

## 中国和越南紫金牛科植物新种及混淆种类的澄清

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### 摘 要

在编写《柬埔寨、老挝、越南植物志》紫金牛科的过程中, 作者对我国紫金牛科植物也作了进一步的检查和整理, 共发现 *Ardisia waitaki*, *A. linangensis*, *A. malipoensis*, *A. crassirhiza*, *Maesa consanguinea* var. *confusa* 等 5 个新类群, 归并了 *Ardisia elegantissima* Leveille, *A. glauca* Mez, *A. corymbifera* var. *tuberifera* C. Chen, *A. kwangtungensis* Walker 和 *Maesa protigiosa* C. Chen; 同时澄清了部分长期混淆或被错误鉴定的种类。

关键词: 紫金牛科; 新类群; 新异名; 中国; 越南

## NEW AND NOTEWORTHY SPECIES OF MYRSINACEAE FROM CHINA AND VIETNAM

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### Abstract

Five new taxa of Myrsinaceae from China, *Ardisia waitaki*, *A. linangensis*, *A. malipoensis*, *A. crassirhiza*, *Maesa consanguinea* var. *confusa* are described and illustrated; Five names (*Ardisia elegantissima* Leveille, *A. glauca* Pitard, *A. corymbifera* var. *tuberifera* C. Chen, *A. kwangtungensis* Walker, *Maesa protigiosa* C. Chen,) are reduced to synonyms and several confused or misidentified species of *Ardisia* and *Maesa* are clarified and corrected.

Key words: Myrsinaceae; New taxa; New synonyms; China; Vietnam

### Introduction

After the publication of Mez's monograph of the Myrsinaceae in 1902, J. Pitard (1903) revised the Indo-China species for Lecomte's Flore Generale De L'Indo-Chine and Egbert H. Walker (1904) published a comprehensive revision of the eastern Asia species independently. Their treatment, for the most part, were followed by subsequent authors. As it is well known, China and Indo-China are closely associated both geographically and floristically; a high percentage of species are shared by these two areas. But at that time the authors had only limited material for purposes of comparison; there were difficulties to extend their studies over the boundary of the countries. Thus it was inevitable that specific names were multiplied and some confusion resulted. Recently I have had the privilege of studying the complete material in herbaria PE, IBSC, P. AUU, US, A and MO through the kindness of the directors, and in the study it was found necessary to establish as valid species certain plants which has hitherto not received recognition and to reduce some names as synonyms. In addition some species which have long been confused

or misidentified are also clarified or corrected.

Specimens cited are deposited in herbarium of South China Institute of Botany (IBSC) unless otherwise stated.

*Ardisia waitakii* C. M. Hu, sp. nov. (subg. Akosmos) Fig. 1.

Type: China, Guangxi, Dongxing Xian, Shi Wan Da Shan, in deep forest, alt. 900m. S. H. Chun 5264 (holo-, IBSC).

*Ardisia oxyphylla* Wall. ex A. DC. var. *cochinchinensis* auct. non Pitard; Walker in Journ. Arn. Arb. 23: 345. 1942. specim. excl. W. T. Tsang 27487; C. Chen in Fl. Reipubl. Popul. Sin. 58: 54. 1979. — *Ardisia cochinchinensis* (Pitard) C. M. Hu in Acta Bot. Austrosinica 6: 27. 1990; P. P. Maj., typo excluso.

Species similis *A. quinquegonae* Bl. et *A. depressae* C. B. Clarke, a quibus imprimis differt sepalis late ovatis vel suborbiculatis plus minusve imbricatis.

Arbuscula vel frutes 1—4m altus, partibus novellis ferrugineo-lepidotis, ramulis subteretibus, glabrescentibus. Folia oblonda vel oblongo-lanceolata, 9—20 cm longa et 2.5—5.5 cm lata, apice breviter acuminata vel rare acuta, basi cuneata, margine integra vel obscure undulato-crenata, angustissime recurva, sicca firme chartacea vel subcoriacea, glabra, subtus minutissime lepidota, utrinque glandulis elevatis instructa, costa supra anguste impressa, subtus bene elevata, nervis lateralibus numerosis, parallelis, utrinque elevatis, prope marginem junctis nervum intramarginalem distinctum formantibus, rete venularum irregulari utrinque prominulo; petioli 7—12 mm longi, supra canaliculati. Inflorescentiae laterales vel subterminales, umbellatae simplices vel raro ramorae, ferrugineo-lepidotae; pedunculi 3—20 mm longi; pedicelli 5—10 mm longi. Flores 3.5—4 mm longi. Sepala basi breviter coalita, late ovata vel suborbiculata, 1.5—1.8 mm longa, apice obtusa, margine ciliolata, plus minusve imbricata. Corolla albida vel rosea, tubo c. 0.4 mm longo, lobis ovatis c. 3×2 mm, apice obtusiusculis vel acutis, sparse punctatis. Antherae anguste ovatae, c. 2.5 mm longae, apice apiculatae, eglandulosae; filamenta vix 0.5 mm longa. Ovarium ovoideum; stylus gracilis 2—2.5 mm longus. Drupa globosa, 5.5—6 mm diam., obscure punctata.

