

Draft BioCode (1997): The Prospective International Rules for the Scientific Names of

Organisms

Author(s): W. Greuter, D. L. Hawksworth, J. McNeill, M. A. Mayo, A. Minelli, P. H. A. Sneath,

B. J. Tindall, P. Trehane, P. Tubbs

Source: Taxon, Vol. 47, No. 1, (Feb., 1998), pp. 127-150

Published by: International Association for Plant Taxonomy (IAPT)

Stable URL: http://www.jstor.org/stable/1224030

Accessed: 18/06/2008 21:29

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Draft BioCode (1997): the prospective international rules for the scientific names of organisms

Prepared and edited by

W. Greuter¹, D. L. Hawksworth², J. McNeill³, M. A. Mayo⁴, A. Minelli⁵, P. H. A. Sneath⁶, B. J. Tindall⁷, P. Trehane⁸ & P. Tubbs⁹ (the IUBS/IUMS International Committee for Bionomenclature)

Fourth draft, revised at a meeting of the Committee at Egham, U.K., 21-25 April 1997, by

W. Greuter, D. L. Hawksworth, J. McNeill, A. Minelli, B. J. Tindall, P. Trehane & P. Tubbs

PREAMBLE

- 1. Biology requires a precise, coherent and simple system for the naming of organisms used internationally, dealing both with the nomenclatural terms and with the scientific names which are applied to the individual taxonomic groups of organisms (taxa, singular taxon). BC, G.C. 1 & 2; ICBN, Pre. 1; ICZN, Pre. [2] & [4], Art. 1.
- 2. The provisions of this Code shall apply to names of all kinds of organisms, whether eukaryotic or prokaryotic, fossil or non-fossil¹⁰, and of some fossil traces of organisms, that are published and established on or after 1 January $200n^{11}$, and shall govern the choice of name when these names compete among themselves or with earlier names. They shall also, and without limitation of date, provide, in the interest of nomenclatural stability and security, for the protection, conservation, or suppression of all such names, as well as for their correct form and spelling. ICBN, Pre. 7; ICZN, Pre. [2].

¹ Botanischer Garten & Botanisches Museum Berlin-Dahlem, Freie Universität, D-14191 Berlin, Germany.

² 114 Finchley Lane, Hendon, London NW4 1DG, U.K.

³ Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario M5S 2C6, Canada.

⁴ Scottish Crop Research Institute, Virology Division, Invergowrie, Dundee DD2 5DA, U.K.

⁵ Dipartimento di biologia, Università di Padova, Via Trieste 75, I-35121 Padova, Italy.

⁶ University of Leicester, Department of Microbiology, P.O. Box 138, Leicester LE1 9HN, U.K.

⁷ Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Mascheroder Weg 1b, D-38124 Braunschweig, Germany.

⁸ Hampreston Manor, Wimborne, Dorset BH21 7LX, U.K

⁹ ICZN, Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

In this *Code*, the term "fossil" is applied to a taxon when its name is based on a fossil type and the term "non-fossil" is applied to a taxon when its name is based on a non-fossil type

The precise date upon which the *BioCode* will take effect is presently unknown. The date will be established by the ICB after approval of authority transfer by the bodies responsible for the Special *Codes*, as detailed in Div. III. 3.

- 3. Names of organisms that have been established (i.e., validly published or become available) prior to 1 January 200n and are not yet covered by adopted Lists of Protected Names are in all other respects (including their subsequent typification) governed by the International Code of Nomenclature of Bacteria: Bacteriological Code, the International Code of Botanical Nomenclature, or the International Code of Zoological Nomenclature, hereafter called the "Special Codes", depending on the accepted taxonomic position of their type.
- 4. Separate rules for virus nomenclature, contained in *The International Code of Virus Classification and Nomenclature*, have been established in conformity with Principles I & V of this *Code* and with the thrust of many of its rules. Because names of virus species do not have the binominal form required under this *Code*, and names of virus taxa in other recognized ranks have mandatory terminations according to rank, provisions of this *Code* proscribing these terminations for non-virus taxa ensure that the names of viruses and other organisms cannot conflict.
- 5. The nomenclature of cultivated plants follows the provisions of this *Code*, in so far as these provisions are applicable, but the naming of distinguishable groups of plants whose origin or selection is primarily due to the intentional actions of mankind follows the supplementary provisions contained in the *International Code of Nomenclature for Cultivated Plants*. *ICBN Pre*. 8.

DIVISION I. PRINCIPLES

Principle I

The *BioCode* governs the formation and choice of scientific names of known taxa but not the definition of the taxa themselves. Nothing in this *Code* may be construed to restrict the freedom of taxonomic thought or action. – *BC*, *G.C.* 4; *ICZN*, *Pre.* [2].

Principle II

Scientific nomenclature of organisms builds upon the Linnaean system of binominal names (binomina) for species. – BC, Rule 12A; ICBN, Art. 23; ICZN, Art. 5.

Principle III

The application of names of taxa is determined by means of name-bearing types, although this principle does not apply to some names at supra-familial ranks (see Art. 25.1(b)). -BC, Prin. 5; ICBN, Prin. II; ICZN, Art. 61.

Principle IV

The nomenclature of a taxon is based upon priority (precedence by date) of publication (Art. 19.1), although application of this principle is not mandatory at all ranks (Art. 19.7). – BC, Prin. 6; ICBN, Prin. III; ICZN, Pre. [3].

Principle V

Each taxon in the family group, genus group or species group with a particular circumscription, position, and rank has only one accepted name, except as may be specified in earlier *Codes. – BC, Prin. 8; ICBN, Prin. IV; ICZN, Pre. [2].*

Principle VI

Scientific names of taxa are by convention treated as if they were Latin, regardless of their derivation. – BC, Prin. 3 & Rule 6; ICBN, Prin. V; ICZN, Art. 11.

Principle VII

The only proper reasons for changing a name are either a change in the circumscription, position or rank of the taxon, resulting from progress in taxonomic knowledge, or the promotion of nomenclatural stability. – BC, Prin. 9; ICBN, Pre. 9; ICZN, Art. 23b.

Principle VIII

In the absence of a relevant rule or where the consequences of rules are doubtful, established custom is followed (see also Div. III.4.). – BC, Rule 4; ICBN, Pre. 10; ICZN, Art. 80.

Principle IX

The rules of nomenclature are retroactive, subject to any specified limitations (see also Pre. 2-3). – BC, Rule 2; ICBN, Prin. VI; ICZN, Art. 86.

DIVISION II. RULES

CHAPTER I. TAXA AND RANKS

Article 1

1.1. Taxonomic groups of any rank will, in this *Code*, be referred to as *taxa* (singular: *taxon*). – *BC*, *G.C.* 7; *ICBN*, *Art.* 1.1; *ICZN*, *Art.* 1.

Article 2

- 2.1. Every individual organism is treated as belonging to an indefinite number of taxa of consecutively subordinate rank. ICBN, Art. 2.1.
- 2.2. Taxa normally consist of whole organisms in all their life stages, irrespective of the nature of the corresponding name-bearing types. For practical reasons, in some categories of organisms taxa are recognized and can be named that correspond only to parts of organisms or to definite stages of their life history. Such taxa are termed parataxa. This *Code* provides, in Art. 36, for names of parataxa in the following categories: fossil non-algal botanical taxa, some fungi with a pleomorphic life history, and trace fossils (ichnotaxa). *ICBN*, Art. 3.3-4; *ICZN*, Art. 1d, 10d, 23g & 42b(i).

