

(276–279) Proposals to provide for registration of new names and nomenclatural acts

Special Committee on Registration of Algal and Plant Names (including fossils)

Members of the Special Committee: Mary E. Barkworth (Convener),¹ Mark Watson (Secretary),² Fred R. Barrie,³ Irina V. Belyaeva,⁴ Richard C.K. Chung,⁵ Jiřina Dařková,⁶ Gerrit Davidse,⁷ Ali A. Dönmez,⁸ Alexander B. Doweld,⁹ Stefan Dressler,¹⁰ Christina Flann,¹¹ Kanchi Gandhi,¹² Dmitry Geltman,¹³ Hugh F. Glen,¹⁴ Werner Greuter,¹⁵ Martin J. Head,¹⁶ Regine Jahn,¹⁷ Malapati K. Janarthanam,¹⁸ Liliana Katinas,¹⁹ Paul M. Kirk,²⁰ Niels Klazenga,²¹ Wolf-Henning Kusber,¹⁷ Jiří Kvaček,⁶ Valéry Malécot,²² David G. Mann,^{2,23} Karol Marhold,²⁴ Hidetoshi Nagamasu,²⁵ Nicky Nicolson,²⁶ Alan Paton,²⁷ David J. Patterson,²⁸ Michelle J. Price,²⁹ Willem F. Prud'homme van Reine,³⁰ Craig W. Schneider,³¹ Alexander Sennikov,³² Gideon F. Smith,³³ Peter F. Stevens,^{7,34} Zhu-Liang Yang,³⁵ Xian-Chun Zhang³⁶ & Giuseppe C. Zuccarello³⁷

