** partly to the use of the expression " valid name " in two **different** senses in the Rules (in Art. 15, and Art. 51, 56), much time **has been** spent in discussions whether particular names were " valid." **The** expression " *valid name* " is now defined as the *correct* name, **under this** Code, for a given group, whereas *any* name *published in*

*accordance with the Code* is a "*legitimate*" name, whether valid or not in a given classification. The use of this distinction throughout the Code removes this source of ambiguity. Similarly a consistent use of the words "name" and "epithet" has been introduced. The examples have been revised throughout, as some were found to be inapplicable.

(6) The Articles of Chapter III, Sections 6 and 7, of the Rules are very *difficult to consult* in their present arrangement and form. An attempt has been made to arrange the subject-matter in a more convenient sequence.

(7) The establishment of an *Advisory Committee* with the functions indicated (Art. 77) should secure greater uniformity in nomenclature through the publication of their "Opinions."

We believe that the adoption of the proposed International Code would lead to greater precision and stability in nomenclature, and at the same time remove much ambiguity. Such relatively few changes as may be required by the new Article on homonyms are much outweighed by the gain in stability and the consequent saving of time. It is hoped that the changes introduced in the Code may lead to its acceptance by botanists who have hitherto, on various grounds, been unable to accept the International Rules.

The redrafting of the Rules has led to an increase in the number of Articles from 58 to 78. The actual number of *new* Articles, however, is only 10 (namely Nos. 17, 23, 24, 25, 34, 44, 68, 75, 76, 77). Certain Articles of the Rules were too comprehensive for clarity, and each of these has therefore been divided, for convenience of consultation: thus Art. 51 of the Rules has been divided into Art. 20, 64, 65, 66, 67, 69 and 70 of the Code. Rec. II and III of the Rules are replaced by Art. 26 and 27 of the Code.

# (1) International Code of Botanical Nomenclature.

## Chapter I. General Considerations (Art. 1–3, 8–9) and Guiding Principles (4–7).

Art. 1. Botany cannot make satisfactory progress without a precise system of nomenclature, which is used by the great majority of botanists in all countries.

Art. 2. The precepts on which this precise system of botanical nomenclature is based are divided into *principles*, *rules* and *recommendations*. The principles (Art. 1–9, 10–14, and 15–19*) form the basis of the rules and recommendations. The object of the rules (Art. 19–78*) is to put the nomenclature of the past into order and to provide for that of the future. They are always retroactive : names or forms of nomenclature contrary to a rule (*illegitimate* names or forms) cannot be maintained. The recommendations deal with subsidiary points, their object being to bring about greater uniformity and clearness in future nomenclature : names or forms contrary to a recommendation cannot on that account be rejected, but they should not be copied.

Art. 3. The Rules of nomenclature should be neither arbitrary nor imposed by authority. They should be simple and founded on considerations sufficiently clear and forcible for everyone to comprehend and be disposed to accept.

Art. 4. The essential points in nomenclature are : (1) certainty in the application of names ; (2) stability of names. It follows that names or forms which will cause error, ambiguity or confusion should be avoided or rejected, and also that no superfluous names should be created.

Other considerations such as absolute philological and grammatical correctness, regularity or euphony of names, more or less prevailing custom, regard for persons, etc., are relatively subsidiary.

Art. 5. In the absence of a relevant rule, or where the consequences of rules are doubtful, established custom should be followed.

Art. 6. Botanical nomenclature is independent of zoological nomenclature in the sense that the name of a plant is not to be rejected simply because it is identical with the name of an animal. If, however, an organism is transferred from the animal to the vegetable kingdom, its zoological names are to be accepted in

* Art. 19 is both a principle and a rule.

botanical nomenclature with their original zoological status; and if an organism is transferred from the vegetable to the animal kingdom its names retain their botanical status.

Art. 7. Scientific names of all groups should be in Latin or Greek. When taken from any language other than Latin, or formed in an arbitrary manner, they are treated as if they were Latin Latin terminations should be used as far as possible for new names.

Art. 8. Nomenclature deals with: (1) the *terms* which denote the rank of taxonomic groups (Art. 10–14); (2) the *names* which are applied to the individual groups.

Art. 9. This Code applies to all classes of the plant kingdom, recent and fossil.

## Chapter II. **Categories of taxonomic groups, and the terms denoting them** (Art. 10–14).

**Art. 10. Every individual plant,** interspecific hybrids excepted, **belongs to a species** (*species*), every species to a genus (*genus*), every genus to a family (*familia*), every family to an order (*ordo*), every order to a class (*classis*), every class to a division (*divisio*).

Art. 11. In many species we distinguish varieties (*varietas*) and forms (*forma*), in the case of parasites special forms (*forma specialis*); and in some cultivated species, modifications still more numerous; in many genera sections (*sectio*) and series (*series*), in many families tribes (*tribus*).

Art. 12. Additional categories may, if required, be introduced below any category from division to variety inclusive. The terms denoting them are formed from the term of the category immediately higher in rank by adding the prefix sub (*sub*). In this way subfamily (*subfamilia*) denotes a category between a family and a tribe, subtribe (*subtribus*) a category between a tribe and a genus, etc. The classification of subordinate groups may thus be carried to twenty-four degrees in the following order: Regnum vegetabile. Divisio. Subdivisio. Classis. Subclassis. Ordo. Subordo. Familia. Subfamilia. Tribus. Subtribus. Genus. Subgenus. Sectio. Subsectio. Series. Subseries. Species. Subspecies. Varietas. Subvarietas. Forma. Forma specialis. Individuum.

If this list of categories is insufficient, it may be enlarged by the intercalation of supplementary groups, provided that this does not give rise to confusion or error.

Names of forms and hybrids believed to have arisen under cultivation are dealt with in Art. 39.

Examples: *Grex* is a category which may be intercalated between subgenus and sectio; *clon* between forma and individuum.

Art. 13. The definition of each of these categories varies, up to a certain point, according to individual opinion and the state of the science ; but their relative order, sanctioned by custom, must not be altered. No classification is admissible which contains such alterations.

Examples of inadmissible transposition : a form divided into varieties, a species containing genera, a genus containing families or tribes.

Art. 14. A plant resulting from cross-fertilization between plants belonging to different groups is a hybrid (*hybrida*).

## Chapter III. **Names of taxonomic groups** (Art. 15–76).

### Section 1. **General Principles.**

Art. 15 [formerly 16]. The essential purpose in giving a name to a taxonomic group is to supply a concise means of referring to that group.

**Art. 16** [part of former Art. 15]. Each taxonomic group, **with a given circumscription position and rank, can bear only one *valid* name (i.e. correct name under this Code).**

Art. 17 [new]. The application of names of taxonomic groups is determined by means of *nomenclatural types*. A nomenclatural type is that constituent element of a group to which the name of the group is permanently attached, whether as an accepted name or as a synonym.

The type of the name of an order or suborder is a family, that of the name of a family, subfamily, tribe or subtribe is a genus, that of a generic name is a species, that of the name of a species or group of lower rank is usually a specimen or preparation. In species named by Linné, however, the type is frequently a description or figure given by a previous author. The same applies to Fries and certain other authors. Where permanent preservation of a specimen or preparation is impossible, the application of the name of a species or subdivision of a species is determined by means of the original description and figure.

Note.—The nomenclatural type is not necessarily the most typical or representative element of a group : it is merely that element with which the *name* of the group is permanently associated.

Examples: The type of the name *Malvales* is the family *Malvaceae* ; the type of the name *Malvaceae* is the genus *Malva* ; the type of the name *Malva* is the species *Malva sylvestris* L. ; the type of the name *Polyporus amboinensis* Fries is the figure and description in Rumph. Herb. Amboin. vi. p. 129, t. 57, fig. 1.

Art. 18 [formerly 17]. Changes in nomenclature should be made only after adequate taxonomic study.

## Section 2. **Principle of priority of publication.**

Art. 19 [part of former Art. 15]. When it is necessary to choose between two or more names or epithets which have been applied within a given taxonomic group, the principle of priority of publication is applied, the earliest name or epithet which will be in accordance with the rules being chosen.

Note.—This principle does not apply to groups of higher rank than the family—vide Art. 25.

## Section 3. **Limitation of the principle of priority.**

Art. 20 [formerly part of Art. 51 : 5°]. A name of a taxonomic group has no status under this Code, and has no claim to recognition by botanists, unless it is ***validly*** published (vide Sect. 6, Art. 41–49).

Art. 21 [formerly 19]. Legitimate botanical nomenclature for all groups of plants begins with the publication of Linné, Species Plantarum, ed. 1 (1753), with the following exceptions :

(*a*) Muscineae, 1801 (Hedwig, *Species Muscorum*).
(*b*) Fungi : Uredinales, Ustilaginales and Gasteromycetes, 1801 (Persoon, *Synopsis methodica Fungorum*).
(*c*) Fungi caeteri, 1821–32 (Fries, *Systema mycologicum*).
(*d*) The following Algae : Nostocaceae homocysteae, 1891–93 (Gomont, *Nostocaceae homocysteae*) ; Nostocaceae heterocysteae, 1886 (Bornet et Flahault, *Nostocaceae heterocysteae*) ; Desmidiaceae, 1848 (Ralfs, *British Desmidiaceae*) ; Oedogoniaceae, 1900 (Hirn, *Monographie und Ikonographie der Oedogoniaceen*).

It is agreed to associate generic names which appear in Linné's Species Plantarum, ed. 1 (1753), and ed. 2 (1762–63), with the first subsequent descriptions given under those names in Linné's Genera Plantarum, ed. 5 (1754) and ed. 6 (1764).

Art. 22 [formerly 20]. As the strict application of rules sometimes leads to undesirable changes in nomenclature, certain widely used names are conserved as exceptions. These names are principally such as have come into general use in the fifty years following their publication, or have been used in monographs and important floristic works, or are widely known to horticulturists, foresters and the general public. They include names of families (Appendix II), genera (Appendix III) and species (Appendix IV).

These lists of conserved names will remain permanently open for additions. Any proposal of an additional name should be accompanied by a detailed statement of the cases for and against its conservation. Such proposals should be submitted to the Advisory Committee (vide Art. 77) for its opinion.

The application of conserved names is determined by nomenclatural types, or by substitute-types where necessary or desirable.

A conserved name is conserved against all other names for the group, whether these are cited in the corresponding list of rejected names or not, so long as the group concerned is not united or reunited with another group bearing a legitimate name. In the event of union or reunion with another group, the earlier of the two competing names is adopted in accordance with Art. 60.

Examples.—The generic name *Spergularia* J. et C. Presl (1819) is conserved against *Alsine* L. (1753), emend. Reichb. (1832) (=*Delia* Dum. + *Spergularia*), although *Alsine* L. (1753), partim, is not included in the list of rejected names: *Spergularia* was conserved as including *Delia* (*Alsine* L., partim). If the genus *Weihea* Spreng. (1825) is united with *Cassipourea* Aubl. (1775), the combined genus will bear the prior name *Cassipourea*, although *Weihea* is conserved, and *Cassipourea* is not.—If *Mahonia* Nutt. (1818) is reunited with *Berberis* L. (1753), the combined genus will bear the prior name *Berberis*, although *Mahonia* is conserved.—*Nasturtium* R. Br. (1812) was conserved only in the restricted sense, for a monotypic genus based on *N. officinale* R. Br.: hence, if it is reunited with *Rorippa* Scop. (1760), it must bear the name *Rorippa*.

**Art. 23 [new]. When a name proposed for conservation has been provisionally approved by the Advisory Committee, botanists are authorized to retain it pending the decision of the next International Botanical Congress.**

## Section 4. Nomenclature of the taxonomic groups according to their categories.

### § 1. Nature of names: unitary, binary or ternary.

Art. 24 [new]. Genera and groups of higher rank are known by unitary names. Groups of lower rank than the genus are known by combinations consisting of the name of the genus followed by one or two epithets (binary or ternary combinations).

### § 2. Names of groups above the rank of family (unitary names).

Art. 25 [new]. Names of groups above the rank of family are not subject to the principle of priority of publication.

Art. 26 [formerly Rec. II]. Names of groups above the rank of order may be taken from any source. They must, however, be in the plural.

Examples.—*Angiospermae, Gymnospermae; Monocotyledoneae, Dicotyledoneae; Pteridophyta; Coniferae; Fungi, Lichenes, Algae.*

Art. 27 [formerly Rec. III]. Names of orders (*ordines*) are formed from the name of their type-family by adding the suffix *-ales* to the stem of the family name; names of suborders (*subordines*) are formed in a similar way by adding the suffix *-ares*.