Article 3

3.1. The principal ranks of taxa in descending sequence are: kingdom, phylum, class, order, family, genus, and species, among which genus and species are primary. – BC, Rule 5b; ICBN, Art. 3.1.

Article 4

4.1. Secondary ranks of taxa, when required, include in descending sequence: domain above kingdom, superfamily above family, subfamily and tribe between family

and genus, subgenus, section and series between genus and species, and subspecies, variety and form below species. – BC, Rule 5b; ICBN, Art. 4.1.

- 4.2. When an even greater number of ranks of taxa is desired, the terms for these are made by adding the prefixes super-, sub-, or infra- (infra- being below sub-) to non-prefixed terms denoting principal or secondary ranks. *ICBN*, *Art.* 4.2.
- Ex. 1. Superspecies or infraspecies are permitted but not infrasubspecies.
- 4.3. Throughout this *Code* the term "suprafamilial" refers only to ranks above the family group; the phrase "family group" refers to the ranks of superfamily, family and subfamily; "subdivision of a family" only to taxa of a rank between family group and genus group; "genus group" refers to the ranks of genus and subgenus; "subdivision of a genus" only to taxa of a rank between genus group and species group; "species group" to the ranks of species and subspecies; and the term "infrasubspecific" refers to ranks below the species group. *ICBN*, *Art. 4 Note 1*.
- Note 1. Further ranks may be intercalated or added, but designations of taxa in such ranks are not governed by this Code. ICBN, Art. 4.3.]

CHAPTER II. PUBLICATION

- 5.1. Publication, under this *Code*, is defined as distribution of text or images (but not sound) in multiple identical, durable, and unalterable copies, in a way that makes it generally accessible as a permanent public record to the scientific community, be it through sale or exchange or gift, and subject to the restrictions and qualifications in the present Article. *BC*, *Rule 25a*; *ICBN*, *Art. 29.1*; *ICZN*, *Art. 8 & 9*.
- 5.2. The distribution of text in encrypted (including digitized) form, in particular the dissemination of text or images solely through erasable electronic support or through electronic communication networks, is not publication. *ICZN*, *Art. 9. Contrary to BC*, *Rule 25b (3); ICZN*, *Art. 8a*.
- 5.3. Any matter containing a statement to the effect that it is not intended for general public use is not considered as a publication. ICZN, Art. 8b.
- 5.4. Communication of text or images at a public meeting, in any way unlikely to be durable and reach a wider audience than those in attendance, is not publication. BC. Rule 25b (1): ICZN, Art. 9.
- 5.5. The placing of texts or images in collections or exhibits, e.g., on labels (including specimen labels, even if printed) or information sheets, is not publication. BC, Rule 25b (2); ICZN, Art. 9.
- 5.6. The reproduction of hand-written material in facsimile, e.g., by print, photostat or microfilm, is not publication. *ICZN*, *Art.* 9.
- 5.7. Inclusion of names in issued patents and patent applications is not publication. -BC, Rule 25b (5).
- 5.8. The distribution of films or photographs of text or images is not publication. *ICZN*, *Art.* 9.

6.1. The publication date is the date on which publication as defined in Art. 5 took place (see also Art. 13.2). In the absence of proof establishing some other date, the one appearing in the publication itself must be accepted. – BC, Rule 26a; ICBN, Art. 31.1; ICZN, Art. 21.

CHAPTER III. NAMES (GENERAL PROVISIONS)

SECTION 1. STATUS

Article 7 – BC, Rule 23a & 24a

- 7.1. For the purposes of this *Code*, publication of a name is defined in Art. 5-6. *ICBN*, Art. 6.1; ICZN, Art. 7-9.
- 7.2. Established names are those that are published in accordance with Art. 8-13 (see also Art. 38) or that, prior to 1 January 200n, were validly published or became available under the relevant Special Code. ICBN, Art. 6.2; ICZN, Art. 10-11.
- 7.3. Acceptable names are those that are in accordance with the rules, i.e., are not unacceptable under Art. 18, and, for names published before 1 January 200n, are neither illegitimate nor junior homonyms under the relevant Special Code. ICBN, Art. 6.3.
- 7.4. In the family group, genus group, or species group, the accepted name of a taxon with a particular circumscription, position, and rank is the acceptable name which must be adopted for it under the rules (see Art. 19). *ICBN*, *Art.* 6.5; *ICZN*, *Art.* 23.
- *Note 1.* In ranks not belonging to the family group, genus group, or species group, any established name of a taxon adopted by a particular author is an accepted name (see Art. 19.7).
- 7.5. In this *Code*, unless otherwise indicated, the word "name" means an established name, whether it be acceptable or unacceptable (see Art. 20). *ICBN*, *Art.* 6.6; *ICZN*, *Art.* 23.
- 7.6. The name of a taxon consisting of the name of a genus combined with one epithet is termed a binomen, the name of a species combined with an infraspecific epithet is termed a trinomen; binomina or trinomina are also termed combinations. *ICBN*, *Art.* 6.7; *ICZN*, *Art.* 5.

SECTION 2. ESTABLISHMENT

Article 8

8.1. In order to be established (Art. 7.2) on or after 1 January 200n, a name of a taxon must: (a) be published as provided for by Art. 5-6; (b) have a form that complies with the provisions of Art. 25-33; (c) be adopted by the author(s), who must be a named person (or persons); (d) not be proposed merely in anticipation of the future acceptance of the group concerned, or in anticipation of a particular circumscription,

- position, or rank of the group; and (e) comply with the special provisions of Art. 8-12 (see also Art. 38.3). Furthermore, (f) names in the family group, genus group and species group must be registered as provided for in Art. 13. BC, Rule 29 & 30; ICBN, Art. 32.1.
- 8.2. In order to be established, a name of a new taxon must be accompanied by a Latin or English description or diagnosis, or by a direct and unambiguous bibliographic reference to a previously published Latin or English description or diagnosis that applies to the taxon when placed in a rank belonging to the same rank group (Art. 9.3). BC, see Rec. 25a; ICBN, Art. 36.1.
- 8.3. In order to be established, new names must be clearly identified as such in the original publication, by statements such as "new species", "sp. nov.", "new combination", "comb. nov.", etc. -BC, Rule 33a.
- 8.4. When a publication contains a statement to the effect that names or nomenclatural acts in it are not to be considered for nomenclatural purposes, names that it may contain are considered as not published in the sense of this *Code* (see Art. 5.1). BC, see Rule 28b; ICZN, Art. 8b.

- 9.1. A new combination or a replacement name for a previously established name is not established unless its basionym (name-bringing or epithet-bringing synonym) or the replaced name is clearly indicated by a direct and unambiguous bibliographic reference to its author and place of original publication. ICBN, Art. 33.2; ICZN, Art. 67h.
- 9.2. In order for a bibliographic reference to be direct and unambiguous it must include page or plate reference (where applicable) and date; for publications with a consecutive pagination, page reference is a reference to the page or pages on which the basionym was published or on which the protologue¹² is printed, but not to the pagination of the whole publication unless it is coextensive with that of the protologue. *ICBN*, *Art.* 33 Note 1.
- 9.3. The basionym or replaced name may be of a different rank from the new combination or replacement name, but only within the following ranges (Art. 4.3): suprafamiliar ranks, family-group taxa, subdivisions of a family, genus-group taxa, subdivisions of a genus, species-group taxa, and infra-subspecific taxa. *ICBN*, Art. 41.1.
- *Note 1.* Change of rank within the family group or genus group, or elevation of rank within the species group do not require the formal establishment of a new name or combination (see Art. 27.1, 29.1, and 31.5).

