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中国蔷薇科、荨麻科和壳斗科植物新组合

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New combinations of Rosaceae, Urticaceae and Fagaceae from China

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笔者在编研《中国生物物种名录》第一卷第五分册(蔷薇科至叶下珠科)的过程中, 根据最近的研究结果, 对《中国植物志》及*Flora of China*中一些属的概念做了调整, 有22个名称需要进行重新组合, 现报道如下。

1 蔷薇科(Rosaceae)

广义的李属(*Prunus s.l.*)包括了桃属(*Amygdalus*)、杏属(*Armeniaca*)、樱属(*Cerasus*)、桂樱属(*Lauro-cerasus*)、稠李属(*Padus*)及狭义的李属(*Prunus s.s.*)等多个属。最近的分子系统学研究支持广义李属的单系性质, 但樱属、桂樱属、稠李属等属却都不是单系类群, 各属之间的关系还不十分清楚(Potter et al, 2007; Chin et al, 2010, 2014; Shi et al, 2013)。在广义李属内, 传统分类使用的形态性状并不能很好地区分各属或者各亚属, 给鉴定造成了困扰, 以致两三百年来不同学者对于这一类群的系统发育关系有着不同的看法, 分类意见一直不能统一(Kalkman, 1965; Bortiri et al, 2001, 2006)。但相对于分为桃属、杏属、樱属、桂樱属、稠李属和狭义李属等多个属的处理来说, 有更多证据支持广义的李属概念, 因此*Flora Europaea* (Webb, 1978)、*Flora of North America* (Phipps, 2014)以及国内很多地方志如《西藏植物志》(俞德浚等, 1985)、《贵州植物志》(陈谦海, 1989)、《福建植物志》(张永田, 1985)、《广东植物志》(陈伟球, 2000)、*Flora of Hong Kong* (Xia & Deng, 2008)等志书也都使用广义李属。有鉴于此,

我们在编研《中国生物物种名录》的时候也沿用广义李属的概念, 故有下列20个名称需组合至李属。

(1) 陕梅杏

Prunus armeniaca L. var. *meixianensis* (J. Y. Zhang, T. Z. Li, X. J. Li & Y. He) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca vulgaris* Lam. var. *meixianensis* J. Y. Zhang, T. Z. Li, X. J. Li & Y. He, Bull. Bot. Res., Harbin 9(3): 66, f. 3 (1989). **Type:** China, Shaanxi Province, Meixian, alt. 700 m, 15 Jun. 1982, J. Y. Zhang et al. B21104 (holotype, Herbarium of Liaoning Institute of Pomology).

(2) 熊岳大扁杏(熊岳杏)

Prunus armeniaca L. var. *xiongyueensis* (T. Z. Li, J. Y. Zhang, X. J. Li & Y. He) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca vulgaris* Lam. var. *xiongyueensis* T. Z. Li, J. Y. Zhang, X. J. Li & Y. He, Bull. Bot. Res., Harbin 9(3): 65, f. 2 (1989). **Type:** China, Liaoning Province, Xiongyue, alt. 22 m, 25 Jul. 1985, T. Z. Li et al. C21201 (holotype, Herbarium of Liaoning Institute of Pomology).

(3) 志丹杏

Prunus armeniaca L. var. *zhidanensis* (C. Z. Qiao & Y. P. Zhu) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca zhidanensis* C. Z. Qiao &

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Y. P. Zhu, Acta Phytotax. Sin. 31(2): 188 (1993). –*Armeniaca vulgaris* Lam. var. *zhidanensis* (C. Z. Qiao & Y. P. Zhu) L. T. Lu, Acta Phytotax. Sin. 38(3): 281 (2000). **Type:** China, Shaanxi Province, Zhidan County, Taipingshan, C. Z. Qiao & Y. P. Zhu 890176 (holotype, Herbarium of the Second Military Medical University).

(4) 武夷红樱

Prunus campanulata Maxim. var. **wuyiensis** (X. R. Wang, X. G. Yi & C. P. Xie) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Cerasus campanulata* (Maxim.) A. N. Vassiljeva var. *wuyiensis* X. R. Wang, X. G. Yi & C. P. Xie, Acta Bot. Yunnan. 29(6): 616, f. 1 (2007). **Type:** China, Fujian Province, Wuyishan, alt. 900 m, on forests evergreen, 6 Mar. 2006, X. G. Yi 30604 (holotype, NF).