Examples of names of orders: *Liliales* (from *Liliaceae*), *Polygonales* (from *Polygonaceae*), *Urticales* (from *Urticaceae*). Examples

of names of suborders: *Bromeliares* (from *Bromeliaceae*), *Malvares* (from *Malvaceae*), *Euphorbiares* (from *Euphorbiaceae*).

§ 3. NAMES OF FAMILIES AND SUBFAMILIES, TRIBES AND SUBTRIBES (UNITARY NAMES).

Art. 28 [formerly 21]. Names of families (*familiae*) are formed from the accepted name of their type-genus by adding the suffix *-aceae* to the stem of the generic name.

Examples: *Rosaceae* (from *Rosa*), *Salicaceae* (from *Salix*), *Amaryllidaceae* (from *Amaryllis*).

Note.—Certain names of families not so formed are conserved—see Appendix II.

Art. 29 [formerly 23]. Names of subfamilies (*subfamiliae*) are formed from the names of their type-genera by adding the suffix *-oideae* to the stem of the generic name; similarly those of tribes (*tribus*) take the suffix *-eae*, and those of subtribes (*subtribus*) take the suffix *-inae*.

Examples of subfamilies: *Asphodeloideae* (from *Asphodelus*), *Rumicoideae* (from *Rumex*); tribes: *Asclepiadeae* (from *Asclepias*), *Phyllantheae* (from *Phyllanthus*); subtribes: *Metastelmatinae* (from *Metastelma*), *Madiinae* (from *Madia*).

§ 4. NAMES OF GENERA (UNITARY NAMES).

Art. 30 [formerly 24]. Names of genera are substantives (or adjectives used as substantives), in the nominative singular, and written with a capital initial letter. They may be taken from any source whatever, and may even be composed in an absolutely arbitrary manner.

Examples: *Rosa, Convolvulus, Cornucopiae, Hedysarum, Bartramia, Liquidambar, Gloriosa, Impatiens, Manihot, Meborea, Ifloga* (an anagram of *Filago*).

§ 5. NAMES OF SUBDIVISIONS OF GENERA (BINARY NAMES).

Art. 31 [formerly 25]. The epithets of subgenera and sections are preferably substantives formed in the same way as generic names; those of subsections series and subseries are preferably adjectives in the nominative plural, agreeing in gender with the generic name. All such epithets are written with a capital initial letter. The epithet is either separated from the generic name by a term abbreviation or symbol indicating its rank, or is placed within parentheses.

Examples: *Scilla* subgen. *Adenoscilla*, or *Scilla* (*Adenoscilla*), *Hermannia* subgen. *Eu-hermannia, Hieracium* subgen. *Archihieracium, Melilotus* subgen. *Micromelilotus, Fraxinus* sect. *Fraxinaster, Trifolium* sect. *Trifoliastrum, Trifolium* sect. *Lagopus, Inga* sect. *Pseudinga, Draba* sect. *Heterodraba, Ocimum* sect. *Gymnocimum Plantago* sect. *Neoplantago, Stachys* sect. *Stachyotypus, Dianthus* subsect. *Tubulosi, Cordia* subsect. *Laxiflorae, Thalictrum* subsect. *Platycarpa.*

§ 6. NAMES OF SPECIES (BINARY NAMES).

Art. 32 [formerly 26]. Names of species are binary combinations consisting of the name of the genus followed by a single specific epithet. If an epithet consists of two or more words, these must be either united into one or joined by hyphens. Symbols forming part of specific epithets proposed by Linné must be transcribed.

Examples: *Cornus sanguinea, Lychnis dioica, Dianthus monspessulanus, Papaver Rhoeas, Uromyces Fabae, Fumaria Gussonei, Geranium Robertianum, Embelia Sarasinorum, Atropa Belladonna, Impatiens Noli-tangere, Adiantum Capillus-Veneris, Atropa Bella donna* L. Sp. ed. 1, 181 is written *Atropa Belladonna* (as in L. Sp. ed. 2, 260). *Impatiens noli tangere* L. Sp. ed. 1, 938 is written *Impatiens Noli-tangere* (the capital initial being employed in accordance with Rec. X.). *Scandix Pecten* ♀ L. must be transcribed as *Scandix Pecten-Veneris; Veronica Anagallis* ▽ L. must be transcribed as *Veronica Anagallis-aquatica.*

§ 7. NAMES OF GROUPS BELOW THE RANK OF SPECIES (TERNARY NAMES).

Art. 33 [formerly 28]. Names of groups below the rank of species are ternary combinations consisting of the name of the species followed by the distinctive epithet of the group. It is often desirable to insert before the distinctive epithet a term abbreviation or symbol indicating the rank of the group.

Examples: *Andropogon ternatus* subsp. *macrothrix,* or *Andropogon ternatus macrothrix; Herniaria hirsuta* var. *diandra,* or *Herniaria hirsuta diandra; Minuartia tenuifolia* subvar. *Barrelieri* or *Minuartia tenuifolia Barrelieri.*

§ 8. NAMES AND FORMULAE OF HYBRIDS (OR PUTATIVE HYBRIDS).

Art. 34 [new]. Groups of hybrid origin should not be given names unless they possess relatively constant morphological characters (vide Art. 38).

Art. 35 [formerly 31]. Hybrids between two species of the same genus are designated by a formula indicating their parentage and, whenever it seems useful or necessary, by a name.

(1) *Sexual hybrids.* The formula consists of the names of the two parents connected by the sign ×. The name resembles that of a species and is subject to the same rules, but is distinguished by the presence of the sign × before the " specific " epithet.

When the direction of the cross is unknown, the names of the parents are given in alphabetical order. When known, it is indicated by inserting the signs ♀ and ♂, the name of the female parent coming first.

(2) *Asexual hybrids* (graft-hybrids, chimerae etc.). The formula consists of the name of the two parents in alphabetical order connected by the sign +. The name has a " specific " epithet different

from that of the corresponding sexual hybrid (if any), and the epithet is preceded by the sign +.

Example of sexual hybrids : *Geum* × *intermedium* (*Geum rivale* × *urbanum*) ; *Mentha* × *Lamarckii* (*Mentha longifolia ?* × *rotundifolia*) ; *Salix* × *cernua* (*Salix herbacea* × *lapponum*, teste Moss ; *S. herbacea* × *repens*, testibus A. et G. Camus).

Art. 36 [formerly 32]. Bigeneric hybrids (i.e. hybrids between species of two genera) are also designated by a formula and, whenever it seems useful or necessary, by a name.

The formula consists of the names of the two parents connected by a sign, as in Art. 35 (1).

The name consists of a new " generic " name usually formed by a combination of the names of the parent genera, and a "specific " epithet. All hybrids (whether sexual or asexual) between the same two genera bear the same " generic " name.

(1) *Sexual hybrids.* In the formula, the connecting sign × is used. The name is preceded by the sign ×.

(2) *Asexual hybrids.* In the formula, the connecting sign + is used. The name is preceded by the sign +. The " specific " epithet is different from that of the corresponding sexual hybrid (if any) between the same species.

Examples of sexual hybrids : × *Odontioda Boltonii* (*Cochlioda Noezliana* × *Odontoglossum Vuylstekeae*) ; × *Pyronia Veitchii* (*Cydonia oblonga* × *Pyrus communis*).

Examples of graft hybrids : + *Pyronia Danielii* (*Cydonia oblonga* + *Pyrus communis*).

Art. 37 [formerly 33]. Ternary hybrids, or those of a higher order, are designated like ordinary hybrids by a formula and, whenever it seems useful or necessary, by a name. Such as are trigeneric or polygeneric are given new " generic " names usually formed by a combination of the names of the parent genera.

Examples : *Salix* × *Straehleri* = *Salix aurita* × *cinerea* × *repens*, or *S.* (*aurita* × *repens*) × *cinerea*.

Examples of new generic names : × *Brassolaeliocattleya* (composed of the three names *Brassavola*, *Laelia* and *Cattleya*), × *Potinara*, × *Vuylstekeara*.

Art. 38 [formerly 34]. When there is occasion to distinguish different hybrid forms of the same parentage, each of these should be given a separate " specific " epithet. When necessary, the parentage is indicated within parentheses.

Examples : *Mentha* × *villosa*, *M.* × *alopecuroides*, and *Mentha* × *Lamarckii* are different hybrids, all supposedly of the parentage *M. longifolia* × *rotundifolia*. None of these should be treated as a variety of one of the others.

§ 9. NAMES OF PLANTS OF HORTICULTURAL ORIGIN.

Art. 39 [formerly 30]. Forms and hybrids of horticultural origin, or recognized only by horticulturists, are given fancy epithets, preferably vernacular, as different as possible from the botanical epithets of species and varieties. When they can be referred to a given species, subspecies or botanical variety, the fancy epithet follows the name of that group. When they cannot be referred to any species, the fancy epithet follows the generic name.

Examples : *Galega officinalis* " George Hartland " ; *Cypripedium* " Goliath."

## Section 5. **Conditions of effective publication.**

Art. 40 [formerly 35]. Publication is effected, under this Code, either by sale to the general public, or by general distribution among specified representative botanical institutions, of printed matter or indelible autographs.

No other kind of publication is accepted as effective : communication of new names at a public meeting, or the placing of names in collections or gardens open to the public, does not constitute effective publication.

Examples : Effective publication without printed matter : *Salvia oxyodon* Webb et Heldr. was published in July 1850 in an autograph catalogue placed on sale (Webb et Heldreich, *Catalogus plantarum hispanicarum, etc. ab A. Blanco lectarum*, Parisiis, Jul. 1850, folio).— Non-effective publication at a public meeting : Cusson announced his establishment of the genus *Physospermum* in a memoir read at the Société des Sciences de Montpellier in 1773, and later in 1782 or 1783 at the Société de Médicine de Paris, but its effective publication dates from 1787 in the Mémoires de la Société Royale de Médicine de Paris, vol. v, 1re partie.

Note.—The preparation of a list of representative botanical institutions is referred to the Advisory Committee.

## Section 6. **Conditions and dates of valid publication of names.**

Art. 41 [first paragraph from former Art. 37, 38; second paragraph from former Art. 37]. A name of a taxonomic group is not validly published unless it is both (1) effectively published (vide Art. 40), and (2) accompanied by a description of the group or by a reference to a previously and effectively published description of it.

Mention of a name on a ticket issued with a dried plant without a printed or autographed description does not constitute valid publication of that name.

Note.—A plate or figure with analyses is, in certain circumstances, accepted as equivalent to a description (vide Art. 47, 48).

Examples of names not validly published: *Egeria* Neraud (Bot. Voy. Freycinet, 28: 1826), published without description or reference to a previous description under another name; *Sciadophyllum heterotrichum* Decaisne et Planch. in Rev. Hortic. sér. IV. iii. 107 (1854), published without description or reference to a former description.

The name *Loranthus macrosolen* Steud. originally appeared without a description, on the printed tickets issued about the year 1843, with Sect. II. nn. 529, 1288 of Schimper's herbarium specimens of Abyssinian plants: it was not validly published, however, until A. Richard (Tent. Fl. Abyss. i. 340: 1847) supplied a description. *Nepeta Sieheana* Hausskn. was not validly published by its appearance without a description in a set of dried plants (W. Siehe, Bot. Reise nach Cilicien, No. 521: 1896).

Art. 42 [formerly 36 bis]. On and after January 1, 1912, the name of a new taxonomic group of fossil plants is not validly published unless it is accompanied by illustrations or figures showing the essential characters of the fossils concerned, as well as by a description.

Art. 43 [part of former Art. 37]. A name of a taxonomic group is not validly published when it is merely cited as a synonym.

*Acosmus* Desv., cited as a synonym of the generic name *Aspicarpa* Rich., was not validly published thereby. *Ornithogalum undulatum* Hort. Berol. ex Kunth, Enum. Pl. iv. 348 (1843), cited as a synonym under *Myogalum Boucheanum* Kunth, was not validly published thereby: when transferred to *Ornithogalum* this species must be called *Ornithogalum Boucheanum* (Kunth) Aschers. in Österr. Bot. Zeitschr. xvi. 192 (1866). Similarly *Erythrina micropteryx* Poepp. was not validly published by being cited as a synonym of *Micropteryx Poeppigiana* Walp. in Linnaea, xxiii. 740 (1850): the species in question, when placed under *Erythrina* must be called *Erythrina Poeppigiana* (Walp.) O. F. Cook in *U. S. Dept. Agric.* Bull. no. 25, p. 57 (1901).