Article 10

10.1. The name of a new taxon of the rank of genus or below is not established unless the name-bearing type is designated (see Art. 14-17). Designation of the type must include one of the words "holotype" (holotypus) or "type" (typus), or the cor-

¹²Protologue (from the Greek *protos*, first; *logos*, discourse): everything associated with a name in the publication in which it is eligible for establishment.

responding abbreviation. – BC, Rule 27, see also Rule 18b; ICBN, Art. 37.1; ICZN, Art. 13b.

10.2. For the name of a new species or infraspecific taxon for which the holotype is a preserved specimen, the institution or collection in which the type is conserved must be specified. – BC, Rec. 30a; ICBN, Art. 37.5.

Recommendation 10A

10A.1 It is strongly recommended that name-bearing types be deposited in a public collection with a policy of giving *bona fide* biologists open access to deposited material, and that it be scrupulously conserved. – ICBN, Rec. 7A.1.

Article 11

11.1. In order to be established, a name of a new fossil botanical taxon of specific or lower rank must be accompanied by an illustration or figure showing diagnostic characters, in addition to the description or diagnosis, or by a bibliographic reference to an illustration or figure previously published in accordance with Art. 5-6. This requirement also applies to names of new non-fossil algal taxa at these ranks. – ICBN, Art. 38.1.

Article 12

12.1. Only if the corresponding genus or species name is established can the name of a subordinate taxon be established (but see Art. 34.3). – BC, Rule 32b; ICBN, Art. 43.1.

SECTION 3. REGISTRATION

- 13.1. Registration is effected (a) by submitting the published matter that includes the protologue(s) or nomenclatural acts (Art. 16.4, 18.5 or 19.5) to a registering office designated by the relevant international body (see Div. III.7), or (b), where an official medium for establishment of names has been designated, by publication in that medium. Registration will be granted to all submitted names that fulfil the requirements of Art. 8-12 (see also Art. 40.7). The exact procedure is outlined in Annex $A^{13} BC$, Rule 27; ICBN, Art. 32.2.
- 13.2. The date of a name under Art. 13.1 (a) is that of its registration, which is the date of receipt of the relevant matter at the registering office. BC, Rule 24a, 24b & 27; ICBN, Art. 45.1.
- 13.3. When alternative (homotypic) names are proposed simultaneously for registration for one and the same taxon (same rank and same position) neither is considered to be submitted.
- 13.4. When one or more of the other conditions for establishment (Art. 8-12) have not been met prior to registration, the name must be resubmitted for registration after these conditions have been met. *ICBN*, *Art.* 45.2.

¹³This Annex, and those referred to in Art. 22.12, 37.6, 39.1, 39.2, and 39.3, will be prepared at later dates, and are not, therefore, included in this *Draft BioCode*.

SECTION 4. TYPIFICATION

Article 14

- 14.1. The application of names of taxa of the rank of superfamily or below, and of those names of taxa in the higher ranks that are ultimately based on generic names, is determined by means of name-bearing types (types of names of taxa). The unit formed by the name and its type is referred to as the nominal taxon. -BC, Rule 18a; ICBN, Art. 7.1; ICZN, Art. 61a.
- 14.2. A name-bearing type is that element to which the name of a taxon is permanently attached, whether it be an accepted name or not. BC, Rule 15; ICBN, Art. 7.2; ICZN, Art. 61a.
- 14.3. A new name based on a previously published acceptable name, e.g., as a new combination or as a replacement for an older name (see Art. 9), is typified by the type of the older name. BC, Rule 34a; ICBN, Art. 7.3; ICZN, Art. 67h, 72e.

Article 15

- 15.1. For names of superspecies, species or infraspecific taxa the name-bearing type is a specimen (but see Art. 15.3). A specimen as here defined normally consists of a single individual or parts thereof, but may sometimes consist of (parts of) more than one individual of the named taxon, on the condition that they are all collected or isolated at the same time and place, and conserved permanently as a single curatorial unit (e.g., museum jar, herbarium sheet, slide preparation, or mounted set of freezedried ampoules). BC, Rule 18a; ICBN, Art. 8.1; ICZN, Art. 61a.
- 15.2. Type specimens cannot be metabolically active organisms, but may be organisms permanently preserved in a viable but metabolically inactive state, e.g., by lyophilization or cryopreservation. BC, Rule 18a; ICBN, Art. 8.2.
- *Note 1.* In the event that an organism preserved in a metabolically inactive state cannot serve to fix the application of the name, e.g., by losing its viability, an epitype (Art. 16.3), that may be preserved from a living culture, may be designated.
- 15.3. When authors of new names explicitly indicate in the protologue that it is not practicable to preserve type material as defined in Art. 15.1 and 15.2, the type may be an illustration or figure showing diagnostic characters. BC, Rule 18a, see also Rule 18f; ICBN, Art. 8.3; ICZN, Art. 73 (a)(iv).

- 16.1. If a type specimen is lost or destroyed, or is unavailable for consultation for an indefinite period of time, a neotype may be designated to serve as type so long as the original type is unavailable or missing. BC, Rule 18c, 18d, 18e & 18g; ICBN, Art. 9.6; ICZN, Art. 75.
- 16.2. When a type specimen contains parts belonging to more than one taxon, a part of it may be designated as lectotype so as to fix the application of the name. *ICBN*, *Art. 9.10; ICZN*, *Art. 74*.
- 16.3. When a type is demonstrably ambiguous and cannot be critically identified for purposes of the precise application of the name of a taxon, and it is desirable to fix

that application, an epitype may be designated that is not itself ambiguous. Suitability of a designated epitype may be challenged (see Div. III.9). – *ICBN*, *Art.* 9.7; *ICZN*, *Rec.* 75E.

- *Note 1.* Designations of types of names published before 1 January 200*n* are made in accordance with the rules in the relevant Special *Code*.
- 16.4. Type designations as provided for in Art. 16.1-3 must be published (Art. 5-6) and registered (Art. 13).

Recommendation 16A

16A.1. A neotype should be selected from among duplicates of, or specimens belonging to the same series as, the original type, when such material does not demonstrably differ taxonomically from the original type.

Article 17

- 17.1. The type of a nominal taxon in the rank of genus or subdivision of a genus is a nominal species (see also Art. 22.9). BC, Rule 20a-g; ICBN, Art. 10.1; ICZN, Art. 63.
- 17.2. The type of a nominal taxon of the family group, or of a nominal taxon of higher rank whose name is ultimately based on a generic name, is the nominal genus from which it is derived. BC, Rule 21a & 21b; ICBN, Art. 10.6; ICZN, Art. 63.

SECTION 5. HOMONYMY

Article 18 – BC. Rule 56a.

- 18.1. A family-group, genus-group or species-group name established on or after 1 January 200n, unless conserved (Art. 22) or otherwise protected, is not acceptable if it is a later homonym (see also Art. 18.5), that is, if it, or one of its coordinate names, is spelled exactly like a name based on a different type that was previously established for a taxon of the same rank. -BC, Rule 51b(4); ICBN, Art. 53.1; ICZN, Art. 52.
- Note 1. In the ranks of the species group, a binomen or trinomen that is already established cannot be displaced, even if there is an earlier acceptable name whose final epithet would otherwise have to be adopted under Art. 19.4. In such cases, the resultant combination would be unacceptable as a later homonym as defined in Art. 18.1.
- 18.2. An infra-subspecific name is not acceptable, irrespective of its date, if it has the same epithet as a subspecies name within the same species, but is based on a different name-bearing type.
- 18.3. When two or more species-group names based on different types are so similar that they are likely to be confused they are treated as homonyms. This does not apply to genus-group names, except as provided by Art. 18.4. BC, Rule 51b(4), 62a; ICBN, Art. 53.3; ICZN, Art. 58.