(5) 华仁杏

Prunus cathayana (D. L. Fu, B. R. Li & J. Hong Li) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca cathayana* D. L. Fu, B. R. Li & J. Hong Li, Bull. Bot. Res., Harbin 30: 1 (2010). **Type:** China, Hebei Province, Zhuolu County, 11 Jul. 2008, D. L. Fu 2008071101 (holotype, CAF).

(6) 长叶桂樱

Prunus dolichophylla (T. T. Yu & L. T. Lu) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Lauro-cerasus dolichophylla* T. T. Yu & L. T. Lu, Bull. Bot. Res., Harbin 4(4): 50, f. 2 (1984). **Type:** China, Yunnan Province, Xichou County, alt. 1,300–1,500 m, 24 Sep. 1947, K. M. Feng 11997 (holotype, PE barcode no. 00004582!).

(7) 新疆桃(吕宛桃, 大宛桃)

Prunus ferganensis (Kostina & Rjabov) Y. Y. Yao ex Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Prunus persica* (L.) Batsch subsp. *ferganensis* Kostina & Rjabov, Trudy Prikl. Bot., Ser. 8, Polodovye Jagodnye Kul't. 1: 323, f. 27 II (1932). –*Persica ferganensis* (Kostina & Rjabov) Kovalev & Kostina, Trudy Prikl. Bot., Ser. 8, Polodovye Jagodnye Kul't. 4: 75 (1935). –*Amygdalus ferganensis* (Kostina & Rjabov) T. T. Yu & L. T. Lu, Fl. Reipubl. Popularis

Sin. 38: 20 (1986). –*Prunus ferganensis* (Kostina & Rjabov) Y. Y. Yao, Fl. Desert. Reipubl. Popul. Sin. 2: 158 (1987), nom. inval. **Type:** unknown.

姚育英(1987)在发表新组合*Prunus ferganensis* (Kostina & Rjabov) Y. Y. Yao时未引证基名*Prunus persica* subsp. *ferganensis* Kostina & Rjabov的文献出处, 而只引证了基于该名称的另一组合*Persica ferganensis* (Kostina & Rjabov) Kovalev & Kostina的文献出处。根据*International Code of Nomenclature for Algae, Fungi, and Plants (Melbourne Code)*条款41.5的规定(McNeill et al, 2012), 姚育英(1987)没有清楚地指出其基名, 因此其组合为不合格发表。

(8) 鹤峰樱

Prunus hefengensis (X. R. Wang & C. B. Shang) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Cerasus hefengensis* X. R. Wang & C. B. Shang, Ann. Bot. Fennici 44: 151 (2007). **Type:** China, Hubei Province, Hefeng County, alt. 800–1,000 m, roadside on edge of forest, 11 Apr. 1996, X. R. Wang 96069 (holotype, NF).

(9) 洪平杏

Prunus hongpingensis (T. T. Yu & C. L. Li) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca hongpingensis* T. T. Yu & C. L. Li, Acta Phytotax. Sin. 23(3): 209, pl. 1, f. 1 (1985). **Type:** China, Hubei Province, Hongping County, alt. 1,800 m, 31 Jul. 1977, *Shennongjia Exped. 34031* (holotype, HIB barcode no. 0096980!).

(10) 钝核甘肃桃

Prunus kansuensis Rehder var. **obtusinucleata** (Y. F. Qu, X. L. Chen & Y. S. Lian) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Amygdalus kansuensis* (Rehder) Skeels var. *obtusinucleata* Y. F. Qu, X. L. Chen & Y. S. Lian, Acta Bot. Boreal.-Occident. Sin., 29(6): 1281 (2009). **Type:** China, Gansu Province, Kangxian, alt. 1,500 m, 1 Aug. 2008, Y. S. Lian et al. 080024 (holotype, NWTC).