A distinctive species, in many ways similar to *A. quinquegona* Bl. and *A. depressa* C. B. Clarke, but can be easily distinguished by its broadly ovate and more or less imbricated calyxlobes. *A. oxyphylla* var. *cochinchinensis* Pitard, known only from the type collection, is quite different from the new species by having hairy branchlet and petioles; it doubtless belongs to section Tinus and is scarcely different from *A. amherstiana* A. DC.

Additional material. — CHINA. Guangdong: Yunfu Xian, Yunwu Shan, C. Wang 37286; Xinyi Xian, C. Wang 30960, 37800, Y. K. Wang 30960; Maoming Xian, Na Shan, L. Tang 1790. Guangxi: Dongxing Xian, Pinglung Shan, P. C. Chow 80174; Shi Wan Da Shan, S. H. Chun 5280; Kungping Shan, W. T. Tsang 26710 (A, US, IBSC); Shangsi Xian, Shi Wan Da Shan, alt. 500—800 m. S. H. Chun 4930; 5017, C. C. Chang 13159, C. L. Tso 23622. — VIETNAM. Tonkin; Hanoi, W. T. Tsang 27003, 29009 (A, US, P. IBSC); Dam-ba, W. T. Tsang 30350 (A, US, P, IBSC).

*Ardisia brunnescens* Walker in Journ. Washington Acad. Sci. 27: 198. Fig. 1. 1937. (subg. Akosmos). Type: China, Guangxi, Lungzhou, H. B. Morse 708 (holo-, NY).

*Ardisia glauca* Pitard in Fl. Gen. Indo-Chine 3: 814. 1930, non Mez 1920. syn. nov., Typus: Vietnam, Vo-xa, Bon 4394 (holo-, p).



Fig. 1 *Ardisia watkinsii* C. M. Hu (S.-H. Chun 5264).

