

NOMENCLATURE

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A consideration of “nomina subnuda”

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Many names were originally published with very short or non-technical descriptions, and it is often unclear whether these meet the requirements of Art. 32.1 (c) for valid publication. Such names are often referred to as “nomina subnuda”. The Committee for Spermatophyta, in considering proposals to conserve or reject, has often had to decide whether to accept such names as validly published or not. Current examples include Proposal 1400 to reject *Capparis gibbosa* A. Cunn. (see below). Furthermore, although there is no provision in the Code for committee recommendations in such cases (as there is under Art. 53.5, in deciding whether two similar names should be treated as homonyms), an informal opinion has frequently been asked for in these and other similar cases. The following considerations thus arise from extensive discussion in that Committee over the last two or three years, which culminated in an informal vote being taken on ten such examples. The present notes are a report on the Committee’s deliberations, and are presented impartially without any indication of the opinions of the present author. It is hoped that this will provoke further discussion with interested people outside the Committee, with more examples being provided, so that a broad assessment of the arguments may be made. Then it is intended that appropriate proposals to the next Congress may be presented before the end of 2003 to provide a resolution of the problem in the next Code.

Widely divergent views have been expressed in the Committee for Spermatophyta. The ten cases on which an informal vote was taken, together with one general question addressed, are outlined below, and the votes of the members on each are reported. The main arguments for the different viewpoints which have been expressed in the Committee are then summarised.

1). *Capparis gibbosa* A. Cunn. in J. Bot. (Hooker) 4: 261 (1841). The protologue appeared in a biographical sketch of Alan Cunningham published by R. Heward after Cunningham’s death, quoting verbatim extensively from his diaries. It read (quoting from the diary) “Two species of *Capparis* abound in the brushes, of the same

kind as those seen at Vansittart Bay last year; the arborescent gouty species of this genus (*Capparis gibbosa*, A. Cunn.) which was first observed on the shores of Cambridge Gulf, is frequent here, growing to an enormous size, and laden with large fruit”. Of the present Committee, five said that they would treat the name as valid, while eight said they would not (two not voting). The name later turned out to be an earlier synonym of *Adansonia gregorii* F. Muell. (in a different family from *Capparis*), and a proposal to reject *C. gibbosa* A. Cunn. (Prop. 1400) was published by Paul G. Wilson & G. P. Guymer in Taxon 48: 175–176 (1999). This resulted in a vote of 9–6 in favour of the proposal by this Committee, but this does not give a two-thirds majority for either acceptance or rejection of the proposal, and no recommendation has been published so far. The six votes against the proposal may include some by members who considered that the name is invalid and that rejection is therefore unnecessary. Furthermore, some who considered at the time that *Capparis gibbosa* was valid may have now changed their opinion on this in the light of discussion of other cases reported on here. A final report on this proposal is being delayed for further consideration.

2). *Sorindeia africana* DC., Prodr. 2: 280 (1825). An opinion on this was requested by F. Breteler (Wageningen). Candolle included two species in the genus, of which the first was already described by Thouars and to which Candolle applied the symbol meaning a small tree up to 25 feet high (see reverse of title-page of volumes 11 and 13 of the Prodrusus for explanation of symbols). The second species was given no description or reference to a description, but was given the symbol meaning a woody plant of which the size is unknown. In this Committee, two would accept this as validating the name while ten would not, two abstaining.

3). *Comesperma scoparia* J. R. Drumm. in Hooker’s J. Bot. 2: 369 (1840). Opinion requested by

Anna Monro (Canberra). The name appears in a letter from Drummond to Hooker, which the latter published, possibly without Drummond's authority to do so. The letter read "A curious plant belonging to the Polygaleae, and called by the settlers Swan River Broom, and which I suppose to be a species of *Comesperma*, I have called (from the use made of it) the *Comesperma scoparia* [habitat and locality details] ... it affords an excellent ready-made broom, the root forming the handle; full-grown specimens are about two feet in diameter, growing in dense upright bushes about two feet high; green branches are thrown up every year to the outside of the plants, which, when they exceed two feet in diameter, begin to decay at the heart. The plants in greatest demand for brooms measure about nine inches in diameter, and are shaped exactly like a well made broom; the branches are very tough, without leaves, and the flowers blue". In the Committee, six said they would accept this as a valid name, while seven said they would not.