¹⁴ Here and elsewhere in this *Code*, the phrase "final epithet" refers to the last epithet in sequence in any particular combination, whether in the rank of a subdivision of a genus, or of a species, or of an infraspecific taxon.

- 18.4. When it is doubtful whether species-group or genus-group names are sufficiently alike to be confused, a request for a binding decision (see Div. III.9) may be submitted to the appropriate committee(s). BC, Rule 58; ICBN, Art. 53.4.
- 18.5. When two or more homonyms have the same date, the first of them that is adopted in a publication (Art. 5-6) and registered (Art. 13) by an author who simultaneously rejects the other(s) is the only one acceptable. Likewise, if an author, in publication, substitutes other names for all but one of these homonyms, the homonym for the taxon that is not renamed takes precedence. ICBN, Art. 53.6; ICZN, Art. 24.

SECTION 6. PRECEDENCE

- 19.1. For purposes of precedence the date of a name is either the date attributed to it in an adopted List of Protected Names or, for unlisted names, the date on which it was validly published under the botanical or bacteriological *Code*, or became available under the zoological *Code*, or was established under the present *Code*. Limitations of priority that under previous *Codes* affected names in certain groups or of certain categories, even if not provided for in the present *Code*, still apply to such names if they were published before 1 January 200n. BC, Rule 24a & 24b; ICZN, Art. 10.
- 19.2. A name cannot take precedence outside its own rank (but see Note 1). BC, Rule 23a; ICBN, Art. 11.2; ICZN, Art. 23c.
- *Note 1.* Under the principle of co-ordinate status (Art. 27.1, 29.1 and 31.5), co-ordinate names in the other rank (or ranks) of the same rank group are automatically established and accordingly take the same date in each rank of the group.
- 19.3. For any taxon in one of the ranks of the family or genus group, the accepted name is the earliest acceptable one that competes at that rank, except in cases of limitation of precedence by conservation, protection, or suppression (see Art. 21-23) or where Art. 19.7, 24, or 36 apply. BC, Rule 23a; ICBN, Art. 11.3; ICZN, Art. 23.
- 19.4. For any species-group taxon, the accepted name is the combination of the final epithet of the earliest acceptable name that competes at that rank, with the accepted name of the genus or species to which it is assigned, except (a) in cases of limitation of precedence under Art. 21-24, or (b) if the resulting combination cannot become established under Art. 31.2 and 32, or would be unacceptable as a later homonym as defined in Art. 18, or (c) if Art. 19.7 or 36 rule that a different combination be used. BC, Rule 23a; ICBN, Art. 11.4; ICZN, Art. 23.
- 19.5. When, for any taxon of the family group, genus group or species group, a choice is possible between acceptable names of equal date, or between final epithets of acceptable names of equal date, the first such choice to be published (Art. 5-6) and registered (Art. 13) establishes the relative precedence of the chosen name, and of any acceptable combination with the same type and final epithet at that rank, over the other competing name(s) (but see Art. 19.6). BC, Rule 24b; ICBN, Art. 11.5; ICZN, Art. 24.

- 19.6. A choice as provided for in Art. 19.5 is effected by adopting one of the competing names, or its final epithet in the required combination, and simultaneously rejecting or relegating to synonymy the other(s), or homotypic synonyms thereof. ICBN, Art. 11 Note. 1; ICZN, Art. 24.
- *Note* 2. Names of organisms (animals and algae excepted) based on a non-fossil type are treated as taking precedence over names of the same rank based on a fossil (or subfossil) type (see Art. 36.2). *ICBN*, Art. 11.7.
- 19.7. The principle of priority is not mandatory for names of taxa not belonging to the family group, the genus group or the species group. BC, Rule 23a (up to class); ICBN, Art. 11.9; ICZN, Art. 1b.

20.1. Unless it has been established (Art. 7.2), a name of a taxon has no status under this Code. – BC, Prin. 7: ICBN, Art. 12.1.

Article 21 – BC, see Rule 24a, 24b & 27.

- 21.1. In order to stabilize the nomenclatural status of names in current use, and to prevent their being displaced by names no longer in use, published lists of names may be submitted for adoption (see Div. III.9).
- 21.2. Once a list has been adopted, all listed names and their coordinate names are protected, subject to specified restrictions and exceptions. A protected name is treated as if conserved against earlier homonyms and unlisted competing synonyms; it is accepted as established in the place and on the date cited in the list; and its type, when listed, its spelling and, if specified, its gender are treated as if conserved.
- 21.3. Protection can, for individual lists, be restricted with respect to the options set out in Art. 21.2, and individual entries on a list can be exempted from protection. Such restrictions and exceptions are to be specified upon adoption by the appropriate committee.
- 21.4. Once a list has been adopted, entries can be added, modified or removed only by the mechanisms of conservation or suppression of names (Art. 22-23). Specified restrictions and exceptions can be waived or modified only upon recommendation of the appropriate committee.
- 21.5. An earlier homonym of a protected name does not lose its status of an established name, but the precedence of the two homonyms is inverted by protection. *ICBN*, *Art.* 15.2.
- 21.6. When, for a taxon of the family or genus group, two or more protected names compete, Art. 19.3 governs the choice of name (see also Art. 21.9). *ICBN*, Art. 15.3.
- 21.7. When, for a taxon of the species group, two or more protected names and/or two or more names with the same final epithet and type as a protected name compete, Art. 19.4 governs the choice of name. *ICBN*, Art. 15.4.
- 21.8. The date of protection does not affect the date (Art. 19) of a protected name, which is determined only on the basis of its establishment or equivalent actions under the Special Codes. BC, Rule 24b; ICBN, Art. 15 Note 1.

- 21.9. A name which is neither protected nor has the same type and final epithet as a protected name in the same rank may not be applied to a taxon which includes the type of a protected name in that rank unless the final epithet of the latter cannot be used in the required combination (see Art. 19.4(b)). ICBN, Art. 15.5.
- 21.10. Conservation (Art. 22) and suppression (Art. 23.1) override protection. ICBN, Art. 15.6.

Article 22 – BC, Rule 56b, see also Rule 24a.

