

## Valid publication of the name *Sarcococca longipetiolata* (Buxaceae): Third time lucky

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**Abstract** “*Sarcococca longipetiolata*” was not validly published by Cheng (1979) because two gatherings were simultaneously indicated as type, the flowering material using Latin and Chinese and the fruiting material using Chinese alone (contrary to the requirements of Art. 40). “*Sarcococca longipetiolata* M.Cheng” was not validly published by Li (2009) because the type indicated was a lectotype in conflict with Art. 40.6 (and not correctable; Art. 9.9 Note 6). The name *Sarcococca longipetiolata* is validated here by indicating a single gathering as the holotype. Given the requirements of Art. 40 of the ICN, researchers and editors need to make sure that type indications made in Latin and a modern language refer to the same gathering.

**Keywords** indication of the type; nomenclatural type; *Sarcococca longipetiolata*; valid publication

### ■ INTRODUCTION

Indication of the type is a requirement for valid publication of a name of a new species or infraspecific taxon that was published on or after 1 January 1958 (Art. 40.1, 40.2 in McNeill & al., 2012). The type is either a single specimen or an illustration (see Art. 8.1). For a taxon published before 1 January 1990, the type can be indicated using “typus” or “holotypus”, or its abbreviation, or its equivalent in a modern language (Art. 40.6). After 1 January 1958 a name of a new taxon is not validly published when two or more gatherings are simultaneously indicated as the type, or when no single gathering is indicated as the type when two or more gatherings are cited (Art. 40.2) (see Yu & al., 2011).

Either Latin or Chinese (or both) can be used to indicate the type in Chinese publications. In some cases, authors have designated two gatherings as type for a new taxon, one gathering using Latin and Chinese, and another gathering using Chinese alone. Under this condition, the name cannot be taken as validly published (see the treatment for *Turpinia subsessilifolia* C.Y.Wu in Yu & al. 2011). Unfortunately, some have overlooked the gathering indicated as the type in Chinese alone, or they have treated the indication of the type using Latin as taking precedence over the one using Chinese.

For example, “*Rapanea cicatricosa*” was effectively but not validly published by C.Y. Wu & C. Chen (in Fl. Yunnan. 1: 381. 1977) because two gatherings were indicated as type,

*Sino-Vietnamese Expedition 55* (as “模式, typus! HY”) and *K.M. Feng 22901* (as “果模式” [“fruiting type”]). *Rapanea cicatricosa* C.Y.Wu & C.Chen was validly published in Pipoly & Chen (in Novon 5: 360. 1995) who referenced Wu & Chen’s previously published diagnosis and cited a single gathering, *Sino-Vietnamese Expedition 55*, as holotype. Likewise, “*Ferula tunshanica*” was effectively but not validly published by Su [group author, Jiangsu Institute of Botany] (in Fl. Jiangsu 2: 935. 1982) because two gatherings were indicated as type, *Wen-Zhe Fang & Ping-Ping Ling & al. 7402* [a typographical error for 74020] (NAS) (as “花模式” [“flowering type”]) and *Shou-Lu Liu & Gan Yao 1025* (NAS) (as “果模式” [“fruiting type”]). *Ferula tunshanica* S.W.Su was validly published in Li & al. (in Phytotaxa 13: 60. 2010) who referenced Su’s previously published diagnosis and cited a single gathering, *Wen-Zhe Fang & Ping-Ping Ling & al. 74020*, as holotype. Clearly, these two cases cannot be treated as errors to be corrected (Art. 9.9) because Art. 40 is quite clear that names (published after 1 Jan. 1958) cannot be taken as validly published if more than one gathering is indicated as type. Also in both cases, the authors of the publications (i.e., Pipoly & Chen, 1995; Li & al., 2010) in which the names (i.e., *Rapanea cicatricosa*, *Ferula tunshanica*) were validly published did not accept the names in question treating them as homotypic synonyms of *Myrsine cicatricosa* (C.Y.Wu & C.Chen) Pipoly & Chen and *Ferula licentiana* var. *tunshanica* (Su) R.H.Shan & Q.X.Liu ex K.M.Shen, respectively. However, Pipoly & Chen (in Novon 5: 360. 1995) and

Li & al. (in Phytotaxa 13: 60. 2010) can still be taken as the respective places of valid publication for *Rapanea cicatricosa* C.Y.Wu & C.Chen and *Ferula tunshanica* S.W.Su because the acceptance or otherwise of the authors of the publication (who are not the authors of the names as per Art. 46.6) is not relevant (see Ex. 3 under Art. 36.1).