- 1 Intermountain Herbarium, Utah State University, Logan, Utah 84322-5305, U.S.A.
- 2 Herbarium, Royal Botanic Garden, Edinburgh EH3 5LR, Scotland, U.K.
- 3 Missouri Botanical Garden, P.O. Box 299, Saint Louis, Missouri 63166-0299, U.S.A.; Herbarium, Botany Department, Department of Science and Education, Field Museum of Natural History, 1400 S. Lake Shore Drive, Chicago, Illinois 60605-2496, U.S.A.
- 4 Science Directorate, Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, U.K.
- 5 The Herbarium, Forest Biodiversity Division, Forest Research Institute Malaysia, 52109 Kepong, Selangor, Malaysia
- 6 Department of Palaeontology, National Museum, Prague, Václavské náměstí 68, 115 79, Praha 1, Czech Republic
- 7 Missouri Botanical Garden, P.O. Box 299, Saint Louis, Missouri 63166-0299, U.S.A.
- 8 Hacettepe Üniversitesi, Faculty of Science, Department of Botany, 06800 Ankara, Turkey
- 9 National Institute of Carpology (Gaertnerian Institution), 21 Konenkova Street, 127560, Moscow, Russian Federation
- 10 Herbarium Senckenbergianum Frankfurt/Main, Senckenberg Forschungsinstitut und Naturmuseum, Senckenberganlage 25, 60325 Frankfurt/Main, Germany
- 11 Species 2000, Naturalis Biodiversity Center, 2333 CR Leiden, The Netherlands
- 12 Herbaria, Harvard University, 22 Divinity Avenue, Cambridge, Massachusetts 02138-2020, U.S.A.
- 13 Komarov Botanical Institute of the Russian Academy of Sciences, Prof. Popov str., 2, 197376, St. Petersburg, Russian Federation
- 14 Box 1781, Forest Hills, Kloof 3624, South Africa
- 15 Botanischer Garten und Botanisches Museum Berlin, Freie Universität Berlin, Königin-Luise-Str. 6–8, 14195 Berlin, Germany; Orto botanico di Palermo, Via Lincoln 2, Palermo PA, Italy
- 16 Department of Earth Sciences, Brock University, 1812 Sir Isaac Brock Way, St. Catharines, Ontario L2S 3A1, Canada
- 17 Botanischer Garten und Botanisches Museum Berlin, Freie Universität Berlin, Königin-Luise-Str. 6–8, 14195 Berlin, Germany
- 18 Department of Botany, Goa University, Goa – 403206, India
- 19 División Plantas Vasculares, Museo de La Plata, Universidad Nacional de La Plata, Argentina
- 20 Royal Botanic Gardens (Jodrell Laboratory), Kew, Richmond, Surrey TW9 3DS, U.K.
- 21 Royal Botanic Gardens Victoria, Birdwood Avenue, Melbourne, Victoria 3004, Australia
- 22 IRHS, Agrocampus-Ouest, INRA, Université d'Angers, SFR 4207 QuaSaV, 49071, Beaucauzé, France
- 23 Aquatic Ecosystems, Institute for Food and Agricultural Research and Technology (IRTA), Crta de Poble Nou Km 5.5, 43540 Sant Carles de la Ràpita, Catalunya, Spain
- 24 Institute of Botany, Slovak Academy of Sciences, Dúbravská cesta 9, 845 23 Bratislava, Slovak Republic; Department of Botany, Faculty of Science, Charles University, Benátská 2, 128 01 Praha 2, Czech Republic
- 25 The Kyoto University Museum, Kyoto University, Yoshida-honmachi, Sakyo-ku, Kyoto 606-8501, Japan
- 26 Biodiversity Informatics, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, U.K.
- 27 Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, U.K.
- 28 School of Biological Sciences, University of Sydney, New South Wales, Australia
- 29 Conservatoire et Jardin botaniques de la Ville de Genève, Case Postale 60, Chemin de l'Impératrice 1, 1292 Chambésy, Geneva, Switzerland
- 30 Naturalis Biodiversity Center, P.O. Box 9517, 2300 RA Leiden, The Netherlands
- 31 Department of Biology, Trinity College, Hartford, Connecticut 06106, U.S.A.
- 32 Botanical Museum, Finnish Museum of Natural History, University of Helsinki, Unioninkatu 44, P.O. Box 7, 00014 Helsinki, Finland; Herbarium, Komarov Botanical Institute of Russian Academy of Sciences, Prof. Popov str. 2, 197376, St. Petersburg, Russian Federation
- 33 Department of Botany, P.O. Box 77000, Nelson Mandela Metropolitan University, Port Elizabeth, 6031 South Africa; Centre for Functional Ecology, Departamento de Ciências da Vida, Universidade de Coimbra, 3001-455 Coimbra, Portugal
- 34 Department of Biology, University of Missouri-St. Louis, 1 University Boulevard, St. Louis, Missouri 63121-4400, U.S.A.
- 35 Kunming Institute of Botany, Chinese Academy of Sciences, 132# Lanhei Road, Heilongtan, Kunming 650201, Yunnan, P.R. China
- 36 The National Herbarium, Institute of Botany, Chinese Academy of Sciences, 20 Nanxincun, Xiangshan, Beijing 100093, P.R. China
- 37 School of Biological Sciences, Victoria University of Wellington, P.O. Box 600, Wellington, 6140 New Zealand

Author for correspondence: Mary Barkworth, mary.barkworth@gmail.com

DOI <http://dx.doi.org/10.12705/653.37>

The Melbourne Congress of 2011 authorized a Special Committee on Registration of Algal and Plant Names (including fossils), which was established the following year (Wilson in *Taxon* 61: 878–879. 2012). Its explicit mandate was “to consider what would be involved in registering algal and plant names (including fossils), using a procedure analogous to that for fungal names agreed upon in Melbourne and included in the *Code* as Art. 42”, but expectations at the Nomenclature Section in Melbourne went farther than that. There was the hope that registration systems for at least some of the main groups would soon be set up, to be used and tested on a voluntary basis and, if found to be generally accepted, would persuade the subsequent Congress in Shenzhen, in 2017, to declare registration of new names an additional requirement for valid publication.