- 22.1. Conservation of names (see Div. III.9) is a means of suspending the application of the rules in the interest of stability of nomenclature of names of individual taxa of the family group, genus group and species group, or, where adopted lists of protected names exist, of amending such lists. ICBN, Art. 14.1; ICZN, Art. 79c.
- 22.2. Once conserved, a name is placed on an appropriate list. It is then treated as established in the place and on the date cited in that list. *ICZN*, *Art.* 78f.
- 22.3. A conserved name is conserved against all other names in the same rank group based on the same type (homotypic synonyms, which are to be rejected), whether explicitly cited as rejected or not, and against those names based on different types (heterotypic synonyms) that are explicitly cited. A conserved binomen or trinomen is conserved against all names listed as rejected, and against all combinations based on the rejected names. BC, Rule 23a, 56b; ICBN, Art. 14.4.
- 22.4. When a conserved name competes with one or more names based on different types and against which it is not explicitly conserved, the earliest of the competing names is adopted in accordance with Art. 19, unless Art. 21 applies. BC, Rule 56b; ICBN, Art. 14.5; ICZN, Art. 78f.
- 22.5. When a name of a taxon has been conserved against an earlier name based on a different type, the latter is to be restored, subject to Art. 19, if it is considered the name of a taxon at the same rank distinct from that of the conserved name, except when the earlier rejected name is a homonym of the conserved name or when Art. 21 applies. *ICBN*, Art. 14.6.
- 22.6. A rejected name, or a combination based on a rejected name, must not be restored for a taxon that includes the type of the corresponding conserved name. *ICBN*. Art. 14.7.
- 22.7. The stated type of a conserved name may not be changed except by the procedure outlined in Art. 22.13. BC, Rule 36, 37a; ICBN, Art. 14.8; ICZN, Art. 79c.
- 22.8. A name may be conserved with a different type from that designated by the author or determined by application of the relevant Code (see also Art. 22.9). Such a name may be conserved either from its place of establishment (even though the type may not then have been included in the named taxon) or from a later publication by an author who did include the type as conserved. In the latter case the original name and the name as conserved are treated as if they were homonyms (Art. 18), whether or not the name as conserved was accompanied by a description or diagnosis of the taxon named. -ICBN, Art. 14.9.

- 22.9. A conserved name, with its corresponding autonyms and coordinate names, if any, is conserved against all earlier homonyms. An earlier homonym of a conserved name does not lose its status of an established name, but the precedence of the two homonyms is inverted by conservation. BC, Rule 56b; ICBN, Art. 14.10.
- 22.10. A name may be conserved in order to preserve a particular orthography or gender. A name so conserved is to be attributed without change of date to the author who established it, not to an author who later introduced the conserved spelling or gender. ICBN, Art. 14.11; ICZN, Art. 79c.
- 22.11. The date of conservation does not affect the date (Art. 18) of a conserved name, which is determined only on the basis of the date of its establishment (Art. 8-13). ICBN, Art. 14 Note 3.
- 22.12. The lists of conserved names will remain permanently open for additions and changes. Regulations and procedures for the conservation of names in the major groups of organisms are outlined in Annex B.
- 22.13. Any proposal of an additional name or for the amendment of an existing entry (see Div. III.9) must be accompanied by a detailed statement of the cases both for and against its conservation. BC, App. 8; ICBN, Art. 14.12; ICZN, Art. 79c.
- 22.14. When a proposal for the conservation of a name has been submitted (see Div. III.9), retention of that name is authorized pending action and ratification. *ICBN*, *Art. 14.14*; *ICZN*, *Art. 80*.

- 23.1. Any name that would cause a disadvantageous nomenclatural change may be proposed for suppression (see Div. III.9). A name thus suppressed, or its basionym if it has one, is placed on a list. Along with the listed names, all combinations based on them, and all suprageneric names that may be formed from them, are similarly suppressed, and none is to be used. *ICBN*, *Art.* 56.1; *ICZN*, *Art.* 78h.
- 23.2. The list of suppressed names will remain permanently open for additions and changes. Any proposal for suppression of a name (see Div. III.9) must be accompanied by a detailed statement of the cases both for and against its suppression, including considerations of typification. BC, Rule 56a; ICBN, Art. 56.2; ICZN, Art. 78i.
- 23.3. When a proposal for the suppression of a name has been submitted (Div. III.9), that name need not be adopted pending the action and ratification. *ICBN*, *Art. 14.14*; *ICZN*, *Art. 80*.

Article 24

24.1. A name that has been widely and persistently used for a taxon or taxa not including its type is not to be used in a sense that conflicts with current usage unless and until a proposal to deal with it under Art. 22.1 or 23.1 has been submitted and rejected. – BC, Rule 37a; ICBN, Art. 57.1; ICZN, Art. 23b.

CHAPTER IV. RANK GROUPS AND THEIR NAMES

SECTION 1. TAXA ABOVE THE RANK OF SUPERFAMILY

Article 25

- 25.1. Names of taxa above the rank of superfamily are treated as nouns in the plural and are written with a capital initial letter. They may be either (a) typified names (see Art. 14.1) that are formed by adding a termination denoting their rank to the genitive singular stem of a generic name or exceptionally to the whole name, or (b) typeless ("descriptive") names that are formed differently, apply to taxa defined by circumscription, and may be used unchanged at different ranks. ICBN, Art. 16.1.
- 25.2. For typified names, the name of a subphylum which includes the type of the adopted name of a phylum, the name of a subclass which includes the type of the adopted name of a class, or the name of a suborder which includes the type of the adopted name of an order, are to be based on the same type.
- 25.3. The typified name of a phylum or subphylum is formed from the same generic name as an acceptable name of an included class. The phylum name termination is -mycota for fungi, -phyta for other botanical taxa. The subphylum name termination is -mycotina for fungi, -phytina for other botanical taxa. ICBN, Rec. 16A.1.
- 25.4. The typified name of a class or subclass is formed from the same generic name as an acceptable name of an included order. The class name termination is -mycetes for fungi, -phyceae for algae, -opsida for other botanical taxa. The subclass name termination is -mycetidae for fungi, -phycidae for algae, -idae for other botanical taxa. ICBN, Rec. 16A.2.
- 25.5. The typified name of an order or suborder is formed from the same generic name as an acceptable name of an included family, the order name termination being -ales for all botanical and bacteriological taxa, and the suborder name termination being -ineae for all botanical and bacteriological taxa. BC, Rule 9; ICBN, Art. 17.1.
- 25.6. The name of a taxon above the rank of family may not have the termination -virinae, -virales, or -viridae, because these terminations are reserved for the names of viral taxa (see Pre. 4).
- 25.7. When a name is published with a Latin termination not agreeing with the provisions of this Article, the termination is changed to accord with it, but the name retains its authorship and date. *ICBN*, Art. 17.3; Rec. 16A.4.
- *Note 1.* Names of taxa above the rank of superfamily with terminations that do not conform to the standards set out in Art. 25.3-25.5 are acceptable as descriptive names (cf. Art. 25.1(b)).

Recommendation 25A

25A.1. The terminations provided in Art. 25.3-25.5 for particular historic groupings of organisms should not be used for typeless, descriptive names of any names above the rank of superfamily.

SECTION 2. FAMILY-GROUP TAXA AND SUBDIVISIONS OF FAMILIES

Article 26

26.1. Family-group names are treated as nouns in the plural and are written with a capital initial letter. They are formed by adding a termination denoting rank to the genitive singular stem of a generic name, or to the whole name if necessary to avoid homonymy. – BC, Rule 9; ICBN, Art. 18.1; ICZN, Art. 11f.

The superfamily name termination is -oidea for zoological taxa. – ICZN, Rec. 29A.

The family name termination is -aceae for all botanical and bacteriological taxa, -idae for zoological taxa. - ICBN, Art. 18.1; ICZN, Art. 29a.

The subfamily name termination is *-oideae* for all botanical and bacteriological taxa, *-inae* for zoological taxa. – *ICBN*, *Art.* 19.1; *ICZN*, *Art.* 29a.

- 26.2. The name of a family may not have the termination -viridae, and the name of a subfamily may not have the termination -virinae, because these terminations are reserved for the names of viral taxa (see Pre. 4).
- 26.3. When a name is published with a Latin termination not agreeing with the provisions of this Article, the termination is changed to accord with it, but the name retains its authorship and date. Normally any required change will be made during the registration process. *ICBN*, *Art.* 18.4; *ICZN*, *Art.* 32c.
- 26.4. The establishment of any family-group name automatically establishes coordinate names, formed from the same generic name and having the same authorship and date, at the two other ranks of the family group. *ICBN*, *Art.* 19.4; *ICZN*, *Art.* 36.