Art. 44 [part new, part from former Art. 37]. A name of a taxonomic group is not validly published unless it is *definitely accepted* by the author who publishes it. A name proposed provisionally (*nomen provisorium* seu *eventuale*) in anticipation of the eventual acceptance of a group, or of a particular circumscription position or rank of a given group, or merely mentioned incidentally, is not validly published.

The generic name *Conophyton* Haw.—suggested by Haworth (Rev. Gen. 82: 1821) for *Mesembryanthemum* sect. *Minima* Haw. l. c. 81 in the following words: " If this section proves to be a genus, the name of *Conophyton* would be apt "—was not validly published since Haworth did not then adopt that name: the correct name for the genus is *Conophytum* N. E. Brown in Gard. Chron. Ser. III.

lxxi. 198 (1922). The name *Himantandra* F. Muell., incidentally mentioned in remarks on *Eupomatia Belgraveana* F. Muell. (Australas. Journ. Pharm., Jan. 1887 ; Bot. Centralbl. xxx. 325)—" The anther-appendage is analogous to that of *Doryphora* ; consequently this *Eupomatia* might subgenerically or perhaps even generically be separated (as *Himantandra*) "—is not thereby validly published : valid publication as a generic name dates from 1912, when Diels (Engl. Jahrb. xlix. 164) actually adopted *Himantandra* and supplied a generic description.

In 1891, Baillon (Hist. Pl. x. 49) suggested that *Tecoma spiralis* Wright might perhaps represent a new genus intermediate between *Radermachera* and *Tecoma*, or a new section. Three years later K. Schumann suggested independently (Engl. et Prantl, Nat. Pflanzenfam. iv. Abt. 3b 238) that *Tecoma spiralis* Wright might be treated as the type of an independent genus *Neurotecoma*, but stated that the material available was insufficient for a thorough investigation of the question. Neither *Spirotecoma* Baill. nor *Neurotecoma* K. Schum. was validly published by its author. The name *Spirotecoma* Baill. was, however, validly published by Dalla Torre et Harms (Gen. Siphonog. 467, n. 7734 : 1904) as a generic name, with a reference to the previously published diagnosis in Engl. et Prantl, Nat. Pflanzenfam. *Cotema* Britton et P. Wils. (Mem. Torr. Bot. Club, xvi. 107 : 1920), being also based on *Tecoma spiralis*, is a synonym.

Art. 45 [part of former Art. 38]. A group is not characterized, and the publication of its name is not validated, merely by mention of the subordinate groups included in it : thus the publication of the name of an order is not validated by mention of the included families ; that of a family is not validated by mention of the included genera ; that of a genus is not validated by mention of the included species.

The family name *Rhaptopetalaceae* Pierre (Bull. Soc. Linn. Par. ii. 1296 : maio 1897), which was accompanied merely by mention of constituent genera, *Brazzeia*, *Scytopetalum* and *Rhaptopetalum*, was not validly published, as Pierre gave no description : the family bears the later name, *Scytopetalaceae* Engl. (Engl. et Prantl, Nat. Pflanzenfam., Nachtr. i. 242 : 1897, serius) which was accompanied by a description.

The generic name *Ibidium* Salisbury (Trans. Hort. Soc. i. 291 : 1812) was published merely with the mention of four included species. As Salisbury supplied no generic description, the publication of *Ibidium* was invalid.

Art. 46 [part of former Art. 38]. A name of a genus is not validly published unless it is accompanied : (1) by a description of the genus ; or (2) by the citation of a previously and effectively published description of the genus under another name ; or (3) by a reference to a previously and effectively published description of the genus as a subgenus or section.

An exception is made for the generic names published by Linné in *Species Plantarum* ed. 1 (1753) and ed. 2 (1762–63), which are treated as having been validly published on those dates (vide Art. 21).

Note.—In certain circumstances, a plate with analyses is accepted as equivalent to a generic description—vide Art. 47.

Examples of validly published generic names: *Carphalea* Juss. Gen. Pl. 198 (1789), accompanied by a generic description; *Thuspeinanta* Th. Dur. Ind. Gen. Phanerog. p. x (1888), accompanied by a reference to the previously described genus *Tapeinanthus* Boiss. (non Herb.); *Aspalathoides* K. Koch (Hort. Dendrol. 242: 1853) based on a previously described section, *Anthyllis* sect. *Aspalathoides* DC.

Art. 47 [(1) new; (2) part of Art. 38]. The name of a *monotypic* new genus based on a *new* species is validated: (1) by the provision of a combined generic and specific description (*descriptio generico-specifica*); (2) by the provision of a plate with analyses showing essential characters, but this applies only to plates and generic names published before January 1, 1908.

The generic name *Sakersia* Hook. f. (Hook. Ic. Pl. Ser. III. i. 69, t. 1086: 1871) was validly published, being accompanied by a combined generic and specific description of *S. africana* Hook. f. (nov. gen. et sp.), the only known species.

The generic name *Philgamia* Baill. in Grandidier, Hist. Madag., Pl., Atlas III. t. 265 (1894) was validly published, as it appeared on a plate with analyses of *P. hibbertiodes* Baill. (nov. gen. et sp.), published before January 1, 1908.

On the other hand the generic name *Villebrunnea* Gaud. Voy. Bonite, Bot., Atlas, tt. 91, 92 (1839–46) was not validly published, because the two plates on which it appeared represented two different species, *V. integrifolia* Gaud. and *V. crenulata* Gaud., and no generic description was supplied. These two species are now referred to different genera.

Art. 48 [formerly 37]. The name of a species or of a subdivision of a species is not validly published unless it is accompanied (1) by a description of the group; or (2) by the citation of a previously and effectively published description of the group under another name; or (3) by a plate or figure with analyses showing essential characters, but this applies only to plates or figures published before January 1, 1908.

Examples of validly published names of species: *Onobrychis eubrychidea* Boiss. Fl. Or. ii. 546 (1872), published with a description; *Hieracium Flahaultianum* Arv.-Touv. et Gaut., published on a label with a printed diagnosis in a set of dried plants (Hieraciotheca gallica, nos. 935–942: 1903); *Cynanchum nivale* Nyman, Syll. Fl. Eur. 108 (1854–55), published with a reference to *Vincetoxicum nivale* Boiss. et Heldr. previously described; *Panax nossibiensis*

Drake in Grandidier, Hist. Madag., Bot., Atlas, iii. t. 406 (1896), published on a plate with analyses.

Examples of names of species not validly published are given under Art. 41 and 43 (see also Art. 72).

Art. 49 [formerly 39]. The date of a name (unitary, binary or ternary), or of an epithet, for purposes of priority, is that of its valid publication as a *legitimate* name or epithet. In the absence of proof to the contrary the date placed on the work containing the name or epithet is accepted as correct.

For fossil plants, on and after January 1, 1912, the date is that of the simultaneous publication of the description and figure, or if these are published at different dates, the later of the two dates.

A *legitimate* name or epithet is one that is strictly in accordance with the rules of this Code.

Examples : Specimens of *Mentha foliicoma* Opiz were distributed by Opiz in 1832, but the name dates, for purposes of priority, from 1882, when it was validly published with a description by Déséglise (Menth. Op. in *Bull. Soc. Etudes Scient. Angers,* 1881–1882, 210) ; *Mentha bracteolata* Opiz (Seznam, 65 : 1852), originally published without description, dates from 1882, when a description was supplied by Déséglise (l. c. 211).—There is some reason for supposing that the first volume of Adanson's *Familles des Plantes* was published in 1762, but in the absence of certainty the date 1763 on the title-page is assumed to be correct. Individual parts of Willdenow's *Species Plantarum* were published as follows : vol. i, 1798 ; vol. ii. 2, 1800 ; vol. iii. 1, 1801 ; vol. iii. 2, 1803 ; vol. iii. 3, 1804 ; vol. iv. 2, 1806 ; and not in the years 1797, 1799, 1800, 1800, 1800 and 1805 respectively, which appear on the title-pages of the volumes. It is the former series of dates which is accepted as correct. The third volume of Willkomm & Lange's *Prodromus Florae Hispanicae,* the title-page of which bears the date 1880, was published in four parts, pp. 1–240 in 1874, pp. 241–512 in 1877, pp. 513–736 in 1878, p. 737 to the end in 1880 ; and these latter dates are accepted as correct.

## Section 7. Citation of authors' names for purposes of precision.

Art. 50 [formerly 40]. In order that the name (unitary, binary or ternary) of a taxonomic group may be accurately and completely indicated, and that its date of publication may be readily ascertained, it is necessary to cite the author who first published the name concerned.

Examples : *Simaroubaceae* Lindley, *Simarouba* Aublet, *Simarouba laevis* Grisebach, *Simarouba amara* Aublet var. *opaca* Engler.

Art. 51 [formerly 41]. An alteration of the diagnostic characters or of the circumscription of a group does not warrant the citation of an author other than the one who first published its name.

When the changes have been considerable, an indication of their nature, and of the author responsible for the change, is added, the words: *mutatis charact.*, or *pro parte*, or *excl. gen.*, *excl. sp.*, *excl. var.*, or some other abridged indication being employed.

Examples: *Phyllanthus* L. em. (emendavit) Müll. Arg.; *Myosotis* L. partim, R. Br.; *Globularia cordifolia* L. excl. var. β, em. Lam.; etc.

Art. 52 [formerly 42]. When a name of a taxonomic group has been proposed but not published by one author, and is subsequently published and ascribed to him (or her) by another author, the name of the latter author should be appended to the citation with the connecting word "ex." The same procedure should be adopted for names of garden origin cited as "Hort."

If it is desirable or necessary to abbreviate such a citation, the name of the publishing author as the more important should be retained.

Examples: *Havetia flexilis* Spruce ex Planch. et. Triana; *Capparis lasiantha* R. Br. ex DC.; *Gesneria Donklarii* Hort. ex Hook., or *Gesneria Donklarii* Hook.

Art. 53 [formerly 43]. When an epithet is used for the same group in a combination other than that used by the original author, the original author should be cited within parentheses, the name of the author of the new combination being added. It is often useful to indicate also the combination or rank in which the epithet was originally employed.

Examples: *Sorbus* sect. *Aria* Pers. on transference to *Pyrus* becomes *Pyrus* sect. *Aria* (Pers.) DC.—*Cheiranthus tristis* L. on transference to *Matthiola* becomes *Matthiola tristis* (L.) R. Br. or *Matthiola tristis* (L. *Cheiranthus*) R. Br.—*Medicago polymorpha* L. var. *orbicularis* L. when raised to specific rank becomes *Medicago orbicularis* (L.) All., or *Medicago orbicularis* (L., *M. polymorpha* var.) All.

## Section 8. **Retention of names or epithets of groups which are remodelled or divided.**

Art. 54 [formerly 44]. An alteration of the diagnostic characters, or of the circumscription of a group, does not warrant a change in its name, except in so far as this may be necessitated: (1) by transference of the group (Art. 57–59); or (2) by its union with another group of the same rank (Art. 60–61); or (3) by a change of its rank (Art. 62).

Examples: Robert Brown circumscribed the genus *Myosotis* more narrowly than did Linné, but the generic name has not been and should not be changed. Various authors have united with *Centaurea Jacea* L. one or two species which Linné had treated as distinct; the group thus constituted must be called *Centaurea*

*Jacea* L. sensu ampl. or *Centaurea Jacea* L. em. Visiani, or em. Godron, etc. : the creation of a new name such as *Centaurea vulgaris* Godr. is superfluous.

Art. 55 [formerly 45]. When a genus is divided into two or more genera, the generic name must be retained for one of them, or (if it has not been retained) must be re-established. When a particular species was originally designated as the type, the generic name must be retained for the genus including that species. When no type was designated, a type should be chosen according to the regulations given in Appendix I.

Example : The genus *Glycine* L. Sp. Pl. ed. 1, 753 (1753) was divided by Adanson (Fam. Pl. ii. 324, 327, 562 : 1763) into the two genera *Bradlea* and *Abrus*. This procedure is contrary to Art. 55 : Adanson should have kept the name *Glycine* for one of the genera, and it is now retained for part of *Glycine* L. (1753).

[It is suggested that the regulations for choosing types of generic and specific names should be prepared by the Permanent International Committee or by an ad hoc Committee.]

Art. 56 [formerly 47]. When a species is divided into two or more species, the specific epithet must be retained for one of them, or (if it has not been retained) must be re-established. When a particular specimen was originally designated as the type, the specific epithet must be retained for the species including that specimen. When no type was designated, a type should be chosen according to the regulations given in Appendix I.

The same provisions apply to subdivisions of species, for example to a subspecies divided into two or more subspecies, or to a variety divided into two or more varieties.