The Melbourne Congress also approved mandatory registration of nomenclatural novelties in fungi, starting on 1 Jan 2013. The new Art. 42 of the *Code* (McNeill & al. in *Regnum Veg.* 154. 2012) requires authors to register any fungal nomenclatural novelty, prior to publication, with a recognized repository, whereupon they are provided with a unique identifier for each name, to be included in the protologue along with other *Code*-mandated information. Years before registration became mandatory, mycologists had been encouraged, often prompted by journal editors, to register their nomenclatural novelties prior to publication. Most complied. Consequently, when mandatory registration was proposed, it had strong support from the mycological community.

There are currently three recognized repositories for fungal names. They vary somewhat in how they operate, but they share records of their registered novelties as soon as publication has been effected. One consequence of implementing mandatory registration is that locating new fungal names and combinations and associated protologue information is much simpler now than it was before. This makes it easier to incorporate the information into taxonomic studies and to update taxonomic treatments, inventories, and indices. A corollary is that, no matter what publication outlet an author chooses, the name cannot fail to be noticed.

The positive experience in mycology makes extension of the registration concept to plants and algae a compelling idea. That experience shows that the best way to make mandatory registration of nomenclatural novelties palatable to botanists and phycologists is the establishment of trial registration at repositories with a history of involvement in and commitment to the indexing of names. Trial registration enables users to acquaint themselves with registration procedures, make suggestions on how they might be improved, and appreciate, by personal experience, the benefits of registration.

Unfortunately, the task of establishing such repositories proved to be more complex and time-consuming than had been foreseen. Substantial progress has been made in the establishment of such centres (Barkworth & al., in this issue, pp. 670–672) but the Committee is not in a position to make firm proposals to regulate registration procedures, even less to make registration mandatory from a concrete future date. Nevertheless, the Committee sees it as imperative that the Shenzhen Congress be offered the opportunity to move forward with registration without having to wait six more years. In this spirit, we offer the proposals below. Proposal (276) would declare registration an ongoing concern of the botanical, mycological, and phycological community and provide the basic structure for making it possible. Proposal (277) and Prop. (278) would, in addition, define a flexible framework within which a system of voluntary registration could be developed for various categories of organisms. Proposal (279) would provide for future mandatory registration in a way that does not depend on the six-year intervals between International Botanical

Congresses. Presentation of each proposal is followed by a summary of the support received from members of the Committee.

(276) In Div. III.2, add a new permanent nomenclature committee, as follows:

“(8) Registration Committee, charged with assisting the design and implementation of repositories for new names and nomenclatural acts, monitoring the functioning of existing repositories, and advising the General Committee on relevant matters. It is chaired by the Secretary-General of the International Association for Plant Taxonomy or his/her deputy and includes at least 5 members appointed by the Nomenclature Section selected, in part, to ensure geographic balance, and representatives from: (1) the other permanent nomenclature committees, (2) prospective or functioning repositories, (3) the International Organisation of Palaeobotany, (4) the International Phycological Society, (5) the International Mycological Association, and (6) the International Association of Bryologists.”

Committee vote: in favour 39, against 0, abstain 0.

Of the four proposals, the first is basic. Registration is of too great ongoing importance to the nomenclatural infrastructure of taxonomy to be entrusted to the care of just another Special Committee. If the nomenclatural community feels that there is merit in further exploring the potential and feasibility of a system of registration of new names and nomenclatural acts, creation of a permanent nomenclature committee with appropriate membership is the first necessary step. None of the following proposals need be accepted to justify acceptance of the proposed Registration Committee, but none will be able to function in its absence.

(277) In Art. 42, add two new introductory paragraphs:

“42.0. An interested institution, in particular one with expertise in nomenclatural indexing, may apply for recognition as a nomenclatural repository under this *Code*. A nomenclatural repository takes charge, for specified categories of organisms, of registering nomenclatural novelties (names of new taxa, new combinations, names at new ranks, or replacement names) and/or other nomenclatural acts requiring effective publication such as type designations (Art. 7.9 and 7.10), or choices of name (Art. 11.5 and 53.6), orthography (Art. 61.3), or gender (Art. 62.3).”

