

Bambusa fortunei and Bambusa variegata: competing basionyms for the white-variegated dwarf leptomorph bamboo currently placed in Arundinaria, Pleioblastus, or Sasa

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Introduction

The two opposing views reproduced above have been put forward about the correct specific epithet for the white-variegated running bamboo, which is placed in *Arundinaria*, *Pleioblastus*, or *Sasa* by different authors according to their generic concepts. Demoly (l.c.) favoured the earlier name, based on *Bambusa fortunei* Van Houtte, which he recognizes as *Arundinaria fortunei* (Van Houtte) Rivière & C. Rivière. McClintock (l.c.) favours the later name, based on *Bambusa variegata* Miquel, recognized as *Pleioblastus variegatus* (Miq.) Makino. Validity and current usage of the two epithets require discussion and clarification, with reference to the current Code of Botanical Nomenclature (Greuter et al. 1994).

Validity

The first publication of *Bambusa fortunei* (Van Houtte 1862) certainly followed a minimalist approach. It can be argued that it satisfies the requirements for valid publication (Demoly l.c.), but it has also been argued that it is invalid (McClintock l.c.).

Van Houtte simply entered this bamboo in his catalogue cum price list as 'Bambusa Fortunei foliis niveovittatis 20 ditto', meaning Fortune's Bambusa with snowy-white-striped leaves costing 20 Francs. It is clearly listed as a separate taxon, and therefore van Houtte was considering it to be a new species that could not be included under any other published bamboo name that he was aware of. *Bambusa fortunei* can be taken as a new binomial name. The possession of snowy-white-striped leaves constitutes an effective diagnosis of a new species, separating it from all other bamboos known at that time, and van Houtte used the name again himself. It was subsequently fully recognized as a binomial in Munro's mongraph (1868), published in *Transactions of the Linnaean Society of London*, and it was adopted by many others. Miquel (1866) himself interpreted it as a new species name, listing it as *B. fortunei* var. *foliis niveo-vittatis*.

There are restrictions about use of 'phrase names' in the Code for situations where the distinction between a binomial name and a short sentence become blurred, and this is where the validity of the name would be called into question, under Article 23.6. However, it does not seem to fit any of the categories described in the Code that clearly should not be regarded as names, as the phrase is not all in the ablative or all in the nominative. *Bambusa fortunei* can be considered an epithet in the genitive, with a diagnosis following in the ablative in the conventional manner.

The second publication of the name (van Houtte 1863) included the same listing, but with a text entry in which it is stated that it was a provisional name. The article that is concerned with 'provisional' names is Article 34.1. Such names are those that are speculative and not accepted by the author, such as names listed in synonymy or names conditional upon some later new circumscription of taxa or change in rank. Demoly (l.c.) has pointed out that it is not clear what any apparent proviso might have been, or what van Houtte's name would have been conditional upon. He suggested inclusion in the genus *Bambusa* as a possibility, but van Houtte clearly accepted this species as a *Bambusa* species. Conditionality upon it not being discovered later to represent a previously described species seems more likely. This sort of taxonomic indecision or even modesty is not uncommon. However, as the author accepted it himself as a new taxon, listing it under a new name, this does not fall into the category of 'provisional' names that are to be rejected under Article 34.1. Van Houtte's use of the word provisional expressed his concern that the identification was in doubt, but he still used the new name. This taxonomic hesitation is clearly excluded from the scope of Article 34.1, which categorically states that names are not to be rejected in such circumstances.

When van Houtte used the word provisional he was merely showing the humility natural when daunted by the task of classifying unfamiliar plants. Other examples are found in the very titles of contemporary works, such as Don's 1825 *Prodromus Florae Nepalensis* (Precursor or Forerunner of the Flora of Nepal), and Miquel's own *Prolussio Florae Japonicae* of 1866 (Practice or Rehearsal for the Flora of Japan). It was in that 'rehearsal' that Miquel published *Bambusa variegata*, the name we would be recognizing if *Bambusa fortunei* van Houtte were rejected on the grounds that it was merely a provisional name!

It should also be added that even if the 1863 publication were to be considered invalid under Article 34.1, that would have no retrospective effect upon the validity of the earlier publication in 1862, in which the name was not given as provisional.

Therefore it would appear that both 1862 and 1863 publications could be considered perfectly valid, given any inclination to do so.