1. Flowering branch; 2. Floral bud; 3. Corolla opened up; 4. Anther; 5. Pistil.

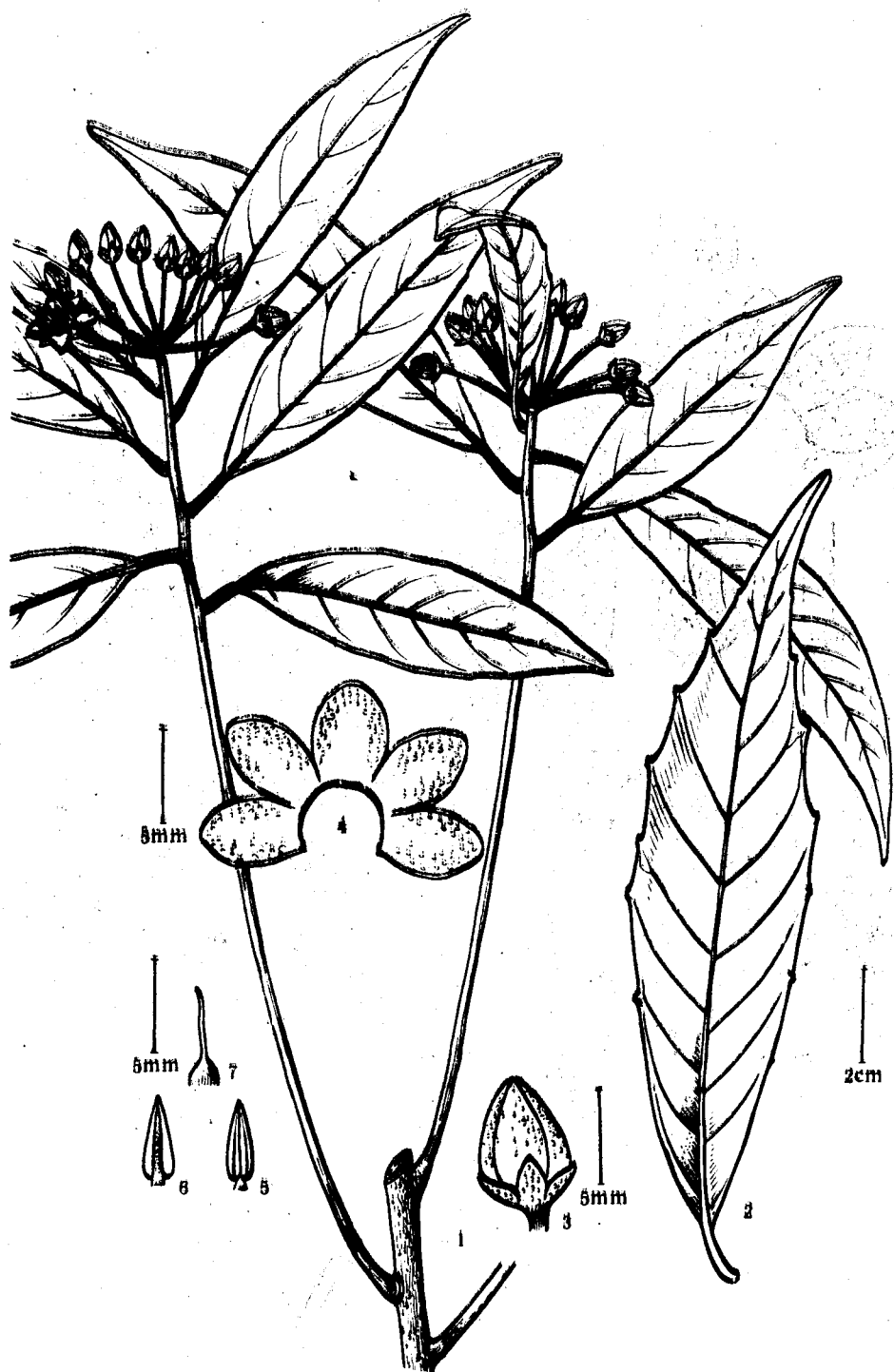


Fig. 2 *Ardisia linangensis* C. M. Hu (Guangdong-73 Exped. 488).  
 1. Flowering branch; 2. A leaf showing the variation of the margin; 3. Floral bud; 4. Corolla opened up;  
 5-6. Stamens; 7. Pistil.

There is no doubt that *A. brunnescens* Walker is identical to *A. glauca* Pitard, but unfortunately, the specific epithet "glauca" has been used by Mez for a Philippine plant.

Additional material. — CHINA. Guangdong: Dinghu Shan, alt. 650m, G. L. Shi 2921; Yunfu Xian, on limestone hills, C. Wang 485 (A, IBSC), 37672, 40820; no further locality, S. S. Sin 5273. Guangxi: Hechi Xian, Guangxi Museum 13715; Lungzhou Xian alt. 360—390m, S. H. Chun 13971, P. C. Tam 57133, 57205. — VIETNAM. mt. Bavi, alt. 1200m. Balansa 3919 (P).

*Ardisia linangensis* C. M. Hu, sp. nov. (subg. *Crispardisia*), Fig. 2. Type: China, Guangdong, Ruyun Xian, Wuzhi Shan, Tian Meng Zhang, in deep forest of mountain valleys, alt. 770 m, 31. May, 1973, Guangdong-73 Exped. 456 (holo-, IBSC).

*Ardisia hanceana* sensu Walker in Philip. Journ. Sci. 73: 117. 1940; C. Chen in Fl. Reipubl. Popul. Sin. 58: 71. 1979. non Mez.

Species affinis *A. tsangii* Walker, sed planta ubique glabra, ramulis specialibus floriferis 3—8-foliatis differt. *A. hanceana* Mez foliis margine undulatim grosse crenatis, sepalis petalisque non atro-punctatis longe distat.