(11) 李梅杏

Prunus limeixing (J. Y. Zhang & Z. M. Wang) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca limeixing* J. Y. Zhang &

Z. M. Wang, *Acta Phytotax. Sin.* 37(1): 107, f. 2 (1999). **Type:** China, Liaoning Province, Xiongyue, in cultivation, 15 Aug. 1996, *J. Y. Zhang et al.* 96-2 (holotype, Herbarium of Liaoning Institute of Pomology; isotype, PE barcode no. 01790027!).

(12) 北亚稠李

Prunus padus L. var. ***asiatica*** (Kom.) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Padus asiatica* Kom., *Fl. URSS* 10: 578 (1941). –*Padus racemosa* (Lam.) Gilib. var. *asiatica* (Kom.) T. T. Yu & T. C. Ku, *Fl. Reipubl. Popularis Sin.* 38: 98 (1986). –*Padus avium* var. *asiatica* (Kom.) T. C. Ku & B. M. Barthol., *Fl. China* 9: 423 (2003). **Type:** unknown.

(13) 泰山野樱

Prunus serrulata Lindl. var. ***taishanensis*** (Yi Zhang & C. D. Shi) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Cerasus serrulata* (Lindl.) Loudon var. *taishanensis* Yi Zhang & C. D. Shi, *Acta Phytotax. Sin.* 37(1): 87 (1999). **Type:** China, Shandong Province, Tai'an City, Mt. Taishan, alt. 1,000 m, 29 May 1998, *Y. Zhang & C. D. Shi 98001* (holotype, Herbarium of Shandong Institute of Pomology; isotype, PE barcode no. 01438567!).

(14) 辽海杏

Prunus sibirica L. var. ***pleniflora*** (J. Y. Zhang, T. Z. Li, X. J. Li & Y. He) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca sibirica* (L.) Lam. var. *pleniflora* J. Y. Zhang, T. Z. Li, X. J. Li & Y. He, *Bull. Bot. Res.*, Harbin 9(3): 65, f. 1 (1989). **Type:** China, Liaoning Province, Beipiao, Daheishan, alt. 800 m, 10 Apr. 1981, *J. Y. Zhang et al.* B10401 (holotype, Herbarium of Liaoning Institute of Pomology).

(15) 仙居杏(杏梅)

Prunus xianjuxing (J. Y. Zhang & X. Z. Wu) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca xianjuxing* J. Y. Zhang & X. Z. Wu, *Bull. Bot. Res.*, Harbin 29(1): 1 (2009). **Type:** China, Zhejiang Province, Xianju County, Baita, Mt. Kuocangshan, alt. 50–500 m, 16 May 2008,

J. Y. Zhang et al. 2008-1 (holotype, Herbarium of Liaoning Institute of Pomology).

(16) 雪落樱

Prunus xueluoensis (C. H. Nan & X. R. Wang) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Cerasus xueluoensis* C. H. Nan & X. R. Wang, *Ann. Bot. Fennici* 50: 79 (2013). **Type:** China, Hubei Province, Enshi Tujia and Miao Autonomous Prefecture, Xuan'en County, Xueluozhai Mt., in alpine shrubbery beside road, alt. 1,430 m, 3 Apr. 2009, *C. H. Nan 040301* (holotype, NF).

(17) 姚氏樱(西藏樱桃)

Prunus yaoiana (W. L. Zheng) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Cerasus yaoiana* W. L. Zheng, *Acta Phytotax. Sin.* 38(2): 195, pl. 1 (2000). **Type:** China, Xizang Province, Nyingchi City, alt. 2,950 m, in forests, 4 Jun. 1989, *G. Yao et al.* 1152 (holotype, Herbarium of Xizang Institute of Plateau Ecology; isotypes, PE barcode no. 01821794! & no. 01821795!).

(18) 政和杏

Prunus zhengheensis (J. Y. Zhang & M. N. Lu) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Armeniaca zhengheensis* J. Y. Zhang & M. N. Lu, *Acta Phytotax. Sin.* 37(1): 105 (1999). **Type:** China, Fujian Province, Zhenghe County, Waitun, Mt. Chouling, alt. 780–940 m, 17 Jul. 1996, *J. Y. Zhang et al.* 96-1 (holotype, Herbarium of Liaoning Institute of Pomology; isotype, PE barcode no. 01790028!).