Article 27

27.1 The name of a subdivision of a family (in particular a tribe or subtribe) is a noun in the plural and is written with a capital initial letter. It is formed in the same way as a name of a family-group taxon, but by adding a termination to denote its rank:

The tribe name termination is *-eae* for all botanical and bacteriological taxa, *-ini* for zoological taxa. – *ICBN*, *Art.* 19.3; *ICZN*, *Rec.* 29A.

The subtribe name termination is -inae for all botanical and bacteriological taxa, -ina for zoological taxa. - ICBN, Art. 19.3.

27.2. The name of a tribe may not have the termination -viridae, and the name of a subtribe may not have the termination -virinae, because these terminations are reserved for the names of viral taxa (see Pre. 4).

SECTION 3. GENUS-GROUP TAXA AND SUBDIVISIONS OF GENERA

Article 28

28.1. The name of a genus is a noun in the singular, or a single word treated as such, and is written with a capital initial letter. It may not have the termination -virus because this termination is reserved for the names of viral genera (see Pre. 4). -BC, Rule 6 & 10a; ICBN, Art. 20.1; ICZN, Art. 4a, 11g.

- 28.2. The name of a subgenus has the same form as a generic name and is used either interpolated in parentheses between the terms of a binomen, or combined with a generic name preceded by the rank designator, "subgenus" (subg.). For nomenclatural purposes the subgeneric name can stand on its own. BC, Rule 10a but see Rule 39a; ICBN, Art. 21.1; ICZN, Art. 4b, 6a.
- 28.3. Subgeneric names that were validly published prior to 1 January 200n under the *International code of botanical nomenclature* are, after that date, considered as established names of infragenera (Art. 4.2).
- *Note 1.* Names of infragenera have the same form as those of other subdivisions of genera, e.g., sections (Art. 30), and are intermediate in rank between subgenus and section (Art. 4.2). They can serve as basionyms for established names of subdivisions of genera in other ranks. and, prior to 1 January 200*n*, of genera (see Art. 9.3).

- 29.1. The establishment of any genus-group name automatically establishes an identical coordinate name at the other rank of the genus group. The coordinate names have the same type, authorship and date. ICBN, Art. 22.1; ICZN, Art. 43.
- 29.2. Any generic name established under the Special *Codes* prior to 1 January 200*n* is deemed to have established simultaneously an identical subgeneric name.

Article 30

- 30.1. The name of a subdivision of a genus (a section, subsection, series or subseries) is a combination of a generic name and an epithet, the two being connected by the term denoting the rank. The epithet is either of the same form as a generic name, or a plural adjective which is written with a capital initial letter and agrees in gender with the generic name. For practical purposes the generic name may be omitted in citation. ICBN, $Art.\ 21.1-21.2$.
- 30.2. The epithet in the name of a subdivision of a genus may not repeat unchanged the accepted name of the genus to which the taxon is assigned unless the two names have the same type. *ICBN*, *Art.* 22.2.

Recommendation 30A

30A.1. The name of any subdivision of a genus that includes the type of the accepted name of the genus to which it is assigned should repeat the generic name unaltered as its epithet. – BC, see Rule 11; ICBN, Art. 22.1.

SECTION 4. SPECIES-GROUP TAXA AND INFRASPECIFIC TAXA

- 31.1. The name of a species consists of a generic name followed by a single word as specific epithet. The epithet may have the form of an adjective, a noun in the genitive, or a word in apposition; it is written with a lower-case initial letter. BC, Rule 12a; ICBN, Art. 23.1; ICZN, Art. 5b.
- 31.2. In a name of a botanical taxon the specific epithet may not exactly repeat the generic name. -ICBN, Art. 23.4.

- 31.3. A name of a subspecies consists of the name of the species followed by a single subspecific epithet having the same form as a specific epithet, the two being optionally connected by the term "subspecies" (subsp.). BC, Rule 31a; ICZN, Art. 5b; ICBN, Art. 24.1.
- 31.4. In a species-group name, the final epithet, when adjectival in form and not used as a noun, agrees grammatically with the generic name. Errors in inflection are to be corrected, but the name retains its authorship and date. BC, Rule 12a, 12c, 13b; ICBN, Art. 23.5; ICZN, Art. 32d.
- 31.5. The establishment of any species-group name automatically establishes a coordinate name at the other rank of the species group. The coordinate names have identical final epithets, the same type, authorship and date. -ICZN, Art. 46.

- 32.1. The name of any subspecies that includes the type of the accepted name of the species to which it is assigned is to repeat the specific epithet unaltered as its final epithet. Names published in explicit infringement of this rule cannot be established. ICBN, Art. 26.1; ICZN, Art. 47.
- 32.2. The final epithet in the name of a subspecies must not repeat unchanged the epithet of the accepted name of the species to which the taxon is assigned unless the two names have the same type. *ICBN*, *Art.* 27.1; *ICZN*, *Art.* 47.

Article 33

- 33.1. The name of an infra-subspecific taxon is a combination of the name of a species and an infraspecific epithet connected by the term denoting the rank. *ICBN*, Art. 24.1.
- 33.2. The final epithet in the name of an infra-subspecific taxon may not repeat unchanged the epithet of the accepted name of the species to which the taxon is assigned unless the two names have the same type. -ICBN, Art. 27.1.
- 33.3. Infra-subspecific epithets have the same form as subspecific epithets. Art. 31.4 applies by analogy. *ICBN*, *Art.* 24.2.

Recommendation 33A

33A.1. The name of any infra-subspecific taxon that includes the type of the accepted name of the species to which it is assigned should repeat the specific epithet unaltered as its final epithet. -ICBN, Art. 26.1.

CHAPTER V. PROVISIONS FOR SPECIAL GROUPS

SECTION 1. BOTANICAL HYBRIDS, AND CULTIVATED PLANTS AND FUNGI

Article 34 – ICBN, App. I

34.1. For genus-group taxa or taxa at lower ranks, hybridity may be indicated if desired by placing the multiplication sign (\times) in front of and against the name or final epithet, respectively. The names of hybrids otherwise follow the same rules as those of non-hybrid taxa.

- 34.2. Designation of hybrid taxa in supraspecific ranks that are condensed formulae, or have a condensed formula as their epithet, and are determined by a statement of parentage under the *International Code of Botanical Nomenclature* (Art. H7 & H9) are not established names under this *Code* unless and until the conditions for their establishment are otherwise fulfilled.
- 34.3. Names below the rank of genus validly published under a condensed formula name under the *International Code of Botanical Nomenclature* retain their status of established names under this *Code*.
- *Note 1.* A hybrid between named taxa may also be indicated by placing the multiplication sign between the names of the taxa; the whole expression is then called a hybrid formula.

Recommendation 34A

34A.1. When contemplating the publication of new names for hybrids between named taxa, authors should consider whether they are really needed, bearing in mind that formulae, though more cumbersome, are more informative.— ICBN, Rec. H10B.1.

Article 35

35.1. Distinguishable groups of cultivated plants and fungi, whose origin or selection is primarily due to the intentional actions of mankind (e.g., cultivars and cultivar-groups), are not covered by this *Code*, but are denominated under the provisions of the *International code of nomenclature for cultivated plants*.