Frutex 0.8—1.5m altus, ubique glabrus. Folia elliptico vel oblongo-lanceolata, raro oblanceolata, apice acuminata vel longè acuta, basi cuneata, 10—17cm longa et 1.5—3.5cm lata, margine subintegra vel dentibus patentibus remotis praedita, glandulis prominulis secus marginem vel ad apicem dentium instructa, sicca firme chartacea, subtus obscure lepidota, glandulis nunc invisibilibus nunc parum manifestis, costa utrinque elevata, nervis lateralibus 12—18-paribus, tenuibus, curvato-ascendentibus, prope marginem junctis nervum intramarginalem formantibus, rete venularum invisibili, petioli 4—12mm longi, supra canaliculati et anguste alati. Inflorescentiae in ramulis specialibus 3—8-foliatis terminales, corymboso-umbellatae, simpleces vel latere ramulos 1—3 pedicellis multo longiores procreantes; pedunculi 3—5mm longi, ramis si adsunt 2—5cm longis, pedicelli 1—2cm longi. Flores ante anthesin conice acutiusculi, 5—6mm longi. Sepala basi breviter coalita, ovata c. 2mm longa, apice plus minusve obtusa, atro-punctata. Corolla rosea vel albida, fere ad basin lobata, lobis ellipticis, 5—5.5 × 3.5—4.2mm, apice acutis vel plus minusve obtusis, conspicue punctatis. Antherae ovato-deltaeidae, c. 4mm longae. apice plus minusve apiculatae, dorso sparse punctatae; filamenta vix 1mm longa. Ovarium ovoideum; stylus c. 5mm longus. Drupa globosa, 7—8mm diam., sparse punctata.

The new species differs from the true *A. hanceana* Mez., with which it has long been confused, by the black-punctate flowers and by the not scalloped leaves. It is more closely allied to *A. tsangii* Walker, but can be easily distinguished by its glabrous and more corymbose inflorescence and by having more (3—8) leaves on the flowering branches.

Additional material. — CHINA. Guangdong: Ruyuan Xian, C. Wang 43870, L. Tang 5577, S. G. Li 201156, Guangdong-73 Exped. 515, 969; Shixing Xian, Zhangdong Shui, alt. 900m. W. X. Wang 720; Lungmen Xian, Nan Kun Shan, W. T. Tsang 25294, C. F. Wei 122032; Dapu Xian, L. Tang 4991, Damou Shan, W. T. Tsang 21250 (A, IBSC), S. G. Lee 202562; Jiaoling Xian, H. H. Hsue 292; Yangshan Xian, L. Tang 1181, 1462; Yao Shan, S. S. Sin 9940, 11837 (Y, IBSC), Lechang Xian, W. T. Tsang 20882 (Y, IBSC), S. P. Ko 51139; Lian Xian P. C. Tam 59728, 60270; Lianshan Xian, P. C. Tam 58762, S. H. Chun 5702; no further locality, W. Y. Chun 5913, 5934 (A, IBSC). Guangxi: Jirixiu Xian, Dayao Shan Exped. 10258, 11428, 11575, 12187, 12436, 12811, 13417, Y. K. Li 400035, 400115, 400370, Q. H. Lu 4627; Lingui Xian, C. H. Tsoong 808951, 808986; Gongcheng Xian, Y. K. Li 402919; He Xian, Y. K. Li 401474; Rongshui Xian, S. H. Chun 14450. Hunan: Yizhang Xian, Mang Shan, alt. 1300m, S. H. Chun 2794, B. H. Liang

83888. Jiangxi; Anyuan Xian, C. M. Hu 2713, 3306. Zhejiang; Shouchang Xian, X. Y. Ho 29496; Taishun Xian, S. Y. Zhang 3689; Kaihua Xian, X. Y. Ho 29923; Tianmu Shan, X. Y. Ho 30289, 31031; Changhua Xian, M<sub>3</sub>B. Teng et al. 4754.

*Ardisia hanceana* Mez in Engl., Pflanzent<sub>18</sub> 9(IV-236); 149. 1902. (subg. Crispardisia). Type: China, Hongkong, Wright 206 (lecto-, p; isolecto-, K (pro parte), here designated).

*Ardisia elegantissima* Leveille in Fedde Repert. Sp. Nov. 10; 373. 1912; C. M. Hu in Acta Bot. Austro-Sinica 6; 29. 1990, syn. nov. Type: China, Hongkong, Happy valley, Bodinier 655 (holo-, E).