2 荨麻科(Urticaceae)

陈家瑞(1982)发表了疣果冷水花(*Pilea verrucosa* Hand.-Mazz.)的两个亚种闽北冷水花(*P. verrucosa* Hand.-Mazz. subsp. *fujianensis* C. J. Chen)和离基脉冷水花(*P. verrucosa* Hand.-Mazz. subsp. *subtriplinervia* C. J. Chen)。Chen和Monro(2003)将纤细冷水花(*P. gracilis* Hand.-Mazz.)并入*P. verrucosa* Hand.-Mazz., 而且将闽北冷水花和离基脉冷水花作为变种处理, 并引证了它们的原始文献。根据 *International Code of Nomenclature for Algae, Fungi, and Plants (Melbourne Code)* 条款 41.6 的规定

(McNeill et al, 2012), Chen和Monro (2003)无意中合格发表了两个新等级中的名称(name at new rank), 即*Pilea verrucosa* Hand.-Mazz. var. *fujianensis* (C. J. Chen) C. J. Chen & Monro 和 *Pilea verrucosa* Hand.-Mazz. var. *subtriplinervia* (C. J. Chen) C. J. Chen & Monro。但随后Chen等(2007)发现*P. verrucosa* Hand.-Mazz. 是*P. verrucosa* Killip (1925)的晚出同名, 于是接受纤细冷水花(*P. gracilis* Hand.-Mazz.)为这个实体的正确名称, 将*P. verrucosa* Hand.-Mazz. (1929)处理为纤细冷水花的异名。通过文献查阅和标本研究, 我们也认同这两个名称实为同种, 接受*P. gracilis* Hand.-Mazz.为正确名称, 但由于Chen等(2007)未对原先发表在*P. verrucosa*之下的两个亚种进行处理, 现因编辑名录所需, 在此重新组合。

(19) 闽北冷水花

Pilea gracilis Hand.-Mazz. subsp. *fujianensis* (C. J. Chen) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Pilea verrucosa* Hand.-Mazz. subsp. *fujianensis* C. J. Chen, Bull. Bot. Res., Harbin 2(3): 55 (1982). –*Pilea verrucosa* Hand.-Mazz. var. *fujianensis* (C. J. Chen) C. J. Chen & Monro, Fl. China 5: 101 (2003). **Type:** China, Fujian Province, Jianning County, Wangpingdong, alt. 1,000 m, 3 Jun. 1978, Z. Y. Li 10880 (holotype, PE barcode no. 00023976!).

(20) 离基脉冷水花

Pilea gracilis Hand.-Mazz. subsp. *subtriplinervia* (C. J. Chen) Y. H. Tong & N. H. Xia, **comb. nov.**

Basionym: *Pilea verrucosa* Hand.-Mazz. subsp. *subtriplinervia* C. J. Chen, Bull. Bot. Res., Harbin 2(3): 56 (1982). –*Pilea verrucosa* Hand.-Mazz. var. *subtriplinervia* (C. J. Chen) C. J. Chen & Monro, Fl. China 5: 101 (2003). **Type:** China, Hainan Province, Changjiang County, Qicha Xiang, Qichaling, alt. 400–600 m, 27 Nov. 1956, S. H. Chen 11391 (holotype, IBSC barcode no. 0001393!).

3 壳斗科(Fagaceae)

广义栎属(*Quercus s.l.*)常包括青冈属(*Cyclobalanopsis*)和狭义栎属(*Quercus s.s.*)。最近大多数的系统学证据表明, 广义的栎属是一个自然的单系类群, 青冈属也是单系类群, 但去除了青冈属

的栎属是一个并系类群(Manos et al, 2001; Oh & Manos, 2008; Hubert et al, 2014)。Hubert等(2014)还对近年来广义栎属的系统发育研究进行了总结, 发现不同外类群的选取会影响青冈类群的系统位置, 但这些研究均支持广义栎属的分类处理。有鉴于此, 在编研《中国生物物种名录》时, 我们采用广义栎属的概念将以下2个仅在青冈属中发表的名称组合至栎属。

(21) 昌化岭青冈

Quercus changhualingensis (G. A. Fu & X. J. Hong) N. H. Xia & Y. H. Tong, **comb. nov.**

Basionym: *Cyclobalanopsis changhualingensis* G. A. Fu & X. J. Hong, Guihaia, 27(1): 29 (2007), as ‘*changhuaglingensis*’. **Type:** China, Hainan Province, Changjiang County, Changhualing, alt. 180–220 m, 4 Oct. 2004, G. A. Fu 11283 (holotype, HFB).