SECTION 2. PARTS OF ORGANISMS, PORTIONS OF LIFE HISTORIES, AND TRACE FOSSILS

- 36.1. Except as specified below, names based on any part of an organism or portion of its life history are treated as applicable to the whole organism and compete for precedence as provided for in Art. 19-24. *ICZN*, *Art.* 23f.
- 36.2. Fossil non-algal botanical taxa are parataxa (Art. 2.2), which for nomenclatural purposes comprise only those parts, life-history stages, or preservation states of organisms that are represented by the corresponding name-bearing types, and whose names for purposes of priority compete only with names based on a name-bearing type representing the same part, life-history stage or preservation state (see also Art. 19 Note 2).
- *Note 1.* This provision does not prevent assigning fossil parataxa below the rank of genus to a non-fossil genus.
- *Note* 2. This provision does not prevent the informal use of names of fossil parataxa to the theoretical concept of whole extinct taxa.
- 36.3. In ascomycetous and basidiomycetous fungi with a pleomorphic life history (excluding those forming lichens), names referring to mitotic asexual morphs (anamorphs) are names of parataxa. These names are applicable only to the morph represented by their type, not to the fungus in all its morphs (holomorph), which is considered to be represented by the teleomorph, i.e. the morph characterized by the

production of asci/ascospores, basidia/basidiospores, teliospores, or other basidium-bearing organs. – *ICBN*, *Art.* 59.1.

- 36.4. The provisions of this article shall not be construed as preventing the publication and use of binomina for parataxa when it is thought necessary or desirable to refer to fungal anamorphs alone, even though the holomorph may be known and have been named. *ICBN*, *Art.* 59.5.
- 36.5. For a name of a taxon of pleomorphic fungi it is the nature of the type that determines whether the name applies to a parataxon (anamorph) or to the whole taxon (holomorph), irrespective of the nature of the higher ranking taxon to which the named taxon was originally assigned. *ICBN*, Art. 59.3.
- 36.6. Unless the type of a name of a pleomorphic fungus represents the teleomorphic state, and unless the original description or diagnosis refers to this morph, or is so phrased that the possibility of its referring to that morph cannot be excluded, the name is deemed to refer to the anamorph alone. *ICBN*, Art. 59.2.
- 36.7. Names referring to the fossilized work of organisms (ichnotaxa) are applicable only to that work, not to the organism responsible for the work. ICZN, Art. 23g (iii).

CHAPTER VI. ORTHOGRAPHY AND GENDER OF NAMES

- 37.1. The original spelling of a name or epithet is to be retained, except for the correction of typographical or orthographical errors (Art. 38), the standardization of terminations required by Art. 25.7, 26.3 and 39, and the mandatory corrections imposed hereunder. BC, Rule 61; ICBN, Art. 60.1; ICZN, Art. 32b.
- 37.2. For names of taxa published on or after 1 January 200n, the words "original spelling" in this Article mean the spelling employed when the name was submitted for registration. Any required corrections and standardizations under Art. 37.6 and 37.7 will be made during the registration process. *ICBN*, Art. 60.2.
- 37.3. Names consist exclusively of letters of the Latin alphabet, which is taken to include *j*, *k*, *w* and *y*, rare or absent in classical Latin (see also Art. 34.1). When other letters and ligatures foreign to classical Latin or diacritical signs appear in a name published on or after 1 January 200*n*, that name cannot be established. When a hyphen is included in such a name the hyphen is deleted. *BC*, *Rule 64*; *ICBN*, *Art. 60.4*; *60.6*; *ICZN*, *Art. 27*, 32
- 37.4. The transcription of ligatures and letters with diacritical signs or other signs foreign to the Latin alphabet in names published prior to 1 January 200n are transcribed in conformity with the Special Code then applicable. The same applies for the letters u, v or i, j when used interchangeably and for the use or suppression of hyphens. ICBN, Art. 60.5.
- Note 1. The use of the diaeresis, indicating that a vowel is to be pronounced separately from the preceding vowel, is not part of the orthography of a name or epithet. ICBN, Art. 60.6; ICZN, Art. 27, 32.

- 37.5. An apostrophe in an epithet is deleted. ICBN, Art. 60.10.
- 37.6. The spelling of certain epithets and the use of connecting vowels or terminations in epithets are standardized as specified in Annex C. BC, App. 9A; ICBN, Art. 60.11.
- 37.7. Epithets of names derived from the generic name of the host but spelled differently are corrected to reflect the established form of the host's name (see Art. 38.3). *ICBN*, *Rec.* 60H.1.

- 38.1. For the purpose of this *Code*, orthographical variants are defined as the various spelling, compounding, and inflectional forms of a name or its epithet (including typographical errors), only one type being involved. Confusingly similar names based on the same type are also treated as orthographical variants. *BC*, *Rule 57b*, see *Rule 57c*, 62a.; *ICBN*, *Art. 61.2*.
- Note 1. For confusingly similar names based on different types, see Art. 18.3 and 18.4.
- 38.2. The correctability and nomenclatural status of orthographical variants published prior to 1 January 200n are governed by the relevant Special *Code*.
- 38.3. On or after 1 January 200n, any orthographical variant of a name is to be corrected to the established form of that name. Whenever such a variant appears in print, it is to be treated as if it were printed in its corrected form. BC, Rule 61; ICBN, Art. 61.4; ICZN, Art. 32c.

- 39.1. A generic name is treated as a noun with either masculine or feminine or neuter gender. Gender is established on the basis of classical Latin and Greek grammar, when applicable, and by subsequent biological usage (see also Annex C). In case of doubt, the gender assigned by the author of the name or, failing this, by the first subsequent author to assign a gender to the name, is accepted. BC, Rule 65; ICBN, Art. 62.1.
- 39.2. Compound generic names take the gender of the last word in the nominative case in the compound. The most usual words used in compounding generic names, together with their gender, are listed in Annex C BC, Rule 65.
- 39.3. The gender of generic names often depends on their termination. The most usual terminations used in forming generic names, together with their gender, are listed in Annex C BC, App. 9; ICBN, Art. 62.2.
- 39.4. When a new generic name is submitted for registration without indication of gender, or with an indication of gender that is contrary to the Code, the gender is assigned or corrected during registration. BC, see Rule 65 (3).

CHAPTER VII. AUTHORSHIP OF NAMES

Article 40 – BC, Rule 33a-d; ICZN, Art. 51.