“42.0bis. Applications for recognition as a nomenclatural repository are to be addressed to the General Committee, which will refer them to the Registration Committee and act upon its recommendation. Prior to such a recommendation, mechanisms and modalities of registration, and definition of coverage, will be developed in consultations among the applicant, the Registration Committee, and the permanent nomenclature committee(s) for the group(s) concerned, and be widely publicized in the taxonomic community; a public trial run of at least one year must have shown that the procedure works efficiently and sustainably. The General Committee has the power to suspend or revoke a granted recognition.”

Committee vote: in favour 38, against 0, abstain 1.

This and the following proposals would not by themselves make registration mandatory. They would enable the Registration Committee to assess both what is desirable and what is feasible in matters of registration, so that, without being restricted to specific protocols and data categories, it may move forward in fulfilling its mandate: to assist in the design and implementation of nomenclatural repositories. Proposal (277) defines the responsibilities of a potential repository

and outlines the procedures to be followed before it may be officially recognized; for which purpose it must, for at least one year, have been publicly available and demonstrated its ability to operate both efficiently and sustainably. The proposal also refers to the necessity of involving the permanent nomenclature committees for the groups concerned in the planning and testing process.

(278) In Art. 42, add another introductory paragraph, with a Note:

“*42.0ter.* Registration may be proactive and/or synchronous and/or retrospective; that is, it may occur before and/or simultaneously with and/or after the valid publication of a nomenclatural novelty or the effective publication of a nomenclatural act.”

“*Note 0.* For ways in which proactive registration of nomenclatural novelties functions, see Art. 42.1 and 42.2, relevant for fungal names.”

Committee vote: in favour 36, against 2, abstain 1.

The third proposal defines three different modes of registration and allows for all three being taken into consideration. They are not mutually exclusive, and each has its particular merits and potential disadvantages. It would be unwise at this stage to give preference to one of them. The registration system devised by the Tokyo Congress and tested before the Saint Louis Congress was retrospective; the mandatory registration that has operated successfully for fungi in the last three years is proactive. Synchronous registration may become both feasible and desirable in the near future. The above proposal provides for flexibility during test phases. Eventually, users will decide which mode (or modes) suits them best.

(279) At the end of Art. 42, add the following paragraph and Note:

“*42.4.* For specified categories of organisms other than fungi, the General Committee, upon recommendation of the Registration

Committee and the permanent nomenclature committee(s) for the group(s) concerned, has the power to declare registration through a recognized nomenclatural repository to be an additional requirement for (1) valid publication of nomenclatural novelties and/or (2) the achievement of nomenclatural acts. Such a decision must be widely publicized at least one year before the requirement can take effect. The General Committee has the power to cancel such a requirement, should the repository mechanism, or essential parts thereof, cease to function. Decisions made by the General Committee under these powers are subject to ratification by a subsequent International Botanical Congress.”

“*Note Ibis.* For nomenclatural novelties published after the date on which registration becomes a condition for valid publication in the group concerned, Art. 33.1 applies.”

Committee vote: in favour 36, against 2, abstain 1.

The last proposal is put forward for the benefit of those who are impatient to see registration made mandatory if and when the required mechanisms are in place and are unwilling to wait for six more years before it can happen. In times when technology and habits evolve at unprecedented speed, it may be appropriate to delegate some decision-making power to the body representing nomenclature between Congresses.

The proposal would provide a mechanism by which the General Committee, upon positive advice from the Registration Committee and other pertinent permanent committees, may declare registration mandatory for given groups of organisms and data categories. The General Committee must advertise its intent at least one year before such a decision can take effect, and the subsequent International Botanical Congress has the power to override the decision, which the General Committee itself can also, if need be, revoke. These safeguard clauses are, in essence, parallel to those that mycologists have devised for the registration provisions for fungal names (the current Art. 42).