Examples : *Lychnis dioica* L. Sp. Pl. ed. 1, 437, was divided by Philip Miller (Gard. Dict. ed. 8, nn. 3, 4 : 1768) into two species, *L. dioica* L. em. Mill. and *L. alba* Mill.—G. F. Hoffman (Deutschlands Flora, 1800, i. 166) divided *Juncus articulatus* L. (1753) into two species, *J. lampocarpus* Ehrh, and *J. acutiflorus* Ehrh. The name *J. articulatus* L. should, however, have been retained for one of the segregate species, and has been re-established in the sense of *J. lampocarpus* Ehrh. (vide Briq. Prodr. Fl. Corse, i. 264 : 1910).

[Re proposed regulations, see note under Art. 55.]

## Section 9. **Retention of epithets of groups below the rank of genus on transference to another genus or species.**

Art. 57 [formerly part of 48]. When a subgenus or section is transferred to another genus (or placed under another generic name for the same genus), the original subgeneric or sectional epithet must be retained, or (if it has not been retained) must be re-established unless one of the following obstacles exists : (1) that the resulting

binary combination has been previously and validly published for a different subgenus or section ; or (2) that there is an earlier validly published subgeneric or sectional epithet available.

Note.—This rule applies even if the rank of the group is changed from subgenus to section or vice versa.

Examples : *Saponaria* sect. *Vaccaria* DC., on transference to *Gypsophila*, becomes *Gypsophila* sect. *Vaccaria* (DC.) Gren. et Godr. *Rhaponticum* subgen. *Alfredia* Less. (Syn. 6 : 1832) on transference to *Carduus*, as a section, becomes *Carduus* sect. *Alfredia* (Less.) Benth. et Hook. f., although the rank has been changed from subgenus to section.

Art. 58 [formerly part of 48—see also former 53]. When a species is transferred, *without change of rank*, to another genus (or placed under another generic name for the same genus), the original specific epithet must be retained or (if it has not been retained) must be re-established, unless one of the following obstacles exists : (1) that the resulting binary combination has been previously and validly published for a different species ; (2) that there is an earlier validly published specific epithet available.

Examples : *Antirrhinum spurium* L. Sp. Pl. ed. 1, 613 (1753), on transference to the genus *Linaria*, became *Linaria spuria* (L.) Mill. Gard. Dict. ed. 8, no. 15 (1768). *Chailletia hispida* Oliv. Fl. Trop. Afr. i. 343 (1868) when placed under the generic name *Dichapetalum* (an earlier name for the same genus), became *Dichapetalum hispidum* (Oliv.) Baill. Hist. Pl. v. 140 (1874). *Lotus siliquosus* L. Syst. Nat. ed. 10, 1178 (1759) was transferred to the genus *Tetragonolobus* Scop. as *Tetragonolobus Scandalida* Scop. Fl. Carn. ed. 2, ii. 87 (1772). As Scopoli did not retain the specific epithet *siliquosus* on transference, it was rightly re-established by Roth as *Tetragonolobus siliquosus* (L.) Roth, Tent. Fl. Germ. i. 323 (1788).

Examples of obstacles : (1) *Spartium biflorum* Desf. (1798–1800), when transferred by Spach in 1849 to the genus *Cytisus* could not be called *Cytisus biflorus*, but was renamed *Cytisus Fontanesii*, because the name *Cytisus biflorus* L'Hérit. (1789) was validly published for a different species before the transference was made.—The earliest synonym of *Calochortus Nuttallii* Torr. et Gray (in Pacific Rail. Rep. ii. 124 (1855–1856) is *Fritillaria alba* Nutt. (Gen. Amer. i. 222 : 1818), but the original specific epithet *alba* cannot now be restored because the name *Calochortus albus* Dougl. was validly published in 1839 (Maund, Botanist, t. 98) for a different species, and the combination *Calochortus albus* (Nutt.) Hort. Berol. was not published until later (Notizbl. Bot. Gart. Berlin, ii. 318 : 1899).

*Santolina suaveolens* Pursh (1814) on transference to *Matricaria* must be called *Matricaria matricarioides* (Less.) Porter (1894) : the original specific epithet *suaveolens* cannot be accepted under *Matricaria* because of the existence of the previously and validly published name, *Matricaria suaveolens* L. Fl. Suec. ed. 2, 297 (1755).

Art. 59 [formerly part of 48]. When a variety or other subdivision of a species is transferred, *without change of rank*, to another genus or species (or placed under another generic or specific name for the same genus or species), the original sub-divisional epithet must be retained or (if it has not been retained) must be re-established, unless one of the following obstacles exists: (1) that the resulting ternary combination has been previously and validly published for a subdivision based on a different type, even if that subdivision is of different rank; (2) that there is an earlier validly published subdivisional epithet available.

Examples: *Helianthemum italicum* var. *micranthum* Gren. et Godr. Fl. France, i. 171 (1847) when transferred, as a variety, to *H. penicillatum* Thib., retains its varietal epithet, becoming *H. penicillatum* var. *micranthum* (Gren. et Godr.) Grosser in Engl. Pflanzenreich, Cistaceae, 115 (1903). *Cardamine hirsuta* var. *subcarnosa* Hook. f. Bot. Antarct. Voy. i. 5 (1847) on transference, as a variety, to *C. glacialis* DC., becomes *C. glacialis* var. *subcarnosa* (Hook. f.) O. E. Schulz in Engl. Bot. Jahrb. xxxii. 542 (1903). The existence of an earlier specific synonym for this variety, *C. propinqua* Carmichael in Trans. Linn. Soc. xii. 507 (1818), is immaterial—see Art. 62. In each of these cases it is the earliest *varietal* epithet which is retained.

## Section 10. **Choice of names when two groups of the same rank are united, or in Fungi with a pleomorphic life-cycle.**

Art. 60 [formerly 46]. When two or more groups of the same rank are united the oldest legitimate name or (in groups below the rank of genus) the oldest legitimate epithet is retained. If the names or epithets are of the same date, the author who unites the groups has the right of choosing one of them. The author who first adopts one of them, citing another as a synonym or referring it to a subordinate group, must be followed.

Examples: K. Schumann (in Engl. et Prantl, Nat. Pflanzenfam. iii. Abt. 6, 5: 1890), in uniting the three genera *Sloanea* L. (1753), *Echinocarpus* Blume (1825) and *Phoenicosperma* Miq. (1865–1866) rightly adopted the oldest of these three generic names, *Sloanea* L., for the resulting genus.

If the two genera *Dentaria* L. Sp. Pl. ed. 1, 653 (1753), Gen. Pl. ed. 5, 295, no. 726 (1754) and *Cardamine* L. l. c. 654, l. c. 295, no. 727 are united, the resulting genus must be called *Cardamine* because this name was chosen by Crantz (Class. Crucif. 126: 1769), who was the first to cite one of the generic names as a synonym of the other.

When H. Hallier (in Engl. Bot. Jahrb. xviii. 123: 1893) united three species of *Ipomaea*, namely, *I. verticillata* Forsk. (1775), *I. rumicifolia* Choisy (1834) and *I. Perrottetii* Choisy (1845), he

rightly retained the name *I. verticillata* Forsk. for the resulting species because *verticillata* is the oldest of the three specific epithets.

Robert Brown (in Tuckey, Narr. Exped. Congo, App. V. 484; 1818) appears to have been the first to unite *Waltheria americana* L. Sp. Pl. ed. 1, 673 (1753) and *W. indica* L. l. c. Since he adopted the name *Waltheria indica* and stated that he considered *W. americana* to be a variety of it, the name *W. indica* must be retained for the combined species.

Art. 61 [formerly 49 bis]. Among Fungi with a pleomorphic life-cycle the different successive states of the same species (anamorphoses, status) can bear only one valid generic and specific name (binary combination), namely, the oldest legitimate one given, starting from Fries, Systema, or from Persoon, Synopsis, to the state containing the form which it has been agreed to call the perfect form.

The perfect state is that which ends in the zygospore or oospore in the Phycomycetes, in the ascus stage in the Ascomycetes, in the teleutospore or its equivalent in the Uredinales, in the spore in the Ustilaginales, and in the basidium in the Eu-Basidiomycetes.

Generic and specific names given to other states have only a temporary value. They cannot replace a generic name already existing and applying to one or more species, any one of which contains the " perfect " form.

The nomenclature of Fungi which have not a pleomorphic life-cycle is governed by the ordinary rules.

Examples: The names *Aecidium* Pers., *Caeoma* Link and *Uredo* Pers. designate different states (aecidiosporic with or without pseudoperidium, uredosporic) in the group *Uredinales*. The generic name *Melampsora* Cast. Obs. ii. 18 (1843), applied to a genus which is defined by means of the teleutospores, cannot therefore be replaced by the name *Uredo* Pers. in Römer, Neu. Mag. i. 93 (1794), since the name *Uredo* is already used to designate a state.—Among the Dothideaceae (Ascomycetes) a species of the genus *Phyllachora* Nitschke, *P. Trifolii* (Pers.) Fuck. Symb. 217 (1869–70) has an older synonym, *Polythrincium Trifolii* G. Kunze, Myk. Heft. i. 13, t. 1, f. 8 (1817) based on the conidial state of this species. The name *Polythrincium* cannot displace that of *Phyllachora* because it represents an inferior state.—The name *Ramularia* Ung. is used for a group of Fungi Imperfecti (Deuteromycetes—Hyphomycetes) several species of which are known to be conidial states of species of the genus *Mycosphaerella* Johans. (Ascomycetes, Sphaeriaceae). Thus *Ramularia Tulasnei* Sacc. belongs to *Mycosphaerella Fragariae* (Tul.) Lindau, and *Ramularia Trifolii* Jaap to *Mycosphaerella carinthiaca* Jaap. But the perfect state of many species of the " genus " *Ramularia* is not known, and in some cases probably does not exist. Hence the practical necessity for retaining the name *Ramularia* to designate the group of Fungi Imperfecti in question.

## Section 11. Choice of names when the rank of a group is changed.

Art. 62 [formerly 49]. When a tribe becomes a family, when a subgenus or section becomes a genus, when a subdivision of a species becomes a species, or the reverse of these changes takes place, and in general when a group changes its rank, the earliest legitimate name or (in groups below the rank of genus) the earliest legitimate epithet given to the group in its new rank is valid, unless that name or the resulting combination is a later homonym (vide Art. 65).

Note.—When a subgenus becomes a section or vice versa the original subgeneric or sectional name must be retained (see also Art. 57).

Examples: *Campanula* sect. *Campanopsis* R. Br. Prodr. 561 (1810) was first raised to generic rank by Schrader, and as a genus must be called *Wahlenbergia* Schrad. Cat. Hort. Goett. (1814), not *Campanopsis* (R. Br.) O. Kuntze, Rev. Gen. ii. 378 (1891).—*Magnolia virginiana* var. *foetida* L. Sp. Pl. ed. 1, 536 (1753), raised to specific rank, must be called *Magnolia grandiflora* L. Syst. Nat. ed. 10, 1082 (1759), not *Magnolia foetida* (L.) Sarg. in Gard. and For. ii. 615 (1889).—*Lythrum intermedium* Ledeb. Ind. Hort. Dorp. (1822), when treated as a variety of *Lythrum Salicaria* L., must be called *L. Salicaria* var. *gracilius* Turcz. (in Bull. Soc. Nat. Mosc. xvii. 235: 1844), not *L. Salicaria* var. *intermedium* (Ledeb.) Koehne (in Engl. Bot. Jahrb. i. 327: 1881). In all these cases the name or epithet given to the group in its original rank is replaced by the first legitimate name or epithet given to it in its new rank.

## Section 12. Rejection of names.

Art. 63 [formerly 50]. A name or epithet must not be rejected, changed or modified, merely because it is badly chosen, or disagreeable, or because another is preferable or better known (see also Art. 74).

Examples: This rule was broken by the change of *Staphylea* to *Staphylis*, *Tamus* to *Thamnus* or *Tamnus*, *Mentha* to *Minthe*, *Tillaea* to *Tillia*, *Vincetoxicum* to *Alexitoxicum*; and by the change of *Orobanche Rapum* to *O. sarothamnophyta*, *O. Columbariae* to *O. columbarihaerens*, *O. Artemisiae* to *O. artemisiephiphyta*. All these modifications must be rejected.

*Ardisia quinquegona* Blume (1825) must not be changed to *A. pentagona* A. DC. (1834), although the specific epithet *quinquegona* is badly formed, the first constituent word being Latin the second Greek.

Art. 64 [replacing former Art. 51: 1°]. A name must be rejected if it is illegitimate (see Art. 2). The publication of an epithet in an illegitimate combination must not be taken into consideration for purposes of priority (see Art. 49).