*Ardisia elegans* sensu Rehder in Journ. Arn. Arb. 15; 290. 1934; Walker in Philip. Journ. Sci. 73; 110. 1940, excl. syn. *A. konishii* Hayata; Chen in Fl. Reipubl. Popul. Sin. 58; 36. 1979, excl. syn. *A. roseiflora* Pitard., non Andr.

There has been a great deal confusion with regard to this species. Rehder (1934) considered *A. elegantissima* Leveille as a synonym of *A. elegans* Andr. This treatment was followed by subsequent authors, and possibly led E. H. Walker to refer an undescribed species to *A. hanceana* Mez. As the present author has pointed out in a previous paper that except for the morphological differences, *A. elegantissima* is confined to South China and Vietnam, while *A. elegans* Andr. is merely a form of *A. crenata* Sims originally introduced to England from Malay Peninsula. The true *A. hanceana* was described by Mez in 1902 based on the specimens of Hance 263 (pro parte) and Wright 206 collected from Hongkong. Unfortunately, the Hance's specimen was lost during The World War II, and there is no duplicates in K, BM and P, but I examined the specimens of Wright 206 preserved in Paris and Kew, and there is no doubt that *A. elegantissima* Leveille is identical with this species.

Additional material. — CHINA. Guangdong; Dapu Xian, L. Tang 5457; Deqing Xian, Y. G. Lau 1008; Dinghu Shan, G. L. Shi 11436, 11467, 2888; Fengkai Xian, Fengkai Exped. 4823, 446026, G. L. Shi 14783, K. C. Ting 6079, C. Wang 164237; Fengshun Xian, S. G. Lee 201366; Gaoyao Xian, Y. K. Lau 1764; Gaozhou Xian P. C. Chow 80331, Y. Tsiang 2117; Guangning Xian, G. L. Shi 14442; Heyuan Xian, W. T. Tsang 29940; Hongkong, C. Wang 32406; Huaiji Xian, Y. G. Lau 2654, G. L. Shi 14586; Huidong Xian, P. Y. Chun et G. C. Zhang 577; Lechang Xian, T. S. Chu 135, S. H. Chun 1573, 3001, S. P. Ko 54533, Y. Li 10637, P. H. Liang 84310, C. L. Tso 20363, 20454, 21194; Liangshan Xian, P. C. Tam 58135, 58599, 58719; Liannan Xian D. R. Zhong 20462, T. S. Chu 778; Lofu Shan, N. K. Chun 41107; Longmen Xian, Nankun Shan Exped. 71530; Maoming Xian, T. S. Chu 1155, L. Tang 1891; Pubei Xian, W. C. Chen 67; Ruyuan Xian, Z. S. Chung 10854; Wengyuan Xian, S. K. Lau 855, 2438, 2778; Xingfeng Xian, Guangdong-77 Exped. 5558; Xinyi Xian, C. Wang 31759, Y. K. Wang 22829; Yangshan Xian, L. Tang 156, 1688; Yingde Xian, W. Y. Chun 6002, 7192, 7243, W. Chen 3527, S. K. Lau 24537, H. Y. Liang 60465, 60687, 60891, L. Tang 945, 8356, C. L. Tso 21885, 22137, T. M. Tsui 357, S. Wang 163865, 163874. Hainan; Baisha Xian S. K. Lau 25460 (A. IBSC); Baoting Xian, F. C. How 70845, S. H. Chun 7634, 7777, C. F. Wei 122201; Changjiang Xian, G. A. Fu 3308, 3781, 3844, S. K. Lau 1798 (A, IBSC); Dan Xian, F. A. McClure 8504, 9338; Ding'an Xian, N. K. Chun et C. L. Tso 44037 (A, IBSC), C. Wang 35435, 35776, H. Y. Liang 64329; Dongfang Xian, Y. N. Chen et P. M. Chang 2602, 2607, 2627, S. H. Chun 11235, 11443, H. Y. Liang 63274; Ledong Xian, K. S. Chow 78388, T. L. Chun 30213, 30307, G. A. Fu 1134, P. A. Green 3, H. Y. Liang 68608, Q. Wang 820071, 820571, H. D. Zhang 3454; Lingshui Xian, H.