Current usage

Where the validity of a name is borderline, interpretation of the validity ought to err towards the support of current usage. McClintock (l.c.) clearly supports this approach, and laments the inadequacy of the Code in supporting nomenclatural stability. In fact the Code has recently been strengthened with this in mind, and a large number of cases where validity is in conflict with current usage have recently been brought to the attention of the International Committee for Botanical Nomenclature. Proposals routinely request formal and binding conservation of a name in current use and rejection of another technically correct but little-used name. A proposal to conserve the widely used name *Thyrostachys siamensis* for the elegant tropical Monastery Bamboo, despite the existence of an earlier and technically correct name, *Thyrostachys regia*, is but one recent example (Stapleton 1998). The Code clearly states that when such a situation exists, the established usage is to be followed pending a proposal for its conservation, i.e. established usage should not be upset. In addition a proposal has been made (Greuter 1998) to fully incorporate the objective of nomenclatural stability as one of the fundamental principles of the Code.

Nomenclatural stability is certainly best served by adoption of the name in widest current use. There is no conflict between horticulturalists and taxonomists on this issue. However, both taxonomy and horticulture are now international subjects, and any survey of current usage of different names has to investigate which names are in use in many different countries. Moreover it would seem reasonable to give particular emphasis to the names used for plants in their country or countries of origin.

McClintock (l.c.) is quite correct in noting that the use of *Pleioblastus variegatus* is well established, especially in English horticultural reference books. However, Demoly (l.c.) has countered McClintock's suggestion that *Pleioblastus variegatus* is the 'now generally used name', by citing a substantial volume of literature to support his own contention that names based upon *Bambusa fortunei* are in even wider use. When a further range of international scientific literature was consulted at Kew it became apparent that both names have indeed been widely used, but that the epithet *fortunei* is in somewhat wider use. The difference is greatest between English horticultural works and the Asian literature. All the recent works from China and Japan consistently use only the epithet *fortunei*, as well as most of the Continental European horticultural books on bamboos.

With due respect to David McClintock, and to the Chairman of the International Commission for the Nomenclature of Cultivated Plants, under these circumstances it seems most appropriate to support the current Asian and Continental usage of the epithet *fortunei*, rather than the English horticultural use of the later name *variegatus*. It would seem to be desirable for the interpretation of the validity of the publication of that epithet by van Houtte in 1862 or 1863 to be as favourable as possible.

Incidentally, as Demoly (l.c.) follows the unusual practice of using capital letters for some specific names it may be pertinent to mention that he is fully entitled to do so under Recommendation 60F.1 of the Code, which states: all specific and infraspecific epithets should be written with a small initial letter, although authors desiring to use capital initial letters may do so when the epithets are directly derived from the names of persons (whether actual or mythical), or are vernacular (or non-Latin) names, or are former generic names.

Conclusions

The epithet *fortunei* is in wider use than the epithet *variegatus*, and while *variegatus* is widely used in English horticultural publications, *fortunei* is consistently used in Japan and China, from where the species originates.

Publication of the name *Bambusa fortunei* by van Houtte in either 1862 or 1863 can be considered to be valid in accordance with the rules. The earlier publication should be followed now that Demoly has

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pointed out its existence, and the correct names in the genera Arundinaria, Pleioblastus, and Sasa would appear to be those based upon it.

References

- Demoly, J.-P. (1999): Notes et nouvéautes nomenclaturales pour des bambous cultivés en Europe. In Bambou 29, 12–13
- Greuter, W. (1998): Proposal to spell out a new principle in the Code: a homage to Candolle. In Taxon 47:4, 905–906.
- Greuter, W. et al. (1994): International code of botanical nomenclature (Tokyo Code). In Regnum vegetabile 131 (Koeltz Scientific Books, Königstein, Germany).
- van Houtte, L. (1862): *Prix-courant de plantes de serres et de plein air* 93(1862-1863). Etablissment Horticole de Louis van Houtte, Gand, Belgium. (Kew microfiche. No 67, Row 4 frame 4).
- van Houtte, L. (1863). Flore des serres et des jardins de l'Europe 15, 69. Gand, Belgium.
- Miquel, F.A.G. (1866). Prolusio florae japonicae. In Ann. Mus. Bot. Lugd. Bat. ii. 285.
- Munro, W. (1868): A monograph of the Bambusaceae. In Trans. Linn. Soc. London 26, 1–157.
- Stapleton, C.M.A. (1998). (1366) Proposal to conserve the name Thyrsostachys siamensis Gamble against the name Thyrsostachys regia (Munro) Bennet (Poaceae, Bambusoideae). In Taxon 47:3, 739–740.