When checking names validly published in the catalogues of Jin & Chen (1994, 1999, 2007; see Yu & al., 2011), we found an additional case: two gatherings (*X.P. Gao 53542*, flowering,

Fig. 1; and *X.P. Gao 54811*, fruiting, Fig. 2) were simultaneously indicated as the type of “*Sarcococca longipetiolata*” M.Cheng in Chinese, and only the flowering gathering was indicated as annotated by “*typus*” in the effective publication (Cheng, 1979). Indication of the type in *S. longipetiolata* is different from that in either *Rapanea cicatricosa* or *Ferula tunshanica*, in that Cheng (1979) provided the habitat information separately using English and Chinese as two paragraphs: the English paragraph is “Guangdong: Ruyuan xian, Daqiao, X. P. Gao No. 53542,

**Fig. 1.** Holotype of *Sarcococca longipetiolata* M.Cheng (*X.P. Gao 53542*, IBSC barcode 0001088).





Nov. 7, 1933 (fl. Typus!); No. 54811, Nov. 20, 1934 (fr.) [sic!]; the Chinese paragraph is "... 模式标本高锡朋53542号(花)和54811号(果), 采自广东乳源大桥(存华南植物研究所)..." [sic!], which is translated as "Type specimens Xi-Peng Gao No. 53542 (flowering) and No. 54811 (fruiting), collected from Daqiao, Ruyuan of Guangdong (conserved at IBSC)". Currently, "*S. longipetiolata*" (e.g., Cheng, 1980; Min & Brückner, 2008), is widely taken as validly published by Cheng (1979), which may follow indication of the type in Latin. However, this

name is not validly published, because two gatherings were simultaneously indicated as the type in Chinese in the original description (see Jin & Chen, 1994; Li, 2009).

From the internal evidence of Cheng (1979), a label with "Typus" term was posted on the sheet of two cited specimens (see pls. 8-1, 8-2). Currently, the "Typus" labels are still posted on the both sheets (no. 53542, barcode 0001088 [Fig. 1]; no. 54811, barcode 0001089 [Fig. 2]), while positions of labels have been changed. Please note that someone annotated the sheet 0001088

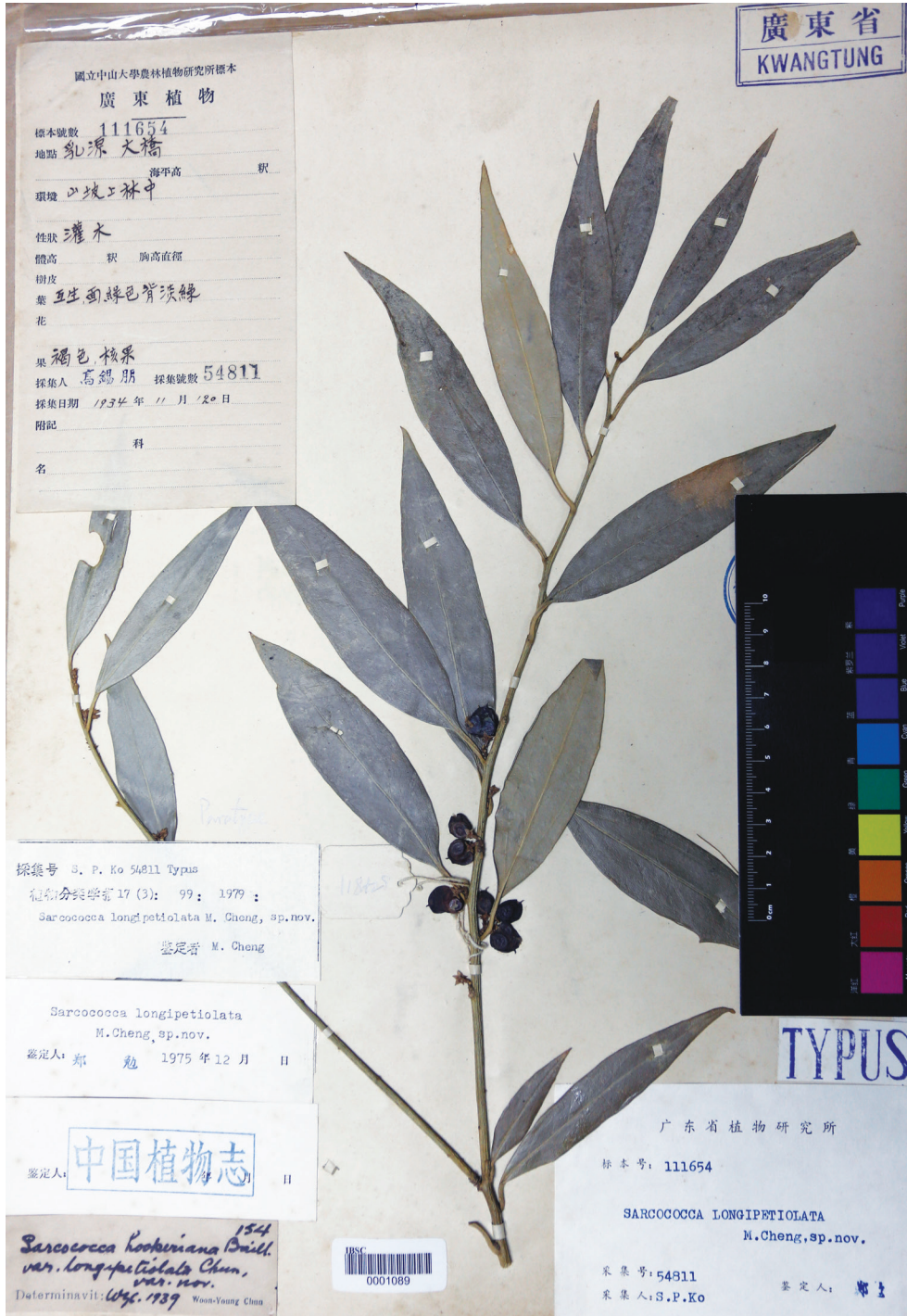


Fig. 2. Paratype of *Sarcococca longipetiolata* M.Cheng (X.P. Gao 54811, IBSC barcode 0001089).