Y. Liang 61609, L. Tang 2711, C. Wang 36314; Qiongzong Xian, S. H. Chun 10727, L. Tang 3323; Sanya Shi (Ya Xian), Z. X. Li 4432, F. C. How et N. K. Chun 70142 (A, IBSC), H. Y. Liang 62050, 62598, C. Wang 33746, 34199, no further locality, N. K. Chun & C. L. Tso 43404 (A, IBSC), H. Y. Liang 65018, Tsang & Fung 17522 (A, IBSC). Guangxi; Bama Xian, Y. K. Li P1061; Cangwu Xian, S. H. Chun 9987, 10079; Dongxing Xian, W. C. Chen 437, G. F. Chen 89300, S. H. Chun 5200, 5150; Heng Xian, Z. Z. Chen 50530; Jinxiu Xian, S. P. Ko 55174 (A, IBSC), Dayao Shan Exped. 11941, 13549, 13858; Lingui Xian, Z. S. Chung 90967, H. F. Tuan 700047; Lungzhou Xian, S. H. Chun 11589, 12885, 12554, C. C. Chang 11937, H. Y. Liang 65950, H. H. Soo 68482, Guangxi Exped. 3170, P. C. Tam 57440, 57483, 57486, 57641; Luocheng, S. H. Chun 14051. R. C. Ching 5622 (A, IBSC); Nanning Shi, R. C. Ching 7888 (A, IBSC); Ningming Xian, C. C. Chang 12057, 12403; Pingnan Xian, S. S. Sin 23, 3854, 8262, 20004, 20474, 25353, C. H. Tsoong 84605, C. Wang 39948 (A, IBSC), 40745, Y. C. Wang 5024, 39022; Qinzhou Xian, S. H. Chun 3833, 4120, L. Tang & T. L. Wu 617, 644, C. L. Tso 23373; Rongshui Xian, S. H. Chun 16474, T. C. Chen 499; Shangsi Xian, S. H. Chun 4496, W. T. Tsang 22509 (A, IBSC); Yangshou Xian, H. F. Tuan et al. 52; Yongfu Xian, G. X. Li 27; Yongning Xian, C. C. Chang 14270. Fujian; Nanjing Xian, G. D. Ye 1579. Jiangxi; Xunwu Xian, C. M. Hu 1653. Guizhou; Sandu Xian, Y. K. Li 8393. — VIETNAM. Balansa 1069 (A, P), Chevalier 29626 (P), Fleury 37656 (P), 32490 (P), Lecomte & Finet 669 (P), 705 (P), Petelot 1045 (A), 1046 (P, A), 2124 (A), 4379 (A; US), 6467 (A, US), Poilane 8199 (P), Sino-Vietnam Exped. 1383, W. T. Tsang 29940 (P). — LAOS. Thorel 63 (P).

*Ardisia lindleyana* D. Dietr., Syn. Pl. 1: 617. 1839, excl. syn. *A. macrocarpa* Wall. (subg. *Crispardisia*). Type: based on *Ardisia punctata* Lindl.

*Ardisia punctata* Lindl., Bot. Reg. 10, pl. 827. 1824, non Jack (1824). Type: No specimen appears to have been preserved; the plate (drawn from a cultivated plant) must therefore serve as the type.

Both *Ardisia punctata* Lindl. and *A. punctata* Jack (in Roxb. Fl. Ind. 2: 275) were described in 1824, but as E. D. Merrill pointed out (cf. Journ. Arn. Arb. 33: 216. 1952) that as the Botanical Register volume 10, plate 827 "is dated Sept. 1, 1824. The introduction to volume two of Roxburgh's Flora Indica is dated March, 1824. The proper name for the Chinese *Ardisia punctata* Lindl., non Jack, is *Ardisia lindleyana* D. Dietr.". But unfortunately, D. Dietrich's treatment and E. D. Merrill's comments were overlooked by subsequent authors.