4). *Cordyline sellowiana* Kunth, Abhandl. Königl. Akad. Wiss. Berlin 1842: 30 (1842). Opinion requested by J. R. Pirani (São Paulo) and E. Nic Lughadha (Kew). The name was published in a collection of notes by Kunth on Liliaceae. On the previous page he gave a formal Latin description of the new genus *Reineckea*, which was followed by various observations on *Cordyline*. A translation of the relevant text is "In a new species from Brazil which I call *Cordyline sellowiana*, and in *Cordyline dracaenifolia* of botanic gardens, which is probably from Brazil, the filaments are very short and the stigma indistinctly 3-lobed. Both together form a still doubtful section of the genus. The same is true of *Charlwoodia* Sweet which Endlicher has already sunk in *Cordyline*". There is no character given to distinguish *C. sellowiana* from the other species. In this Committee two members said they would treat the name as validly published, while 11 said they would not.

5). *Eucalyptus dumosa* A. Cunn. in Oxley, Journals of Two Expeditions into Interior of New South Wales: 63 (1820); Walpers, Repert. Bot. Syst. 2: 925 (1843). Opinion sought by B. Brown (Australia). The context is evident from the title of the publication, and Oxley wrote "Mr Cunningham named those brushes of eucalyptus that spread in every direction around us as *Eucalyptus dumosa*, or the dwarf gum, as they never exceed twenty feet in height, and are generally twelve to fifteen, spreading out into a bushy circle from their roots in such a manner that it is impossible to see farther than from one bush to the other". In the Committee, four have said they would accept the name as validated by this description by Oxley, while nine said they would not.

6). *Ixora podocarpa* Benth. in Bentham & Hooker, Gen. Pl. 2: 113 (1873). Opinion requested by R. Govaerts (Kew). The original publication stated, after the generic description and literature references, "Bacca in *I. podocarpa* Benth. in Pl. Spruce exs. in stipitem basi contracta". In the Committee, 12 said they would regard this as a validating description, while one said he would not.

7). *Boerhavia rubicunda* Steud., Nomencl., ed. 2, 1: 213 (1840). The case was raised by the present writer in light of discussion by F. R. Fosberg in Smithsonian Contrib. Bot. 39: 13 (1978). Steudel gave a symbol indicating life form for all species in his list where he could ascertain it. The only descriptive matter for *B. rubicunda* is the perennial sign, which he also gave for nine other species in the same genus. Comparison may be made with case 2 above, *Sorindeia africana*. Here four members said they would accept the name as valid, while seven said they would not, the others abstaining.

8). *Deparia ×ghangaria* Khullar & S. S. Sharma in Khullar, Illustr. Fern Fl. W. Himalaya, 2: 121 (2000). Opinion requested by R. Davies & K. Challis, Index Kewensis compilers. This new interspecific hybrid name was accompanied by the names of the parent species together with a chromosome number, $n = 126$. In the Committee, nine said they would accept the chromosome number as a validating description (though strong reservations were expressed by several), while four said they would not.

9). *Zollernia parvifolia* Taub. ex Glaziou in Mem. Soc. Bot. France, 3: 154 (1908). Recommendation requested by V. Mansano (Campinas, Brazil). This is one of several hundreds of names, including many previously undescribed species, in a long list published by Glaziou of his own collections from Brazil. In every case he listed two items of information—the life form and the flower colour. In some cases it is possible that these two characters might have been diagnostic of the species at the time, but in most cases they were not and they might be identical for different species of the same genus. For *Zollernia parvifolia* the characters given were "Grand arbre, fl. rose pâle", whereas the previous species in the same genus was given as "Grand arbre, fl. blanc rosé". In the Committee, one member considered that *Z. parvifolia* was validly published, while 13 considered it invalid.

10). *Lotus fraseri* Benth. ex A. Gray, U. S. Expl. Exped. 1838–42 Charles Wilkes, 1: 400 (1854). Opinion requested by R. Davies & K. Challis (Kew) following discussion with K. Gandhi & D. Sokoloff. This name was included in an account of the collections of a voyage taking in at least Hawai'i, several South American coun-

tries, Australia (New South Wales), New Zealand, Fiji, Philippines and Singapore. Although in the work Gray gave long formal Latin descriptions for many new species, for this species the text was only “5. LOTUS FRASERI, Benth. ined./ HAB. Hunter’s River, New South Wales./ The flowers are scarlet, according to the late Mr. Fraser (in herb. Benth.), who long since collected this still unpublished species, in the same region”. The two Australian native species of *Lotus* had already been described, *L. australis* Andr. 1811 having been illustrated with pale pink flowers, while *L. coccineus* Schtdl. 1848 (non Vell. 1825), later renamed as *L. cruentus* Court 1957, had no flower colour given (though the epithet *coccineus* might suggest scarlet). These two species are now known to be both variable in colour from white to deep red. Species introduced to Australia from Europe have yellow flowers. Species of the genus with scarlet flowers are known from outside Australia. In the Committee, two members considered the name *L. fraseri* to be validated by Gray, while 12 did not.