A name is illegitimate in the following cases :

(1) If it was superfluous when published, i.e. if there was a valid name (see Art. 16) for the group to which it was applied, with its particular circumscription, position and rank (see Art. 19).

Examples : The generic name *Cainito* Adans. (Fam. ii. 166 : 1763) is illegitimate because it was a superfluous name for *Chrysophyllum* L. (Sp. Pl. ed. 1, 192 : 1753) : the two genera had precisely the same circumscription. The generic name *Unisema* Raf. (Med. Repos. N. York, v. 192 : 1819) is illegitimate because Rafinesque so circumscribed his genus as to include *Pontederia cordata* L., the type-species of *Pontederia* L. (1753) : *Unisema* Raf. was therefore a superfluous name for *Pontederia* L. *Chrysophyllum sericeum* Salisb. Prodr. 138 (1796) is illegitimate, being a superfluous name for *C. Cainito* L. (1753), which Salisbury cited as a synonym.—On the other hand, *Cucubalus latifolius* Mill. and *C. angustifolius* Mill. (Gard. Dict. ed. 8, nn. 3, 4 : 1768) are *not* illegitimate names, although these species are now re-united with *C. Behen* L. (1753), from which Miller separated them : *C. latifolius* Mill. and *C. angustifolius* Mill., *as circumscribed by Miller*, did *not* include the type of *C. Behen* L.

(2) If it is a binary or ternary name published in contravention of Art. 19, 57, 58 or 59, i.e. if its author did not adopt the earliest legitimate epithet available for the group with its particular circumscription position and rank.

Examples : *Tetragonolobus Scandalida* Scop. (1772) is an illegitimate name because Scopoli did not adopt the earliest specific epithet available, namely, *siliquosus*, when he transferred *Lotus siliquosus* L. (1759) to *Tetragonolobus*.—On the other hand, *Seseli selinoides* Jacq. (Enum. Stirp. Vindob. 51, 227 : 1762) is *not* an illegitimate name, although it is now treated as a synonym of *Peucedanum Silaus* L. (1753). Jacquin did *not* transfer *Peucedanum Silaus* to *Seseli* as *Seseli selinoides* : he described the latter *as a new species*, based on a cultivated specimen of a plant found wild near Lanzendorff. As circumscribed by Jacquin, *Seseli selinoides* and *Peucedanum Silaus* were mutually exclusive.

(3) If it is a later homonym (see Art. 65).

(4) If it is a generic name rejected under the provisions of Art. 71.

(5) If it is a name of a species with an epithet rejected under the provisions of Art. 72.

Art. 65 [vide former Art. 27, 29, 51 : 2°, 53]. A name of a taxonomic group is illegitimate and must be rejected if it is a *later homonym*, that is if it duplicates a name previously and validly published for a group of the same rank based on a different type. Even if the earlier homonym is illegitimate, or is generally treated as a synonym on taxonomic grounds, the later homonym must be rejected.

Examples : The generic name *Tapeinanthus* Boiss. ex Benth. (1848), given to a genus of Labiatae, is a later homonym of *Tapeinanthus* Herb. (1837) a name previously and validly published for a genus of Amaryllidaceae. *Tapeinanthus* Boiss. ex Benth. was therefore rightly rejected by Th. Durand (Ind. Gen. Phan. 703 : 1888), who replaced it by the new generic name *Thuspeinanta*.

The generic name *Stylidium* Swartz (1807) is a later homonym of the validly published generic name *Stylidium* Lour. (1790), and should therefore be rejected under the Rules, although *Stylidium* Lour. is now reduced to *Alangium* Lam. (1783). The name *Stylidium* Swartz is being proposed for conservation, however, because it is very widely known, and the genus is the type of the family name *Stylidiaceae*.

*Astragalus rhizanthus* Boiss. (Diagn. Pl. Or., Ser. I. ii. 83 : 1843) is a later homonym of the validly published name *Astragalus rhizanthus* Royle, Illustr. Bot. Himal. 200 (1835), and it was therefore rightly rejected by Boissier, who renamed it *A. cariensis* Boiss. (Diagn. Ser. I. ix. 57 : 1849).

Note.—Mere orthographic variants of the same name are treated as homonyms—vide Art. 74.

Art. 66 [vide former Art. 29, 51 : 2°]. Two subdivisions of the same species, *even if they are of different rank*, cannot bear the same subdivisional epithet, unless they are based on the same type. If the earlier subdivisional name (ternary combination) was validly published, the later one is illegitimate and must be rejected.

Examples : The ternary combinations *Silene angustifolia* subsp. *vulgaris* Briq. and *Silene angustifolia* var. *vulgaris* Briq. (Prodr. Fl. Corse, i. 544, 545 : 1910) may both be employed because they are based on the same type, and the one group includes the other.

Art. 67 [formerly part of Art. 51 : 4°]. A name of a taxonomic group must be rejected if, owing to its use with different meanings, it becomes a permanent source of confusion or error. A list of names to be abandoned for this reason (*Nomina ambigua*) is appended to this Code (Appendix V).

Examples : The generic name *Statice* L. (sensu restricto) ought strictly speaking to be used for the segregate genus *Armeria* Willd. (1809). It has, however, been so long and widely applied to the segregate genus *Limonium* Mill. that it has become a permanent source of confusion and error.

The name *Rosa villosa* L. Sp. Pl. ed. 1, 491 (1753), is rejected, because it has been applied to several different species, and has become a source of confusion.

Art. 68 [new]. A name of a taxonomic group must be rejected when its application is uncertain (*nomen dubium*). When a subsequent investigation (of types etc.) has established its application, it may be adopted, but the name of the author who published the

additional certifying evidence should be added for purposes of precision. It is also desirable to add the date of certification.

Examples: *Ervum soloniense* L. (Cent. II. Pl. 28: 1756) is a name the application of which is uncertain: it must therefore be rejected (vide Schinz et Thell. in Vierteljahrsschr. Nat. Ges. Zürich, lviii. 71: 1913).

The generic name *Bembix* Lour. (Fl. Cochinch. 282: 1790) was a *nomen dubium* from the time of its publication until 1927, when Spencer Moore identified it with *Ancistrocladus* (Journ. Bot. 1927, 279). It is proposed to conserve the latter name. If, however, the name *Bembix* is adopted for the genus concerned, it must be cited as *Bembix* Lour. teste S. Moore (1927).

Art. 69 [formerly part of Art. 51: 4°]. A name of a taxonomic group must be rejected if the characters of that group were derived from two or more entirely discordant elements, especially if those elements were erroneously supposed to form part of the same individual. A list of names to be abandoned for this reason (*Nomina confusa*) is appended to this Code (Appendix VI).

Examples: The characters of the genus *Schrebera* L. Sp. ed. 2, 1662 (1763), Gen. Pl. ed. 6, 124 (1764), were derived from the two genera *Cuscuta* and *Myrica* (parasite and host)—vide Retz. Obs. vi. 15 (1791). The characters of the genus *Actinotinus* Oliv. in Hook. Ic. Pl. t. 1740 (1888) were derived from the two genera *Viburnum* and *Aesculus*, owing to the inflorescence of a *Viburnum* having been inserted into the terminal bud of an *Aesculus* by a native Chinese collector.

Art. 70 [formerly Art. 51: 3°]. A name or epithet of a taxonomic group must be rejected when it is based on a monstrosity.

Examples: The generic name *Uropedium* Lindl. was based on a monstrosity which is now referred to *Phragmipedium caudatum* Rolfe.

The name *Ornithogalum fragiferum* Vill. Hist. Pl. Dauph. ii. 269 (1787) was based on a monstrosity, and must therefore be rejected. On transference to the genus *Gagea* the specific epithet *fragiferum* must also be rejected: the next oldest name being *Ornithogalum fistulosum* Ram. ex DC. (1805), the species must be called *Gagea fistulosa* (Ram.) Ker-Gawl.

Art. 71 [formerly 54]. Names of genera are illegitimate in the following cases and must be rejected:

(1) When they were merely words not intended as names.

(2) When they coincide with a technical term currently used in morphology unless they were accompanied, when originally published, by specific names in accordance with the binary method of Linné. On and after Jan. 1, 1912, all new generic names coinciding with such technical terms are unconditionally rejected.

(3) When they are unitary designations of species.
(4) When they consist of two words, unless these words were for the first combined into one, or joined by a hyphen.

Examples: (1) *Anonymos* Walt. Fl. Carol. 2, 4, 9, 10, 11, 13, 14, 18, 19, 22, 23, 31, 32, 33, 36, 37, 38, 40, 47, 52, 58 (1788), a word applied to 28 different genera by Walter to indicate that they were *without names*.

(2) The generic name *Radicula* Hill, Brit. Herb. 264 (1756) coincides with the technical term radicula (radicle), and was not accompanied, when originally published, by specific names in accordance with the Linnean method: these were not added until 1794 (by Moench), after the publication of the generic name *Rorippa* Scop. (1760). *Radicula* Hill must therefore be rejected in favour of *Rorippa*.

*Tuber* Micheli ex Fries (Syst. Myc. ii. 289: 1823) was accompanied by binominal specific names, e.g., *Tuber cibarium*, and is therefore admissible.

Names such as *Radix*, *Caulis*, *Folium*, *Spina*, etc. cannot now be validly published as new generic names.

(3) Ehrhart, Phytophylacium (1780) and Beitr. iv. 145–150 proposed unitary names for species known at that time under binary names, e.g., *Phaeocephalum* for *Schoenus fuscus*, and *Leptostachys* for *Carex leptostachys*. These names, which resemble generic names, should not be confused with the latter, and must be rejected, unless they have been published as generic names by a subsequent author: for example, the name *Baeothryon* employed as a unitary name of a species by Ehrhart, was subsequently published as a generic name by A. Dietrich, Spec. Pl. ii. 89 (1833).

(4) The generic name *Uva ursi* Moench (Meth. 470: 1794), as originally published, consisted of two separate words unconnected by a hyphen, and must therefore be rejected. On the other hand, names such as *Quisqualis* (composed of two words combined into one when originally published), *Sebastiano-Schaueria* and *Neves-Armondia* (both hyphened when originally published) are admissible.

Art. 72 [formerly 55]. Specific epithets are illegitimate in the following special cases and must be rejected:

(1) When they are merely words not intended as names.
(2) When they are merely ordinal numbers employed in an enumeration.
(3) When they were published in works in which the Linnean system of binary nomenclature for species was not consistently employed.

Examples: (1) *Viola "qualis"* Krocker, Fl. Siles. ii. 512, 517 (1790); *Atriplex "nova"* Winterl in Ind. Hort. Bot. Univ. Pest. fol. A 8, recto et verso (1788)—the word "nova" is here used in connection with 4 different species of *Atriplex*.

(2) *Boletus vicesimus sextus. Agaricus octogesimus nonus.*

(3) The name *Abutilon album* Hill, Brit. Herb. 49 (1756), being only incidentally in accordance with the Linnean method, must be rejected: Hill's other species was *Abutilon flore flavo.* Linné is regarded as having employed his system of nomenclature for species consistently from 1753 onwards although there are numerous exceptions, e.g., *Apocynum foliis androsaemi*, in Sp. Pl. ed. 1.

Art. 73 [formerly 56]. In the cases foreseen in Art. 64–72, the name or epithet to be rejected is replaced by the oldest legitimate name, or (in a combination) by the oldest legitimate epithet which will be in accordance with the rules. In default of such, a new name or epithet must be chosen. Where a new epithet is required, an author may, if he wishes, adopt an epithet previously given to the group in an illegitimate combination, if there is no obstacle to its employment in the new position or sense.

## Section 13. Orthography of names.

**Art. 74** [former Art. 57, modified]. The original spelling of a name must be retained, except in the case of a typographic error, or of an unintentional orthographic error. When the difference between two names, especially two generic names, lies in the termination, these names are to be regarded as distinct, even though differing by one letter only. This does not apply to mere orthographic variants of the same name.

Note 1.—The words " original spelling " in this Article means the spelling employed when the name was validly published.

Note 2.—The use of a wrong connecting vowel or vowels in a specific epithet (or in that of a subdivision of a species) is treated as an unintentional orthographic error, and may therefore be corrected. —See Rec. XIII.

Note 3.—In deciding whether two or more slightly different names should be treated as distinct or as orthographic variants, the essential consideration is whether they may be confused with one another or not: if there is serious risk of confusion, they should be treated as orthographic variants. Doubtful cases should be referred to the Advisory Committee.