- 40.1. In publications dealing with the taxonomy and nomenclature of organisms, it may be desirable, even when no bibliographic reference to the protologue is made, to cite the name of the author(s) who established the name concerned and the date of its establishment. In so doing the following rules must be followed. BC, Rule 33b Note 1; ICBN, Art. 46.1; ICZN, Art. 50.
- 40.2. A name of a new taxon is to be attributed to the author or authors to whom both the name and the original description or diagnosis were ascribed, even though authorship of the publication may be different. A new combination or replacement name is to be attributed to the author or authors to whom it was ascribed in the original publication, when this contribution is explicitly acknowledged there. Art. 40.5 notwithstanding, authorship of a new name or combination must always be accepted as ascribed, even when it differs from authorship of the publication, when at least one author is common to both. -ICBN, Art. 46.2.
- 40.3. When authorship of a name differs from authorship of the publication in which it appears, both are sometimes cited, connected by the word "in". In such a case, "in" and what follows are part of a bibliographic citation and are omitted unless the place of publication is being referred to, at least by its date. -BC, Adv. Note B(2); ICBN, Art. 46 Note 1.
- 40.4. For the purposes of this Article, ascription is defined as the direct association of the name of a person or persons with a new name or description or diagnosis of a taxon. Mention of an author's name in a list of synonyms is not ascription, nor is reference to a basionym or a replaced synonym, including bibliographic errors, nor is reference to a homonym. ICBN, Art. 46.3.
- 40.5. A name of a new taxon is to be attributed to the author or authors of the publication in which it appears when only the name but not the original description or diagnosis was ascribed to a different author or different authors. A new combination or a replacement name is to be attributed to the author or authors of the publication in which it appears, even when it was ascribed to a different author or to different authors, when in the publication in which it appears their contribution is not explicitly acknowledged. However, in both cases authorship as ascribed, followed by "ex", may be inserted before the name(s) of the publishing author(s). ICBN, Art. 46.4.
- 40.6. In determining the correct author citation, only internal evidence in the publication in which the name appears is to be accepted, including ascription of the name, statements in the introduction, title, or acknowledgements, and typographical distinctions in the text. In this context, all publications appearing under the same title and by the same author, such as different parts of a flora issued at different times (but not different editions of the same work), is to be considered as a whole. *ICBN*, Art. 46.6.
- Note 1. Authors publishing new names and wishing to establish that other persons' names followed by "ex" may precede theirs in authorship citation may adopt the "ex" citation in the protologue. BC, Rule 33c; ICBN, Art. 46 Note 2.

40.7. When a name is submitted for registration in which the authorship is not apparent from the printed matter submitted, that name is to be attributed to the person submitting for registration. If, in such a case, submission is anonymous, the name cannot be registered.

Article 41

41.1. When a taxon of rank lower than subgenus is altered in rank, or is transferred to another genus or species, but retains its name or final epithet, the author of the earlier, name- or epithet-bringing acceptable name (the author of the basionym) is cited in parentheses. The basionym authorship is optionally followed by the basionym date, within the parentheses, and the authorship and date of the alteration or transfer, after the parentheses. – BC, Rule 33b; ICBN, Art. 49.1; ICZN, Art. 51c.

DIVISION III. AUTHORITY

- 1. The BioCode is placed under the joint authority of the International Union of Biological Sciences (IUBS) and of the International Union of Microbiological Societies (IUMS), to be exercised through an inter-union International Committee on Bionomenclature (ICB).
- 2. The ICB consists of a chairperson jointly appointed by the Executive Committee of IUBS and the Executive Board of IUMS, and eight members, similarly appointed in consultation with the five international bodies concerned, as follows: two representing the General Committee on Botanical Nomenclature (GCBN), two representing the International Commission on Zoological Nomenclature (ICZN), two representing the International Committee on Systematic Bacteriology (ICSB), one representing the International Commission for the Nomenclature of Cultivated Plants (ICNCP), and one representing the International Committee on the Taxonomy of Viruses (ICTV).
- 3. The BioCode takes effect as from 1 January 200n [a date to be established by the ICB], but not before approval of authority transfer by the bodies responsible for the Special Codes: (a) an International Botanical Congress acting on the recommendation of its Nomenclature Section for botany (including mycology), (b) the IUBS General Assembly acting on a recommendation of the ICZN for zoology, and (c) an International Congress of Bacteriology acting on the recommendation of the ICSB for bacteriology.
- 4. The ICB has power to resolve present and future ambiguity concerning the provisions of the *BioCode*. It shall, in particular and for nomenclatural purposes only assign to the jurisdiction of one of the three Special *Codes* those organisms that have been or still are treated under different Special *Codes* by different workers. In case of controversy, it will take its decision after due consultation among the specialists in the groups concerned.
- 5. The first and future editions of the *BioCode* are published under the auspices of IUBS and IUMS in association with the copyright holders for the Special *Codes*.

- 6. The ICB has powers to edit future editions of the *BioCode*, and to amend its provisions where necessary. Any proposed change of substance must, however, be subject to public discussion before being approved, as follows:
- 6.1. Any proposal for a change must be published beforehand in the appropriate official organs, *Taxon* (for the GCBN), *Bulletin of zoological nomenclature* (for the ICZN), *International journal of systematic bacteriology* (for the ICSB), and also submitted for publication in other appropriate media such as *Biology international* (IUBS), *Hortax news* (ICNCP), and *Virology division news* (ICTV).
- 6.2. After one year, and taking into account any comments received, the GCBN, ICNCP, ICSB, ICTV and ICZN will each inform the ICB of their opinions and recommendations concerning the proposal.
- 6.3. The ICB will act on the proposal in the light of these opinions, a 80% majority of voting members being required for the approval of a change.
- 6.4. Any adopted change that is not of a retroactive nature will take effect from a date determined by the ICB.
- 7. The ICB takes responsibility for the coordination of a world-wide network of registration offices. It also supervises and coordinates the work of the registration centres that record, maintain and disseminate the registration data.
- 8. IUBS and IUMS will be responsible for convening an International Consultative Group on Bionomenclature, comprising representatives of pertinent inter-governmental bodies and agencies, which will be charged with the development of mechanisms to maintain the registration systems developed in consultation with the ICB.
- 9. Proposals for the conservation or suppression of names, requests for binding decisions on confusability of names, challenges of epitype designations, and applications for the adoption of lists of names in current use, may be submitted to the responsible bodies (presently GCBN, ICZN, or ICSB, as the case may be) or to the ICB for appropriate forwarding. They will then be acted upon in the same way as under the Special *Codes;* this action is to be ratified by the ICB. ICBN, Art. 14.12-14.14, 53.4, 56; Div. III.2; ICZN, Art. 79.

Table 1. Equivalence of nomenclatural terms used in the Draft *BioCode* and in the current biological *Codes* (abbreviations explained below; references in text). The concepts covered by terms given as equivalent are not always exactly the same (e.g., nomenclatural superfluity, an obstacle to legitimacy under the ICBN, is unknown under the BC and ICZN). – BC = *International code of nomenclature of bacteria* (Lapage & al., Washington, 1992); ICBN = *International code of botanical nomenclature (Tokyo Code)* (Greuter & al. in Regnum Veg. 131. 1994); ICNCP = *International code of nomenclature for cultivated plants* – 1995 (Trehane & al. in Regnum Veg. 133. 1995); ICZN = *International code of zoological nomenclature* (Ride & al., London, 1985).

BioCode	BC	ICBN	ICNCP	ICZN
Publication and da	ates of names			
published	effectively published	effectively published	published	published
registerable	effectively published			_
date	date	date (or priority)	date	priority
priority	priority	priority		priority
precedence	priority	priority	precedence	precedence
earlier	senior	earlier	earlier	senior
later	junior	later	later	junior
Nomenclatural sta	ntus			
established	validly published	validly published	established	available
registration	validation	registration	registration	_
acceptable	legitimate	legitimate	acceptable	potentially valid
Taxonomic status				
accepted	correct	correct	accepted	valid
Types of names				
name-bearing type	nomenclatural type	nomenclatural type	name-bearing type	name-bearing type
nominal taxon	name and type	name and type	_	nominal taxon
Synonymy				
homotypic	objective	nomenclatural	homotypic	objective
heterotypic	subjective	taxonomic	heterotypic	subjective
replacement name	-	avowed substitute		explicit replacement
Setting aside the I	rules			
conserved	conserved	conserved	conserved	conserved
rejected	rejected	rejected	rejected	conditionally suppressed
suppressed	rejected	explicitly rejected		suppressed

¹ Although the *Bacteriological Code* defines "effectively published" with the meaning of "published" in the *BioCode*, the term is commonly used to imply "published in a form eligible for registration".