as “Holotype” and the sheet 0001089 as “Paratype”; one may overlook indication of the type in Chinese because the term “模式标本” [“type”] was not listed after the two gatherings.

Li (2009) discovered that “*Sarcococca longipetiolata*” was not validly published; however, he failed to validate this name, because he termed *X.P. Gao 53542* as “Lectotype” contrary to Art. 40.6 (and thus not correctable under Art. 9.9). The name *S. longipetiolata* is validly published here, the flowering sheet (IBSC barcode 0001088) of *X.P. Gao 53542* being indicated as the holotype. Cheng (1979) published a Latin diagnosis of this species in 1979, which is referred to here to satisfy Art. 39.1. According to Art. 46.2, the authorship of the name *S. longipetiolata* is still to be attributed to M. Cheng.

### ■ NOMENCLATURAL TREATMENT

*Sarcococca longipetiolata* M.Cheng, **sp. nov.** – Holotype: CHINA. Guangdong: Ruyuan, Daqiao, 7 Nov 1933, *X.P. Gao 53542* (IBSC barcode 0001088!; isotype: IBSC barcode 0001087!).

*Validating description and diagnosis.* – *Sarcococca longipetiolata* M.Cheng in *Acta Phytotax. Sin.* 17(3): 99. 1979, not validly published under Art. 40.1 & 40.2; *Sarcococca longipetiolata* M.Cheng in *J. S. China Agric. Univ.* 30(4): 115. 2009, not validly published under Art. 40.6.

*Paratype.* – CHINA. Guangdong: Ruyuan, Daqiao, 20 Nov 1934, *X.P. Gao 54811* (IBSC barcode 0001089!).

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### ■ LITERATURE CITED

- Cheng, M. 1979. New taxa of Buxaceae from China with discussions on some species. *Acta Phytotax. Sin.* 17: 97–103.
- Cheng, M. 1980. Buxaceae. Pp. 16–60 in: Cheng, M. & Ming, T.-L. (eds.), *Flora Reipublicae Popularis Sinacae*, vol. 45(1). Beijing: Science Press.
- Jin, S.-Y. & Chen, Y.-L. (eds.) 1994. *A catalogue of type specimens (Cormophyta) in the herbaria of China*. Beijing: Science Press.
- Jin, S.-Y. & Chen, Y.-L. (eds.) 1999. *A catalogue of type specimens (Cormophyta) in the herbaria of China (Sup. I)*. Tianjing: China Forestry Publishing House.
- Jin, S.-Y. & Chen, Y.-L. (eds.) 2007. *A catalogue of type specimens (Cormophyta) in the herbaria of China (Sup. II)*. Beijing: Science Press.
- Li, B.-T. 2009. Validation of some Chinese species of dicotyledons in China. *J. S. China Agric. Univ.* 30: 114–115.
- Li, J.-P., Peng, X.-M. & Yu, W.-B. 2010. Nomenclature notes on *Ferula tunshanica* (= *F. licentiana* var. *tunshanica*) (Apiaceae). *Phytotaxa* 13: 59–60.
- McNeill, J., Barrie, F.R., Buck, W.R., Demoulin, V., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Marhold, K., Prado, J., Prud'homme van Reine, W.F., Smith, G.F., Wiersema, J.H. & Turland, N.J. (eds.) 2012. *International Code of Nomenclature for algae, fungi, and plants (Melbourne Code): Adopted by the eighteenth International Botanical Congress Melbourne, Australia, July 2011*. Regnum Vegetabile 154. Königstein: Koeltz Scientific Books.  
<http://www.iapt-taxon.org/nomen/main.php>
- Min, T.-L. & Brückner, P. 2008. Buxaceae. Pp. 321–332 in: Wu, Z.-Y., Raven, P. & Hong, D.-Y. (eds.), *Flora of China*, vol. 11. Beijing: Science Press; St. Louis: Missouri Botanical Garden Press.
- Pipoly, J.J. & Chen, C. 1995. Nomenclatural notes on the Myrsinaceae of China. *Novon* 5: 357–361.
- Yu, W.-B., Wang, H. & Li, D.-Z. 2011. Names of Chinese seed plants validly published in *A Catalogue of Type Specimens (Cormophyta) in the Herbaria of China* and its two supplements. *Taxon* 60: 1168–1172.