Pleioblastus fortunei not P. variegatus

Jean-Pierre Demoly

Extract from J.-P. Demoly: *Notes and nomenclatural changes for some bamboos cultivated in Europe* (in *Bambou* 29, 12–13). Translated by Henk Beentje & Chris Stapleton, with some explanatory notes in square brackets.

The epithet variegata has been used by some botanists (Makino 1900, 1912; Camus 1913; Rehder 1949; McClure 1966; Lin & Li 1948) despite the priority of the epithet Fortunei, which has been used by the majority (Munro 1866; Fenzi 1876; Mitford 1896; Houzeau de Lehaie 1908; Fiori 1917; Nakai 1933, 1942; Nemoto 1936; Muroi 1963; Hatsushima 1976; Muroi & Okamura 1977; Suzuki 1978, 1979; Murata 1979; Okamura & Tanaka 1986; Chao 1989 etc.). However, the epithet variegata is still in use, since an article by McClintock (in The plantsman 4, 187) stating that the Fortunei would be invalid according to Article 34.1 of the Code [concerning so-called provisional names]. Indeed, in the publication seen by McClintock (Flores des Serres, van Houtte 1863) the name Bambusa Fortunei is followed in the commentary by the indication 'completely provisional name' but this might signify that it was the placement in Bambusa that was provisional and not the specific epithet. However that may be, van Houtte had already published a name for this bamboo twice, in editions of his catalogue from L'Etablissement Horticole de Louis van Houtte at Gand. The first time, in 1861, he called it Bambusa variegata (p.28). This name is invalid as it is only accompanied by the note 'Fortunei', without description (nomen nudum). The second time, in 1862, he gave it the name Bambusa Fortunei, used in the later editions of his catalogue and in his Flora, with the short description 'foliis niveo-vittatis', which was enough to distinguish it from other bamboos at that time [Bambusa argenteostriata Regel, a bamboo with similarly variegated but hairy leaves, being published in 1865]. This name is valid according to Article 30.3, concerning publication in trade catalogues [as it was published prior to 1953], and it cannot be considered provisional.

The prestige enjoyed by van Houtte's Flore des Serres [as place of publication of *Bambusa Fortunei*, rather than the earlier catalogue] is probably due to the fact that Munro cited it (in *Trans. Linn. Soc. London* 26(1868), 111). He was the first author to re-use the name *Bambusa Fortunei* in a monograph, and this reference [to the Flore des Serres] has been taken up by later authors, who did not notice that van Houtte had himself cited his [earlier] catalogue in the Flore des Serres.

Pleioblastus variegatus not P. fortunei

David McClintock

In the last number of *Bambou* (1998), Dr Demoly wrote that he had discovered that van Houtte (1862) had validly published the epithet *fortunei*, thus rendering the epithet *variegatus* published later by Miquel (1866) a synonym. He mentioned that I had written in 1982 that van Houtte (1863) had specifically stated that his use of the epithet *fortunei* was provisional, ergo invalid. Demoly graciously sent me a draft of his paper, on which I made two comments. One was that van Houtte clearly implied in 1863 that his earlier use of *fortunei* (1862) must also be regarded as provisional. In 1863 no rules existed for valid publication of new names, so van Houtte can have had no inkling that in using the name *fortunei* a year earlier he had unwittingly given it validity in the eyes of later generations. Thus there seemed good grounds for retaining the now generally used name *variegatus*. My other comment was that a principle ought to be in the Code (but regrettably is not yet) to the effect that if there is any doubt about the validity of a name change, do not upset established usage. Demoly made no reference to my caveats. I find my thoughts supported by Chris Brickell, the Chairman of the International Commission for the Nomenclature of Cultivated Plants. The name *Pleioblastus variegatus* will not be altered in *The plant finder*, nor, I hope, elsewhere.

References

Demoly, J.-P. (1999): Notes et nouvéautes nomenclaturales pour des bambous cultivés en Europe. Bambou 29, 12–13. van Houtte, L. (1862): Prix-courant de plantes de serres et de plein air 93(1862-1863). Etablissment Horticole de Louis van Houtte, Gand, Belgium.

van Houtte, L. (1863). Flore des serres et des jardins de l'Europe 15, 69. Gand, Belgium.

McClintock, D. (1982): Two familar bamboos. In The plantsman 4:3, 187.

Miquel, F.A.G. (1866). Prolusio florae japonicae. In Ann. Mus. Bot. Lugd. Bat. 2, 285.