Examples of retention of original spelling: The generic names *Mesembryanthemum* L. (1753) and *Amaranthus* L. (1753) were deliberately so spelt by Linné, and the spelling must not be altered to *Mesembrianthemum* and *Amarantus* respectively, although these latter forms are philologically preferable. *Valantia* L. (1753) and *Clutia* L. (1753), commemorating Vaillant and Cluyt respectively, must not be altered to *Vaillantia* and *Cluytia:* Linné latinized the names of these botanists deliberately as " Valantius " and " Clutius." —*Triaspis mozambica* A. Juss. must not be altered to *T. mossambica*, as in Engl. Pflanzenw. Ost-Afrikas, C. 232. *Alyxia ceylanica*

Wight must not be altered to *A. zeylanica*, as in Trimen, Handb. Fl. Ceylon, iii. 127.

Examples of typographic errors: *Saurauja* Willd. (1801) was a typographic error for *Saurauia*: Willdenow in his herbarium always wrote the name correctly as *Saurauia*—*Globba brachycarpa* Baker in Hook. f. Fl. Brit. Ind. vi. 205 (1890), and *Hetaeria alba* Ridley in Journ. Linn. Soc., Bot. xxxii. 404 (1896), being typographic errors for *G. trachycarpa* and *H. alta* respectively, should be cited as *Globba trachycarpa* Baker and *Hetaeria alta* Ridley (vide Journ. Bot. 1921, 349). *Thevetia nereifolia* A. Juss. ex Steud. is an obvious typographic error for *T. neriifolia*.

Examples of unintentional orthographic errors: The name *Stewartia* L. Sp. Pl. ed. 1, 698 (1753) was published with this spelling owing to a mistaken impression on the part of Linné that the family name of the third Earl of Bute was Stewart (not Stuart): it should therefore be corrected to *Stuartia*, as has been done by L'Héritier (Stirp. 153: 1785). *Hexagona* Fries, Epicr. 496 (1836–38) was an unintentional orthographic error for *Hexagonia*: Fries had previously (in Syst. Myc. i. 344: 1821) cited *Hexagonia* Poll. erroneously as "*Hexagona* Poll."—*Libertia Laurencei* Hook. f. (Fl. Tasman. ii. 34: 1860) being an orthographic error for *L. Lawrencei* Hook, f. l.c. 373, t. 129, the latter spelling should be adopted: the collector's name was Lawrence, not Laurence. *Gluta Benghas* L. Mant. ii 293 (1771), being an orthographic error for *G. Renghas*, should be cited as *Gluta Renghas* L., as has been done by Engler (DC. Monogr. iv. 224: 1883): the vernacular name used as a specific epithet by Linné is "Renghas" not "Benghas."—*Pereskia opuntiaeflora* DC. in Mém. Mus. Par. xvii. 76 (1828) should be cited as *P. opuntiiflora* DC. in accordance with Rec. XIII. and Art. 74, note 2. *Cacalia napeaefolia* DC. in DC. Prodr. vi. 328 (1837), and *Senecio napeaefolius* (DC.) Sch. Bip. in Flora, xxviii. 498 (1845) should be cited as *Cacalia napaeifolia* DC. and *Senecio napaeifolius* (DC.) Schrad. respectively: the specific epithet refers to the resemblance of the leaves to those of the genus *Napaea* (not *Napea*), and the connecting vowel "i" should have been used instead of "ae."

Examples of different names: *Rubia* and *Rubus*, *Monochaete* and *Monochaetum*, *Peponia* and *Peponium*, *Iria* and *Iris*, *Symphyostemon* and *Symphostemon*, *Gerrardina* and *Gerardiina*, *Durvillea* and *Urvillea*.

Examples of different specific epithets: *Senecio napaeifolius* (DC.) Sch. Bip. (vide supra) and *S. napifolius* MacOwan are different names, the epithets *napaeifolius* and *napifolius* being derived respectively from *Napaea* and *Napus*.

Examples of orthographic variants:—Generic names: *Astrostemma* and *Asterostemma*, *Pleuripetalum* and *Pleuropetalum*, *Columella* and *Columellia*, both commemorating Columella, the Roman writer on agriculture, *Eschweilera* and *Eschweileria*. The four

generic names *Bradlea* Adans., *Bradlaeia* Neck., *Bradleja* Banks ex Gaertn., *Braddleya* Vell., all commemorating Richard Bradley (1675–1732), are also orthographic variants : each of them has been spelt by subsequent authors both as " *Bradleia* " and as " *Bradleya* " so that no two of them could be used without serious risk of confusion.

Specific epithets : *chinensis* and *sinensis ; ceylanica* and *zeylanica; napaulensis, nepalensis, nipalensis.*

Art. 75 [new]. When the spelling of a generic name differs in Linné's Species Plantarum ed. 1, and Genera Plantarum, ed. 5, the correct spelling should be determined by the following regulations.

(1) If Linné subsequently to 1753–54 consistently adopted one of the spellings, that spelling should be accepted, e.g. *Thuja* (not *Thuya*).

(2) If Linné did not do so, then the spelling which is more correct philologically should be accepted, e.g. *Agrostemma* (not *Agrostema*).

(3) If the two spellings are equally correct philologically, and there is a great preponderance of usage in favour of one of them, that one should be accepted, e.g. *Rhododendron* (not *Rhododendrum*).

(4) If the two spellings are equally correct philologically and there is no great preponderance of usage in favour of one of them, then the spelling that is in accordance or more nearly in accordance with the Recommendations should be accepted, e.g. *Ludwigia* (not *Ludvigia*), *Ortegia* (not *Ortega*).

## Section 14. **Gender of generic names.**

Art. 76 [new]. The gender of generic names is governed by the following regulations :

I. A Greek or Latin word adopted as a generic name normally retains its classical or mediaeval gender, even if the author who published it gave it a different gender. Where, however, the classical or mediaeval gender varies, or is in dispute, or where it differs from the gender usually ascribed to the generic name, the gender of the latter shall be fixed by the Advisory Committee. A list of such generic names with their genders is given in Appendix VII.

II. Generic names which are modern compounds formed from two or more Greek or Latin words take the gender of the last. If the termination is altered, however, the gender will follow it.

Examples of names formed from Greek* words : The generic name *Andropogon* L. was treated by Linné as neuter, but it, like all other compounds in which the Greek masculine word *pogon* is the final element (e.g. *Centropogon, Cymbopogon, Tragopogon*) is now treated as masculine. Similarly all compounds ending in *-codon, -myces, -odon, -panax, -stemon* and other masculine words are masculine.

---

* It seems unnecessary to give examples of names formed from Latin words, as these offer few difficulties.

The generic names *Dendromecon* Benth., *Eomecon* Hance and *Hesperomecon* E. L. Greene are treated as feminine, because they end in the Greek feminine word *mecon*, poppy : the fact that Bentham and E. L. Greene respectively ascribed the neuter gender to the names *Dendromecon* and *Hesperomecon* is immaterial. Similarly all compounds ending in *-achne, -carpha, -cephala, -chlamys, -daphne* and other feminine words are treated as feminine.

The generic names *Aceras* R. Br., *Aegiceras* Gaertn. and *Xanthoceras* Bunge are neuter because they end in the Greek neuter word *ceras*. Robert Brown and Bunge respectively made *Aceras* and *Xanthoceras* feminine, but this is immaterial. Similarly all compounds ending in *-dendron, -nema, -stigma, -stoma* and other neuter words are neuter.

Names ending in *-anthos* (or *-anthus*), and those in *-chilos* (or *-chilus*) ought strictly speaking to be neuter, since that is the gender of the Greek words *anthos* and *cheilos*. These names, however, have been with very few exceptions treated as masculine, hence it is agreed to assign that gender to them.

Examples of compound generic names where the termination of the last word is altered : *Hymenocarpus, Dipterocarpus* and all other compounds ending in the Greek masculine word *carpos* (or *carpus*) are masculine. Those in *-carpa* or *-carpaea*, however, are feminine, e.g. *Callicarpa* and *Polycarpaea* ; and those in *-carpon, -carpum* or *-carpium* are neuter, e.g. *Polycarpon, Ormocarpum* and *Pisocarpium*.

III. Arbitrarily formed generic names or vernacular names used as generic names take the gender assigned to them by their authors. Where the original author has failed to indicate the gender, the next subsequent author has the right of choice.

Examples : *Taonabo* Aubl. Hist. Pl. Guiane, i. 569 is feminine : Aublet's two species were *T. dentata* and *T. punctata*. *Agati* Adans. Fam. ii. 326 (1763) was published without indication of gender. The feminine gender was assigned to *Agati* by Desvaux (Journ. Bot. 1813, i. 120), who was the first subsequent author to adopt the name, and his choice is decisive. Boehmer (Ludwig, Gen. ed. 3, 436 : 1760), and Adanson (Fam. ii. 356 : 1763), failed to indicate the gender of *Manihot*. The first author to supply specific epithets was Crantz (Inst. Rei Herb. i. 167 : 1766), who proposed the names *Manihot gossypifolia* etc. *Manihot* is therefore feminine.

## Chapter IV. **Interpretation and modification of this Code.**

Art. 77 [new]. A small permanent International Advisory Committee shall be established with the following functions :

1. Interpreting the Code in doubtful cases, and issuing considered " Opinions " on the basis of the evidence submitted.

2. Considering additional Nomina conservanda, Nomina ambigua, and Nomina confusa, and making recommendations thereon to the next International Botanical Congress.
3. Considering all proposals for the modification of this Code, and reporting thereon to the next Congress.
4. Reporting on the effects of modifications of the Code accepted at the preceding Congress.

Art. 78 [former Art. 58, modified]. This Code can be modified only by an International Botanical Congress. Modifications accepted at one Congress remain on trial until the next Congress, at which they will receive final sanction unless undesirable consequences, reported to the Advisory Committee, show need for further amendment or rejection.

**Appendix I. Regulations for determining types.**

**Appendix II. Nomina conservata familiarum.**

**Appendix III. Nomina generica conservata.**

**Appendix IV. Nomina specifica conservata.**

**Appendix V. Nomina ambigua.**

**Appendix VI. Nomina dubia.**

**Appendix VII. Nomina confusa.**

The preparation of App. I-II. and IV-VII. is referred to the proposed Advisory Committee (Art. 77). It is suggested that the word "conservata" should be substituted for "conservanda" used in "Nomina generica conservanda" in the International Rules.

## COMMENTARY.

Heading.—" International *Rules* of Botanical Nomenclature " seems an unsuitable title for a Code which includes *Principles* and *Recommendations* in addition to Rules. International *Code* seems better.

## Chapter I.

Art. 1.—The Code refers solely to Botanical nomenclature—hence " Natural History " may be replaced by " Botany," and " naturalists " by " botanists." Botany *can* make progress without a regular system of nomenclature, but it cannot make *satisfactory* progress. A *precise* system is required in order to obtain good results.

Art. 2.—In the English text the word " precepts " seems better than " prescriptions," as it corresponds more nearly in meaning to the French " prescriptions " (and the German " Vorschriften "). The suggested re-wording of Art. 2 seems to make it clearer. The expression " valid name " is used in the 1912 Rules in two different senses: in Art. 15 " valid designation " means the correct designation according to the International Rules, whereas in Art. 51 and 56 " valid name " means a name formed and published in accordance with the International Rules. A particular group may receive *several* names published in accordance with the International Rules, but each group (with a given circumscription position and rank) can bear only *one* correct name. Hence the term " *legitimate* " name is now proposed for a name *published in accordance with the Code,* while the term " *valid* " name is used for the *correct* name according to the Code. It seems desirable to introduce the definition of " *illegitimate* " names into Art. 2.

Art. 3.—The wording of the English text is revised.

Art. 4.—In our opinion, certainty of application of names is more important than fixity of names and should come first. The term " stability " seems preferable to " fixity." Under a stable system there is no creation of superfluous names.

Art. 5.—The original wording is unsatisfactory: no custom contrary to rule can be upheld whether it leads to confusion or not. The whole point is that in the absence of a relevant rule custom is followed.

Art. 6.—The new wording is adopted from Article 1 of the International Rules of Zoological Nomenclature (vide Proc. Biol. Soc. Washington, xxxix. 75: 1926).

Art. 7.—The original wording is somewhat ambiguous, and has led to authors changing Greek terminations of generic names to

Latin ones, contrary to Art. 24. It is not strictly true that scientific names are in Latin for all groups : the binary combination *Manihot Aipi*, for example, is composed of two Brazilian vernacular names.

Art. 8.—It seems undesirable to use the expression " names " in two different senses.

