

桃儿七属的命名学考订*

郁文彬

(中国科学院昆明植物研究所东亚植物多样性和生物地理学重点实验室, 云南 昆明 650201)

摘要: 桃儿七属 (*Sinopodophyllum*) 是中国-喜马拉雅地区特有的单型属, 仅桃儿七 (*S.hexandrum*) 一种。桃儿七的根茎和果实均具有较高的药用价值, 人类的过度采挖和种群恢复较慢使其种群数量急剧下降, 现已被列入《中国物种红色名录》。在近年来的一些研究论文中, 学名 *S.hexandrum* 和 *S.emodi* 常被混用, 这使得有必要考证桃儿七学名的命名学历史, 确认正确的学名使用。查阅原始文献发现, *S.hexandrum* 的基名 *Podophyllum hexandrum* Royle 发表于 1834 年, 而 *S.emodi* 的基名 *Podophyllum emodi* Wall. ex Honigberger 到 1852 年才合格发表 (大多数学者认为是 Hooker 和 Thomson 在 1855 年合格发表), 因此, 名称 *S.hexandrum* 比名称 *S.emodi* 具有优先权。名称的混乱起于 1979 年应俊生建立桃儿七属时, 他提出组合 “*S.emodi* (Wall.) Ying” 作为桃儿七的学名。另外, 由于他未引证 Honigberger 或 Hooker 和 Thomson 的文献信息, 所以组合 “*S.emodi*” 没有被合格发表 (规则 41.5)。随后, 1985 年出版的《西藏植物志》桃儿七属中, 应俊生发现之前的错误并采用名称 “*S.hexandrum*” 取代了 “*S.emodi*”。遗憾的是他虽然意识到该名称是新组合, 但未引证基名 *P.hexandrum* 合格发表的文献信息, 使得组合 “*S.hexandrum* (Rolye) Ying” 没有被合格发表。近年来出版的《云南植物志》、《青海植物志》、《中国植物》和《Flora of China》均未发现该错误, 一直认为 “*S.hexandrum* (Rolye) Ying” 合格发表时间是 1985。实际上, 在 1993 年由于编写格式要求, 应俊生在王文采和武素功主编的《横断山区维管束植物》中引证了基名合格发表的文献信息。因此, 该名称的合格发表时间是 1993 年, 而不是常认为的 1985 年。

关键词: 小檗科; 命名学; 桃儿七属; 桃儿七

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Nomenclatural Clarifications of *Sinopodophyllum* (Berberidaceae)

YU Wen-Bin

(Key Laboratory for Plant Diversity and Biogeography of East Asia, Kunming Institute of Botany,
Chinese Academy of Sciences, Kunming 650201, China)

Abstract: The genus *Sinopodophyllum* was validly published in 1979 under Article 40.1 & 40.3, although the combination “*S.emodi* (Wall.) Ying” was not validated contrary to Article 41.5. The only species *S.hexandrum* (= *P.hexandrum*) was validly published by T.S. Ying in 1993, not in 1985.

Key words: Berberidaceae; Nomenclature; *Sinopodophyllum*; *Sinopodophyllum hexandrum*

The Himalayan Mayapple, including fruits, rhizomes and roots, is a well-known Chinese medicinal herb used by local people in southwestern China (Chinses Pharmacopoeia Commission, 2010; Kong *et al.*, 2010; Sun *et al.*, 2011; Zhao *et al.*, 2011).

Due to anthropogenic overexploitation and a low rate of natural regeneration, the Himalayan Mayapple become an endangered or threatened species in China (Wang and Xie, 2004). Its scientific name “*Sinopodophyllum hexandrum* (Royle) T.S. Ying” is wide-

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作者简介: 郁文彬 (1982-) 男, 助理研究员, 研究方向: 植物系统与演化。E-mail: yuwenbin@mail.kib.ac.cn

ly adopted in the Chinese Floras and checklists (e.g. Ying, 1985, 1993; Bao, 1997; Zhou, 1997; Ying *et al.*, 2011), however, another name “*Sinopodophyllum emodi* (Wall.) Ying” sometimes appears in some publications by Chinese researchers (e.g. Zhang *et al.*, 2005; Zhou *et al.*, 2008; Sun *et al.*, 2011; Zhao *et al.*, 2011). This confused usage promotes us to examine the nomenclatural history of the Himalayan Mayapple.

The Asian monotypic genus *Sinopodophyllum* T. S. Ying including the Himalayan Mayapple alone was separated from the North American genus *Podophyllum* L. by Ying (1979) on the basis of comparisons of several morphological characters. Ying (1979) designated “*Sinopodophyllum emodi* (Wall.) Ying” [sic!] as the generic type, however, his intended combination was not validly published under Article 41.5 of ICN (McNeill *et al.*, 2012), because the basionym citation of “*Podophyllum emodi* Wall. ex Royle in Ill. Bot. Himal. Mts. 64, 1834; Wall. Cat. n. 814, 1829, nom. nud. ...” [sic!] is not the author and place of valid publication of *P. emodi*. *Podophyllum emodi* was a nude name in the *Catalogue* of Wallich (1829), as well as in the *Illustrations* of Royle (1834). Subsequently, it was validly published by Honigberger (1852) with a line drawing illustration under Article 38.8. Since the validation of Honigberger (1852) has been overlooked, the name *P. emodi* was usually ascribed to be unintentionally validated by Hooker and Thomson (1855) with a description, nevertheless, this supposed validation has been recognized as illegitimate superfluous name, because an old name *P. hexandrum* by Royle (1834: 64) was cited in synonymy (Article 52.2). Noteworthy, the genus *Sinopodophyllum* has been validly published by Ying (1979) in accordance with Article 40.1 & 40.3, because his type citation of “*P. emodi* Wall. ex Royle” can indirectly indicate *P. emodi* Wall. ex Honigberger as the type of the genus *Sinopodophyllum*.