(22) 燕千青冈

Quercus yanqianii (G. A. Fu) N. H. Xia & Y. H. Tong, **comb. nov.**

Basionym: *Cyclobalanopsis yanqianii* G. A. Fu, Bull. Bot. Res., Harbin, 27(1): 1 (2007), as ‘*yan-qianii*’. **Type:** China, Hainan Province, Changjiang County, Changhualing, alt. 160–200 m, 5 Oct. 2004, G. A. Fu 11287 (holotype, HFB).

符国瓊(2007)在文中明确指出本种的种加词是为了纪念我国林学家华南农业大学的徐燕千教授, 按照现代汉语的拼音规则“燕千”的正确拼法是“*yanqian*”, “*yanqian*”属于印刷错误, 需要更正, 且根据*International Code of Nomenclature for Algae, Fungi, and Plants (Melbourne Code)*条款60.9的规定(McNeill et al, 2012), 连字符仅在组成加词的单词通常独立存在或连字符前后的字母相同时使用, 因此这里的连字符是应改正的错误, 故予以删除。

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参考文献

Bortiri E, Oh SH, Jiang JG, Baggett S, Granger A, Weeks C, Buckingham M, Potter D, Parfitt DE (2001) Phylogeny and systematics of *Prunus* (Rosaceae) as determined by se-