Art. 9.—The exceptions form part of the Code, hence if the words " The rules and recommendations " are replaced by " This Code," the reference to exceptions may be omitted.

## Chapter II.

It seems desirable to distinguish " groups " and " categories of groups." *Ranunculus bulbosus* and *Rosa* are examples of natural *groups*. Species and genera are two *categories* of groups.

Art. 10.—A hybrid between two or more species cannot be said to belong to a species—hence it is desirable to add the words " interspecific hybrids excepted."

Art. 11.—The category " series " is so frequently employed in large genera that it seems desirable to include it in this Article.

Art. 12.—The first sentence seems to require re-wording. A *subdivision* of a group is not formed by putting the syllable sub (*sub*) before the name of a group. It is the *term* denoting a subordinate category that is formed by adding the prefix sub. By the addition of *Series* and *Subseries* the number of degrees is raised to twenty-four. As the principles of botanical classification are the same for wild and cultivated plants, the words " for wild plants only " may perhaps be omitted. The words " names of forms and hybrids believed to have arisen under cultivation are dealt with in Art. 39 " are added.

Art. 13.—It is the definition of the *category*, or of the *term* applied to it, which varies, not of a *name*—see Art. 8, new wording.

Art. 14.—The term mule (*mistus*) is now obsolete, the result of cross fertilization between two varieties of the same species being now termed a hybrid (*hybrida*).

## Chapter III.

### Section 1. General Principles.

Logically Art. 16 of the 1912 Rules, dealing with the purpose of names, should precede Art. 15 of the 1912 Rules : they are therefore transposed.

Art. 15 (formerly 16). The revised wording seems to bring out the essential point more clearly.

Art. 15 of the 1912 Rules really includes *two* distinct Principles :
(1) that each taxonomic group can bear only one valid name ;
(2) the principle of priority of publication.

There are no exceptions to " (1) " which is a basic principle. It becomes Art. 16 of this Code, under " Section 1. General Principles." On the other hand " (2) " is merely a means to an end, enabling choice to be made between names, and is subject to various limitations such as starting-points, conserved names, etc. Hence it seems desirable to treat " (2) " as a separate article, Art. 19, with a separate sectional heading " Section 2. Principle of priority of publication."

Art. 17 [new]. It is now generally recognized that names should be applied according to a type method. Art. 17 embodies this principle.

Art. 18 [formerly 17]. The point which seems to require emphasis is that changes in nomenclature should be made only by those who have actually studied the groups concerned.

Art. 18 of the 1912 Rules is neither a principle nor a Rule : it is merely a summary of the subjects dealt with in the succeeding articles. It seems to be superfluous, and is therefore omitted.

## Section 2. **Principle of priority of publication.**

Art. 19 [part of former Art. 15]. The wording has been revised : it is frequently the oldest *epithet*, not the oldest name (designation) which is chosen. It seems desirable to add a note referring to Art. 25, which states that the principle of priority does not apply to names of groups above the rank of family. This was implied in the 1912 Rules, names of such groups being there dealt with in Recommendations II and III, not in rules.

## Section 3. **Limitation of the principle of priority.**

Art. 20 [formerly part of Art. 51 : 2°] embodies the most important limitation of the principle of priority, namely, that names have no status unless they are validly published.

Art. 21 [formerly 19]. The revised wording emphasizes the fact that Linné, *Species Plantarum* ed. 1 (1753) is the *general* starting-point of botanical nomenclature. The final paragraph has been widened so as to cover the case of the generic name *Ebenus* L. Sp. Pl. ed. 1 (1753), which was omitted in Gen. Pl. ed. 5 (1754), and of the new generic names which appeared in L. Sp. Pl. ed. 2 (1762–63).

Art. 22 [formerly 20]. It seems advisable to state that the lists of conserved names are permanently open for additions, and to explain the limitations of conservation. Examples are added to make these clear.

Art. 23 [new]. In order to avoid creation of superfluous names, it seems desirable to authorize the ad interim retention of generic names where a prima facie case for their conservation has been established. This has already been proposed by Hall (Candollea, ii. 519: 1926.)

## Section 4. Nomenclature of the taxonomic groups according to their categories.

Art. 24 [new]. It seems desirable to have an Article pointing out that names are of three categories as regards their form, namely, unitary, binary and ternary. It is perhaps not generally realized that the name of a subdivision of a genus, e.g. that of a section, is really a binary combination in which, however, the two elements, the generic *name* and the sectional *epithet* are separated, usually by a term abbreviation or symbol. A *name* can stand by itself, whereas an *epithet* cannot do so. Since the same so-called sectional "name" may be employed for two or more groups in different genera, it is evidently an epithet, and not a name: e.g. *Panicum* sect. *Bifaria*, *Korthalsella* sect. *Bifaria*; *Baccharis* sect. *Discolores*, *Ormosia* sect. *Discolores*, *Combretum* sect. *Discolores*.

Similarly, names of subdivisions of species are really ternary combinations, though the distinctive epithet of the subdivision is usually separated from the specific epithet by a term, abbreviation or symbol. There seems to be no valid objection to the practice, common in America, of omitting the term indicating the category of the subdivision in abbreviated citations. In full citations, or where precision is required, the term denoting rank should be included, or the rank should be indicated in some other way.

Art. 25 [new], 26, 27. In the 1912 Rules there were no Articles concerning names of groups above the family, but merely *Recommendations*. It seems desirable to state explicitly (in Art. 25) that the names of these groups are not subject to the principle of priority of publication.

Rec. III. of the 1912 Rules states that names of suborders take the ending *-ineae*, and Art. 23 of the same Rules states that the name of subtribes end in *-inae*. These two suffixes are so similar that names of suborders might easily be mistaken for names of subtribes, and vice versa. Hence it seems desirable to adopt the suffix *-ares* for names of suborders, in Art. 27 of the Code.

Art. 28 [new]. Nominally (under Art. 15 of the 1912 Rules) names of families are subject to the principle of priority of publication, but in actual practice most botanists accept commonly used family names without investigation. If the rule of priority were followed strictly, many well-known family names would lapse into synonymy (vide Post et Kuntze, Lexic. 612; Bull. Torr. Bot. Club, xxii. 2; Journ. Bot. 1922, 69). Perhaps the most satisfactory method of dealing with this problem would be to include a list of

accepted names of families as an Appendix to the Rules. At present, the same family may pass under three different names, e.g. *Onagraceae, Epilobiaceae, Oenotheraceae; Ternstroemiaceae, Theaceae, Camelliaceae.* If this proposed method is approved, Art. 28 [formerly 21] should be modified accordingly.

The wording of Art. 29 [formerly 23] and 30 [formerly 24] has been slightly modified.

Art. 31 [formerly 25]. The wording is amended by the substitution of "epithets" for "names." See the remarks under Art. 24, above.

Art. 32 [formerly 26]. Names of species are combinations, not of two *names*, but of a generic *name* and a specific *epithet.* The wording is revised accordingly.

Art. 27 and 29 of the 1912 Rules are primarily concerned with homonyms and accordingly come under "Section 12. Rejection of names"—vide Art. 65, 66.

The second parts of Art. 27 and 29 (1912 Rules) state that (1) the same specific "name" (i.e. epithet) may be given in several genera; (2) the same "name" (i.e. epithet) may be employed for subdivisions of different species; (3) the subdivisions of any one species may bear the same "name" (i.e. epithet) as other species. These three propositions, being self-evident, are now omitted.

Art. 33 [formerly 28]. See the remarks re ternary combinations (paragraph 2) under Art. 24 (new).

Art. 34 [new]. One of the basic principles of nomenclature (vide Art. 41) is that names of groups are not valid unless they are associable with descriptions. It follows that when a valid name is mentioned we know approximately the characters of the group concerned. Where the result of a given cross is not a definite describable entity, it seems inconsistent as well as useless to give it a name: a *formula* is preferable in such a case. It seems desirable that names should be used only in accordance with Art. 38 (formerly 34).

Art. 35 [formerly 31] and 36 [formerly 32]. Rehder's suggestion to distinguish sexual hybrids by the sign × and asexual hybrids by the sign + seems excellent. His further suggestion that sexual and asexual hybrids between the same species should bear different epithets is justified by the fact that the two kinds of hybrid are different entities, possessing different sets of characters. The suggested positions of the hybrid signs will serve to distinguish intergeneric hybrids (where the sign precedes the "generic" name) from others.

Art. 36 [formerly 32]. It is surely undesirable that a hybrid between species of *two* genera should bear the generic name of *one* of them.

Art. 37 [formerly 33]. It seems fitting to include the case of trigeneric or polygeneric hybrids here. They might alternatively be included under Art. 36 (formerly 32) by replacing the words " bigeneric " by " intergeneric," " two genera " by " two or more genera," and " the two parents " by " the parents."

Art. 38 [formerly 34]. The proposal (in the 1912 Rules) to recognize " species " and " varieties " of hybrids does not seem particularly happy : " *Mentha* × *Lamarckii* " seems preferable to " × *Mentha villosa* β *Lamarckii* " or " × *Mentha alopecuroides* β *Lamarckii.*"

Art. 39 [formerly 30]. The wording has been revised. Some " fancy " names are actually in Latin : hence the wording " preferably vernacular " seems better than " in common language."

## Section 5. **Conditions of effective publication.**

Section 4 of the 1912 Rules is replaced by two Sections : " Sect. 5. Conditions of effective publication " and " Sect. 6. Conditions and dates of valid publication of names." Effective publication is concerned with the *medium* of publication (printed matter or indelible autographs) and the *mode of distribution.* Valid publication is dependent on the provision of a *description* of the group concerned, and on certain other factors.

Art. 40 [formerly 35]. The new wording is more explicit : " sale or public distribution " is not very definite, and might include " sale by auction " or " distribution of leaflets in the street." Distribution among representative botanical *institutions* will ensure real publicity, whereas distribution among *individual botanists* will not do so.

## Section 6. **Conditions and dates of valid publication of names.**

Art. 41 [containing parts of former Art. 37, 38]. It seems desirable to add this general article, stating that no name of a group is validly published unless it is associated with a description. The requirement of a Latin diagnosis on and after January 1, 1908 (former Art. 36), is omitted, being replaced by a new Recommendation.

Art. 42 [former 36 bis]. Requirement of a Latin diagnosis for fossil plants omitted.

Art. 43 [part of former Art. 37]. As this is a general Rule, it seems best to make it a separate Article, instead of placing it under publication of species.

Art. 44 [new]. Much uncertainty in nomenclature has been caused by the acceptance—by some authors only—of provisional names, " nomina eventualia." In the interests of stability, it seems desirable to reject them.

Art. 45 [part of former Art. 38]. This is again a general Rule, and should not be included under a Article dealing primarily with generic names.

Art. 46 [part of former Art. 38]. The original wording of Art. 38 seems unsatisfactory. The phrase " characterized conformably to Art. 37 " is capable of more than one interpretation : it might refer to the *second* paragraph of Art. 37 as well as to the first, in which case the name of a new genus based on an *old* species would be validated by the provision of a figure with analyses of that old species, which is certainly undesirable, as that is not equivalent to a *generic* description. No provision was made in the 1912 Rules for the validation of the new generic names in Sp. Pl. ed. 2—see remarks under Art. 21.

Art. 47 [partly new, partly from former Art. 38]. This deals with two exceptional cases of validation of generic names, and can be more clearly stated in an independent Article.

Art. 48 [formerly 37]. Art. 37 of the 1912 Rules contained various provisions of a *general* nature, applying also to groups other than species (see new Art. 41 and 43).

Art. 49 [formerly 39]. Dates of *epithets* were not explicitly mentioned in the original Article.

## Section 7. **Citation of authors' names for purposes of precision.**

Art. 50 [formerly 40]. The wording is revised.

Art. 51 [formerly 41]. The wording is slightly revised.

Art. 52 [formerly 42]. A second paragraph is added, as proposed by Rehder in Journ. Arn. Arb. x. 50 (1929).

Art. 53 [formerly 43]. The importance of retaining the name of the *original* author of an epithet is emphasized : under a type method it is more important than that of the *transferring* author, as it indicates the type.

Section 6 of the 1912 Rules was difficult to consult owing to its highly comprehensive character. This defect is remedied by its division into four sections (8, 9, 10 and 11 of this Code) dealing respectively with division, transference, union and change of rank.

## Section 8. **Retention of names or epithets of groups which are remodelled or divided.**

Art. 54 [formerly 44]. It seems much better to specify the exceptions rather than to refer merely to the former Art. 51, which is very inconvenient to consult, and has a back reference to the Rules of Sections 4 and 6.

Art. 55 [formerly 45]. It is generally considered that the original Article is unsatisfactory, owing to its having been drafted before a type method was in general use.