General question. When asked “Do you consider that a statement that a taxon is intermediate between two others, without describing any characters, constitutes a validating description?”, none replied that they would and 13 replied that they would not. This situation arises on occasions when new interspecific hybrid names are proposed, but could also apply in other situations.

Opinions in the Committee thus range widely. Some would accept any descriptive matter, including a mere symbol indicating life form even when it is the same for different species and clearly not diagnostic within the group concerned in the original publication (cases 2 and 7 above). This view is supported by the fact that the Code does not define or qualify “description” in Art 32. Because Art. 32.1(c) allows an author to provide any one of three possibilities: “a description or diagnosis or ... a reference to a previously and effectively published description or diagnosis”, some argue that the inclusion of only a non-diagnostic description satisfies this requirement. At the other end of the spectrum of opinions, there are those who feel that if the author himself clearly did not offer the characters given as being those which define the taxon, such a description should not be accepted. This is reflected in the negative views in the cases 1–5, 7, 9 and 10 above. Note that it is the evident intention of the publishing author that is considered important by those on this side of the argument, not the effectiveness of the characters used. Nobody in the Committee has argued that the critical factor should be whether the characters given are now diagnostic. Some, however, might feel that a critical factor is whether the characters were actually diagnostic at the time of publi-

cation of the name. The length of the description is not considered critical if it was given as being diagnostic (see case 6 above).

It has been argued in the Committee that the only non-subjective way of determining whether such a name is valid or not is to accept anything and everything which can be regarded as descriptive. It has also been said that any other interpretation would lead to many names currently accepted as validly published being now treated as invalid. This view would probably allow that a comment in horticultural literature about “this shrub”, or “this aromatic species”, or “this lovely plant”, accompanied by a binomial, would constitute a validating description if the name used had not been validly published previously. The counter opinion is that if such a liberal view were accepted there are many names in horticultural and other literature that have never been taken up, which should now be accepted as valid, with unknown consequences.

When one examines the wording of the Code, some guidance may perhaps be derived from Example 3 under Art. 32.1 and from Art. 32.2. Example 3 is a “voted example”, as denoted by the asterisk before it, and such examples are considered “to legislate nomenclatural practice where the corresponding Article of the Code is open to divergent interpretation” (preface to Tokyo Code, p. x). This voted Example notes that the table of basic characters in Sweet’s *Hortus Britannicus* often shows exactly the same characters for many or all species of a genus and “clearly their mention is not intended as a validating description or diagnosis”. Here the Code requires intention on the part of the publishing author. In the following paragraph it states that “A diagnosis of a taxon is a statement of that which *in the opinion of its author* distinguishes the taxon from others”. Both of these items in the Code would suggest that at least cases 2, 4, 7 and 9 should not be treated as cases of valid publication, because they were clearly not intended as being diagnostic. The counter argument is that the characters given were a description, not a diagnosis, and since the author intentionally provided a new name (and in case 4 additionally and explicitly stated that he considered it new), therefore Art. 32.2 does not apply. The Code does not tell us how we are to distinguish a description from a diagnosis. However, perhaps to most users of the Code a description is a broader concept than a diagnosis, which may be thought of as being more abbreviated, and so if characters given are inadequate to be considered a diagnosis, they would not qualify as a description either.

Above all, clarification is needed. In practice it might be that current usage could be a critical factor in deciding such cases. If a “nomen subnudum” has never been taken up, it may be best to leave it lying in limbo. If such a name has been accepted and is in common use,

then there is a good case for accepting it as validated by the minimal descriptive characters. But there will be cases in the middle where decisions are still needed. There may be a strong case for placing in the Code a statement comparable with the present Art. 53.5, so that decisions may be taken and arguments on individual cases may be terminated. Members of the Committee for Spermatophyta will pursue the matter in the hope of coming up with an acceptable policy and proposals to clarify the Code. Meanwhile, comments and examples from others would be very welcome.