When describing *P. hexandrum*, Royle (1834) provided a brief diagnosis (i.e., it differs in having

only four petals, and six stamens, the leaves 3- or 5-lobed, with the lobes narrow acute and serrulate towards apex [sic!]) to discriminate from “*Podophyllum emodi* Wall.”. Because “*Podophyllum emodi* Wall.” was not validly published, the brief diagnosis satisfied a descriptive statement to validate of *P. hexandrum* (Article 38.1). Since Hooker and Thomson (1855) considered *P. emodi* and *P. hexandrum* as conspecific, no author has separated them at the specific level (e.g., Chatterjee, 1953; Selivanova-Gorodkova, 1969; Browicz, 1973; Soejarto *et al.*, 1979; Ying, 1979; Shaw, 2009; Ying *et al.*, 2011), so the old name *P. hexandrum* (\equiv *S. hexandrum*) is the correct species name for the Himalayan Mayapple. During preparation of *Flora of Xizang*, Ying (1985) attempted to propose the combination “*Sinopodophyllum hexandrum* (Royle) Ying” to replace “*S. emodi* (Wall.) Ying”, however, the combination was not validly published because he just provided the basionym *Podophyllum hexandrum* Royle but without reference to its place of valid publication contrary to Article 41.5. To date, almost all of published Chinese Floras (e.g., Bao, 1997; Zhou, 1997; Ying, 2001; Ying *et al.*, 2011) adopted *S. hexandrum* was validated by Ying in 1985 (in C.Y. Wu, Fl. Xizang 2: 119. 1985), which is incorrect. Actually, Ying (in Wang T.-S. & Wu S.-G., Vasc. Pl. Hengduan Mount. 1: 558. 1993) subsequently validate the combination “*Sinopodophyllum hexandrum* (Royle) Ying” through referring to the place of valid publication of the basionym *Podophyllum hexandrum* Royle, so the publication date of *S. hexandrum* (Royle) T. S. Ying should be cited as in 1993 (Ying, 1993), not in 1985 (Ying, 1985). To the formal usage of these names, therefore, the correct nomenclatural citations are provided below.

Nomenclatural treatments

Sinopodophyllum T.S. Ying in Acta Phytotax. Sin. 17 (1): 15. 1979. Type: *Podophyllum emodi* Wallich ex Honigsberger (= *S. hexandrum* (Royle)

T.S. Ying)

Sinopodophyllum hexandrum (Royle) T. S. Ying in Wang T.-S. & Wu S.-G., Vasc. Pl. Hengduan Mount. **1**: 558. 1993 ≡ *Podophyllum hexandrum* Royle in Illustr. Bot. Himal. **1**: 64. 1834 ≡ *Podophyllum emodi* Wall. ex Hook. f. & Thomson var. *hexandrum* (Royle) Chatterjee & Mukerjee in Rec. Bot. Surv. India **16** (2): 45. 1953. Lectotype (designated by Soejarto *et al.*, 1981: 655): INDIA. Kedaranta; May 1828, Royle *s.n.* (lectotype, LIV!, specimen on the right hand side of sheet no. 13/1; isolectotypes, LIV!, specimen on the left hand side of sheet no 13/1, K, 000644984!).

= *Podophyllum emodi* Wallich ex Honigsberger in Thirty-five years in the East **2**: 329, pl. 20. 1852 ≡ *Podophyllum hexandrum* var. *emodi* (Honigsberger) Seliv. -Gor. in Bot. Zhurn. **54**: 1605. 1969. Lectotype (designated by Soejarto *et al.*, 1981: 655): CHINA. Xizang: “Gossain Than”, Wallich 814 (lectotype, K, not seen).

= *Podophyllum emodi* var. *chinense* Sprague in Bot. Mag. 146: t. 8850. 1920 ≡ *Podophyllum hexandrum* var. *chinense* (Sprague) Stearn ex Cubey in Hanburyana **3**: 81. 2008. Lectotype (designated here): An illustration in Bot. Mag. **146**: pl. 8850, 1920 (lectotype, K!).

= *Podophyllum emodi* var. *axillare* R. Chatterjee & Mukerjee in Rec. Bot. Surv. India **16** (2): 46. 1953 ≡ *P. hexandrum* var. *axillare* (R. Chatterjee & Mukerjee) Browicz in *Flora Iranica* **101**: 2. 1973. Type: INDIA. West Bengal: “Teesta Vally above Tangu”, *Younghusband* 6. 7. 03 (holotype, CAL, not seen).

= *P. emodi* var. *bhootanense* R. Chatterjee & Mukerjee in Rec. Bot. Surv. India **16** (2): 46. 1953 ≡ *P. hexandrum* var. *bhootanense* (R. Chatterjee & Mukerjee) Browicz in *Flora Iranica* **101**: 2. 1973. Type: BHUTAN. “Taloong”, *Dungbo* 2-8-84 (holotype, CAL, not seen).

= *P. emodi* var. *jaeschkei* R. Chatterjee & Mukerjee in Rec. Bot. Surv. India **16** (2): 47. 1953 ≡ *P. hexandrum* var. *jaeschkei* (R. Chatterjee & Muker-

jee) Browicz in *Flora Iranica* **101**: 2. 1973). Type: INDIA. Himachal Pradesh: Lahaul, *Jaeschke s. n.* (holotype, CAL, not seen).

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