Art. 56 [formerly 47]. This now comes in its proper place, immediately after the corresponding Article dealing with *division* of genera. In the 1912 Rules it was separated by Article 46, dealing with *union* of groups. The examples given were not particularly clear.

## Section 9. Retention of epithets of groups below the rank of genus on transference to another genus or species.

Art. 57, 58 and 59 [formerly parts of 48]. Art. 48 of the 1912 Rules is now divided into three Articles for the sake of clearness. The provisions relating (1) to transference of subgenera and sections, (2) to that of species, and (3) to that of subdivisions of species are different in each case, hence it is inconvenient to include them all in one Article.

Art. 58. Under the revised wording a validly published name of a species may not be duplicated: thus the existence of *Matricaria suaveolens* L. (1755) (*whether that species is kept up or reduced*) invalidates *Matricaria suaveolens* (Pursh) Buchenau (1894). This makes for stability in nomenclature.

Art. 59. Under the revised wording the same subdivisional epithet may not be used for two subdivisions of the same species *even if they are of different rank*, unless they are based on the same type. This will remove an occasional source of confusion.

## Section 10. Choice of names when two groups of the same rank are united, or in Fungi with a pleomorphic life-cycle.

Art. 60 [formerly 46]. The wording has been revised: in groups below the genus it is the oldest *epithet* which is retained, not the oldest *name*.

Art. 61 [formerly 49 bis]. A clause defining the perfect state in the Phycomycetes has been added. The example of *Phoma*, being now unsatisfactory, is replaced by that of *Ramularia*.

## Section 11. Choice of names when the rank of a group is changed.

Art. 62 [formerly 49]. The wording has been revised: in groups below the rank of genus it is the earliest *epithet* given in the new *rank* not the earliest *name* (*or combination*) given in the new *position* which is retained.

## Section 12. **Rejection of names.**

Art. 63 [formerly 50]. The clause relating to earlier homonyms which are " non-valid " is omitted—see Art. 65.

Art. 51 of the 1912 Rules included five different categories of names which must be rejected, and the fourth category itself included two different classes of rejected names, while the fifth comprised names which are " contrary to the rules of sections 4 and 6." Hence it has seemed desirable, for the sake of clearness, to divide Art. 51 (1912 Rules) into six Articles, Nos. 64–67, 69, 70.

Art. 64 [replacing former Art. 51 : 1°]. It seems desirable to indicate the various categories of illegitimate names, supplying references to the relevant Articles.

Art. 65 [parts of former Art. 27, 29, 51 : 2°]. It seems highly desirable that the provisions relating to homonyms should be contained in a single article instead of being scattered through the Rules. This Article prohibits the duplication of names which have been published with a description (or reference to a former description), *even if they are illegitimate*. It will stabilize nomenclature, especially in the numerous cases where there is doubt or dispute whether a prior homonym is illegitimate or not.

Art. 66.—See remarks under Art. 59.

Art. 67 [formerly part of 51 : 4°]. As botanists frequently do not agree whether or not a particular name " has become a permanent source of confusion and error," it is essential to have an official list of such names.

Art. 68 [new]. The rejection of " nomina dubia " is in accordance with Art. 4 : one of the essential points in nomenclature is certainty in the application of names.

Art. 69 [formerly part of 51 : 4°]. As there may be difference of opinion whether a particular name is a " nomen confusum " or not, it is essential to have an official list of " Nomina confusa." The generic name *Crinodendron* Molina has been shown to be based on a mixture of at least two species belonging to different *families*, and was therefore rejected, under International Rules, Art. 51 : 4°, as a " nomen confusum " by Sprague (Kew Bull. 1907, pp. 14, 15). It has, however, been retained by Schneider (Ill. Handb. Laubholzk. ii. 364 : 1909).

Art. 70 [formerly 51 : 3°]. The wording is modified so as to include epithets as well as names.

Art. 71 [formerly 54]. The statement in Examples 1° of Art. 54 (1912 Rules) that " generic names such as *Lignum*, *Radix*, *Spina*, *Radicula*, etc., would not now be admissible " is evidently intended to have the force of a rule, and its substance is therefore incorporated

in Art. 71. A new provision is inserted, rejecting words such as *Anonymos* which are not real generic names.

Art. 72 [formerly 55]. The second provision of Art. 55 (1912 Rules) rejecting tautonyms (" duplicating binomials ") is omitted. It has been shown that rejection of names of this category has led to instability of nomenclature (vide Journ. Bot. 1924, pp. 41–47). Hence, although we dislike tautonyms, we consider that to accept them is the less of two evils. A new provision is inserted, rejecting words which are not real specific epithets. Another new provision is inserted, by which " incidental binomials " such as those which occur in Garsault's works and Hill's British Herbal, are rejected.

Art. 73 [formerly 56]. The wording is revised.

Art. 74 [formerly 57]. The correct spelling of generic names is discussed in Kew Bull. 1928, pp. 113, 285, 337, and 1929, p. 38.

Art. 75 [new]. The subject is discussed in Kew Bull. 1928, pp. 294–296, 341, and 1929, p. 39.

Art. 76 [new]. The subject has been discussed in Journ. Bot. 1921, pp. 157–158: Rehder's suggested modification (Journ. Bot. 1921, p. 290), that indeclinable names borrowed from non-classical languages should bear the gender assigned to them by their authors, has been accepted.

Art. 77 [new]. The numerous instances in which expert nomenclaturists place different interpretations on the Rules show the need for an Advisory Committee.

Art. 78 [former Art. 58, modified]. Experience has shown that the full effects of a proposed rule may not be immediately apparent; hence it seems desirable that final sanction should not be given to any modification of the Code until the succeeding Congress.

# (2) Amendments to the Recommendations.

(1) Rec. I.—Omit the words " with the sign × placed before the generic name." Omit the words " and also half-breeds."

(2) Omit Rec. II and III. These are now replaced by Art. 25–27 of this Code.

(3) Omit Rec. Vb, as now unnecessary, later homonyms being rejected under Art. 65 of this Code.

(4) Rec. Vg.—Substitute the word " legitimate " for " valid."

(5) Rec. X.—Add the words: " or from vernacular names." In the English text, replace the first " taken " by " derived," and the second " taken " by " borrowed."

(6) Omit Rec. XIVf, as now unnecessary, later homonyms being rejected under this Code.

(7) Rec. XVI.—Substitute the following text: "Botanists proposing new epithets for subdivisions of species are recommended to avoid such as have been used previously in the same genus, whether for species or for subdivisions of other species."

(8) Omit Rec. XVII, as now unnecessary, since "half-breeds" are now included under "hybrids."

(9) Rec. XVIIIbis.—Substitute the following text: "When publishing names of new groups to indicate carefully the subdivision which is the type of the new name: the type-genus in a family, the type-species in a genus, the type-variety or specimen in a species. This type determines the application of the name in the event of the group being subsequently divided."

(10) Rec. XX.—Substitute the following text: "When publishing the name of a new group with a description written in a modern language to publish simultaneously a Latin diagnosis of that group.

(11) Omit Rec. XXVbis, as now unnecessary—see Art. 53 of this Code.

(12) Rec. XXVter.—Substitute the words "*Gen.* ed. 5, 322" for "*Gen.* ed. 4, 332."

(13) Rec. XXVII.—Replace the words "that subdivision which was first distinguished or described" by "the type-subdivision."

(14) Rec. XXVIII.—Replace the words "that subdivision which was first distinguished or described" by "the type-subdivision."

(15) Rec. XXIX. 1°.—Replace "*-ineae*" by "*-ares.*" In the English text, replace the word "root" by "stem." Delete all after the word "unless," substituting the following: "the resulting name must be rejected under the provisions of Section 12."

(16) Rec. XXIX. 2°.—Replace the words "retain the old names" by "retain the original epithet or name." Delete all after the word "unless," substituting "the resulting name must be rejected under the provisions of Section 12."

(17) Rec. XXIX 3°.—Replace the word "epithets" by "epithet." Delete all after the word "unless," substituting "the resulting name must be rejected under the provisions of Section 12."

(18) Omit the reference (after Art. 50 of the 1912 Rules) to Rec Vb and XIVf, as these are now omitted.

(19) Omit Rec. XXX.—All doubtful cases should be referred to the Advisory Committee—see Art. 74, Note 3.

(20) Omit Rec. XXXI.—The substance of this Recommendation is now incorporated in Art. 74.

(21) Re-number the Recommendations consecutively.

## V.—PROPOSALS BY E. M. WAKEFIELD (KEW).

I have the honour to submit the following proposals to the International Botanical Congress to be held at Cambridge (England) in 1930:

(1) That for the purpose of preparing a list of Nomina Generica Conservata for the Fungi a small subcommittee of mycologists be appointed, to consist of not more than five members.

(2) That the following paragraph be inserted in Art. 49 bis (Art. 61 International Code) before the final paragraph:

In the case of Fungi with a pleomorphic life-cycle whose perfect state is not known, the author who unites the various imperfect states has the right of choosing the name to be used. The author who adopts one name, citing another as a synonym, must be followed.

Example. *Pseudodiscosia Dianthi* Hösterm. & Laub., 1921 (Melanconiaceae) is connected with the pycnidial form *Heteropatella Dianthi* Budd. & Wakef., 1929 (Excipulaceae). In publishing the description of the latter form, the authors have given reasons for retaining that name for the fungus, pending the discovery of a perfect stage.

E. M. WAKEFIELD,

*August*, 1929.

## VI.—PROPOSAL BY A. J. WILMOTT (BRITISH MUSEUM).

I have the honour to propose to the International Botanical Congress to be held at Cambridge (England) in 1930, that the following new Article be inserted in the International Rules of Botanical Nomenclature (or in the proposed International Code):

Art. 19 bis (or Art. 21 bis of the International Code). Names are legitimate only when they are a development of the system of nomenclature introduced by Linnaeus in 1753 (Species Plantarum), which established consistent binary nomenclature for species.

A. J. WILMOTT,
*August*, 1929.

*Commentary.*

This article is designed to prevent the adoption of generic names from Hill's Herbal and similar works whose authors refused to adopt the "new" Linnean nomenclature. The accepted nomenclature did not take a *date* (i.e., 1753) as its starting point, but a *system of nomenclature.* Hill and others who refused entirely or for a time to accept the changed nomenclature, are here regarded as an overflow of the old system which has nothing to do with the modern system introduced by Linnaeus. The remarkable thing is that this overflow is so slight. To revive generic names from these sources naturally results in changes of nomenclature, and unnecessary changes are generally admitted to be undesirable.

The principle of this article was proposed by Hayek at the International Congress of Vienna, 1905, and was strongly supported until Briquet declared that its adoption would lead to numerous changes of nomenclature since Adanson's names would be rejected. This statement led to the withdrawal of the proposition. My investigations indicate that more changes in established generic nomenclature have resulted from accepting generic names of non-binarist authors than would have resulted from rejecting them. It was not realized that the rejection of Adanson would not necessarily mean the loss of those of his names which had been adopted by Gaertner, DeCandolle and others, but often merely a change in the author cited. In modern nomenclature Tournefort's genera are cited as of Linnaeus, and there is no reason why Adanson's genera should not similarly be cited as of Gaertner, DC., etc. Although some changes have already been made, it is likely that others will still be necessary unless we revert to the custom of rejecting the names of non-binarist authors, a custom which prevailed for the whole of the century during which modern generic nomenclature became fairly stable.

It is true that the DeCandollean Rules took the first edition of the Genera Plantarum (1737) as the starting point for generic names, but since Linnaeus largely maintained his own nomenclature, the adoption of 1753 as a starting point does not involve numerous changes. It is the Linnean nomenclature which was generally accepted, and, that being so, to accept names from contradictory systems *must* lead to changes.

The Zoological Code of Rules recognizes this in its Art. 25, where it lays down, as a limitation of the " Law of Priority," the condition " that the author has applied the principles of binary nomenclature." The proposed wording of " Art. 19 bis " is designed to indicate the reason for its adoption.

## VII.—PROPOSAL BY I. H. BURKILL (LATE DIRECTOR, BOTANICAL GARDENS, STRAITS SETTLEMENTS).

I have the honour to propose to the International Botanical Congress to be held at Cambridge (England) in 1930, that the following new Article be inserted in the International Rules of Botanical Nomenclature (or in the proposed International Code):

Art. 20 bis (or Art. 22 bis of the International Code). No generic name which has fallen into complete disuse for a period of not less than fifty years shall be re-established if there is another legitimate name in use for the genus concerned.

I. H. BURKILL,

*August*, 1929.