- quence analysis of ITS and the chloroplast *trnL-trnF* spacer DNA. *Systematic Botany*, 26, 797–807.
- Bortiri E, Heuvel BV, Potter D (2006) Phylogenetic analysis of morphology in *Prunus* reveals extensive homoplasy. *Plant Systematics and Evolution*, 259, 53–71.
- Chen JR (1982) A monograph of *Pilea* (Urticaceae) in China. *Bulletin of Botanical Research*, 2(3), 1–132. (in Chinese) [陈家瑞 (1982) 中国荨麻科冷水花属的研究. *植物研究*, 2(3), 1–132.]
- Chen JR, Monro AK (2003) *Pilea*. In: *Flora of China*, Vol. 5 (eds Wu ZY, Raven PH), pp. 92–121. Science Press, Beijing & Missouri Botanical Garden Press, St. Louis.
- Chen JR, Monro AK, Chen L (2007) Name changes for Chinese *Pilea* (Urticaceae). *Novon*, 17, 24–26.
- Chen QH (1989) Prunoideae. In: *Flora of Guizhou*, Vol. 7 (ed. Li YK), pp. 257–290. Sichuan Ethnic Publishing House, Chengdu. (in Chinese) [陈谦海 (1989) 李亚科. 见: 贵州植物志(第七卷), 李永康主编, pp. 257–290. 四川民族出版社, 成都.]
- Chen WC (2000) Rosaceae. In: *Flora of Guangdong*, Vol. 4 (ed. Wu TL), pp. 167–242. Guangdong Science and Technology Press, Guangzhou. (in Chinese) [陈伟球 (2000) 蔷薇科. 见: 广东植物志(第四卷), 吴德邻主编, pp. 167–242. 广东科技出版社, 广州.]
- Chin SW, Wen J, Johnson G, Potter D (2010) Merging *Maddenia* with the morphologically diverse *Prunus* (Rosaceae). *Botanical Journal of the Linnean Society*, 164, 236–245.
- Chin SW, Shaw J, Haberle R, Wen J, Potter D (2014) Diversification of almonds, peaches, plums and cherries—molecular systematics and biogeographic history of *Prunus* (Rosaceae). *Molecular Phylogenetics and Evolution*, 76, 34–48.
- Fu GA (2007) One new species of the *Cyclobalanopsis* (Fagaceae) from Hainan Island. *Bulletin of Botanical Research*, 27, 1–2. (in Chinese) [符国瑗 (2007) 海南岛青冈属(壳斗科)一新种. *植物研究*, 27, 1–2.]
- Handel-Mazzetti HREv (1929) *Symbolae Sinicae*, part 7, Anthophyta. Verlag von Julius Springer, Wien.
- Hubert F, Grimm GW, Joussetin E, Berry V, Franc A, Kremer A (2014) Multiple nuclear genes stabilize the phylogenetic backbone of the genus *Quercus*. *Systematics and Biodiversity*, 12, 1–19.
- Kalkman C (1965) The Old World species of *Prunus* subg. *Lauro-cerasus* including those formerly referred to *Pygeum*. *Blumea*, 13, 1–115.
- Killip EP (1925) Notes on Peruvian Urticaceae of the Marshall Field exploration. *Journal of the Washington Academy of Sciences*, 15, 48–56.
- Manos PS, Zhou ZK, Cannon CH (2001) Systematics of Fagaceae: phylogenetic tests of reproductive trait evolution. *International Journal of Plant Sciences*, 162, 1361–1379.
- McNeill J, Barrie FR, Buck WR, Demoulin V, Greuter W, Hawksworth DL, Herendeen PS, Knapp S, Marhold K, Prado J, Prud'homme van Reine WF, Smith GF, Wiersema JH, Turland NJ (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. Koeltz Scientific Books, Königstein.
- Oh SH, Manos PS (2008) Phylogenetics and cupule evolution in Fagaceae as inferred from nuclear CRABS CLAW sequences. *Taxon*, 57, 434–451.
- Phippis JB (2014) Rosaceae. In: *Flora of North America*, North of Mexico, Vol. 9 (ed. Flora of North America Editorial Committee), pp. 18–662. Oxford University Press, New York & Oxford.
- Potter D, Eriksson T, Evans RC, Oh SH, Smedmark JEE, Morgan DR, Kerr M, Robertson KR, Arsenault M, Dickinson TA, Campbell CS (2007) Phylogeny and classification of Rosaceae. *Plant Systematics and Evolution*, 266, 5–43.
- Shi S, Li JL, Sun JH, Yu J, Zhou SL (2013) Phylogeny and classification of *Prunus sensu lato* (Rosaceae). *Journal of Integrative Plant Biology*, 35, 1069–1079.
- Webb DA (1978) *Prunus*. In: *Flora Europaea*, Vol. 2 (eds Tutin TG, Heywood VH, Burges NA, Moore DM, Valentine DH, Walters SM, Webb DA), pp. 77–80. Cambridge University Press, London.
- Xia NH, Deng YF (2008) Rosaceae. In: *Flora of Hong Kong*, Vol. 2 (eds Hu QM, Wu DL), pp. 19–36. Agriculture, Fisheries and Conservation Department, Government of the Hong Kong Special Administrative Region, Hong Kong.
- Yao YY (1987) Rosaceae. In: *Flora in Deserti Reipublicae Populorum Sinarum*, Vol. 2 (ed. Liu YX), pp. 92–168. Science Press, Beijing. (in Chinese) [姚育英 (1987) 蔷薇科. 见: 中国沙漠植物志(第二卷), 刘嫫心主编, pp. 92–168. 科学出版社, 北京.]
- Yu TT, Lu LT, Ku TC (1985) Rosaceae. In: *Flora Xizangica*, Vol. 2 (ed. Wu CY), pp. 539–701. Science Press, Beijing. (in Chinese) [俞德浚, 陆玲娣, 谷粹芝 (1985) 蔷薇科. 见: 西藏植物志(第二卷), 吴征镒主编, pp. 539–701. 科学出版社, 北京.]
- Zhang YT (1985) Rosaceae. In: *Flora Fujianica*, Vol. 2, pp. 263–337. Fujian Science and Technology Press, Fuzhou. (in Chinese) [张永田 (1985) 蔷薇科. 见: 福建植物志(第二卷), pp. 263–337. 福建科学技术出版社, 福州.]

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