Additional material. — CHINA. Guangdong; Boluo Xian, N. K. Chun 1734, 41250, C. F. Wei 121821; Conghua Xian, W. T. Tsang 24903, X. W. Wang & K. C. Zhang 8249, Sino-Germany Exped. 915, 1173; Dapu Xian, W. T. Tsang 21165; Dinghu Shan, C. Buswell et al. 6418, T. N. Liou 7578, S. Wang 161004, 161039, S. Y. Lau 20285, H. Y. Liang 60344, C. L. Tso 21255, 21308, Y. Tsiang 11017, 1546, K. C. Ting 6651; Gaoyao Xian, S. Wang 162294; Guangzhou, S. H. Chun 7104, B. Y. Chen & F. W. Xing 445, T. Z. Lai 54; Hongkong, W. Y. Chun 3092, 3135, 5038, C. L. Tso 20208; Hua Xian, S. Wang 164627; Huidong Xian, B. Y. Chen 273; Jiaoling Xian, H. H. Hsue 232; Lechang Xian, Lam & Liang 84725, T. S. Chu 77, C. L. Tso 20400, S. H. Chun 1524, S. G. Lee 200437; Liannan Xian, D. Y. Zhong 20466; Nanhai Xian, S. P. Ko 51561; Renhua Xian, W. Y. Chun 5589 (A, IBSC); Taishan Xian, Guangdong-73 Exped. 2633; Wengyuan Xian, S. K. Lau 2097; Xinfeng Xian, L. Tang 8247; Xinhui Xian, W. C. Kao 27; Xinyi Xian, C. Wang 37913; Yinde Xian, H. Y. Liang 61293, 61363, L. Tang 828, 837, S. Wang

163847, C. L. Tso 21951, C. S. Niu 7967, C. F. Wei 120862, W. C. Kao & B. H. Chen 211, 229. Guizhou; without locality, Y. Tsiang 10160. Hunan, Guidong Xian, B. G. Li 5576; Yizhang Xian, P. H. Liang 547, 85991, 86224, S. H. Chun 45, 155, 2008. Jiangxi, Anyuan Xian, C. M. Hu 2558; Chongyi Xian, M. X. Nie 9089; Dayu Xian, J. S. Yue 1531; Gan Xian, Z. R. Yu, 1746; Jinggang Shan, S. S. Lai 4536, 4954; Ruijin Xian, C. M. Hu 4020; Shangyou Xian, M. X. Nie 8322; Xunwu Xian, X. X. Yang 12531; Xinjiang Xian, Y. Ling 13194, no further locality, H. M. Mu 21231. Zhejiang; Taishun Xian, S. Y. Zhang, 3793; Wenzhou, C. R. Ching 2039 (IBSC, A). — VIETNAM. Tonkin; Ha Nam Ninh, R. B. H. Bon 70 (P).

*Ardisia pseudocrispa* Pitard in Lecomte, Fl. Gen. Indo-Chine 3: 871. 1930. (subg. *Crispardisia*). Type; Vietnam, Hanoi, Khiem-Khe, au mont Goc-ba-go, Bon 2826 (lecto-, P, here designated).

*Ardisia corymbifera* Mez var. *tuberifera* C. Chen in Acta Phytotax. Sin. 16: 80. 1978. syn. nov. Type; China, Guangxi, Lungzhou, S. H. Chun 13096 (holo-, IBSC).

A distinctive species, in many ways similar to *A. crenata* Sims, from which it differs mainly in the leaves being subentire and having very slender and obscure lateral nerves, which do not form an intramarginal nerve. Its resemblance to *A. corymbifera* Mez is superficial; the indumentum and the structure of the inflorescence are quite different in these two species.

Additional material. — CHINA. Guangxi; Daxin Xian, Y. H. Zhang & S. L. Wang 3956; Debao Xian, Bose Exped. 1555; Lungzhou Xian, C. S. Chung 91039, S. H. Chun 13406, 13857. — VIETNAM. Tonkin; Balansa 1071 (P), 3929 (P), Poilane 16472 (P).

*Ardisia tsangii* Walker in Journ. Arn. Arb. 23: 353. 1942. Fig. 2; a—b. (subg. *Crispardisia*). Type; Vietnam, Tonkin, Tien-Yen, Hoyung Shan, W. T. Tsang 30707 (holo-, A. iso-, US, P, IBSC).

*Ardisia kwangtungensis* Walker in Journ. Arn. Arb. 23: 349. 1942. Fig. 1; a—b. Type; China, Guangxi, Dong-xin Xian, W. T. Tsang 26628 (holo-, A, iso-, US, P, IBSC).

The types of these two species are identical and both were collected at the same area, on the border of south China and Vietnam. The type locality of *A. kwangtungensis* now is in Guangxi province and the species does not occur in Guangdong (Kwangtung), so I prefer to use the specific epithet "tsangii".

Additional material. — CHINA. Guangxi; Dongxing Xian, Shi wan da Shan, in thin forest, alt. 169m, S. H. Chun 4862. — VIETNAM. Tonkin, Tien-yen, W. T. Tsang 27487 (P); Tonkin, Balansa 1067 (P), 1068 (P), 1070a (P), 3920 (P); Tonkin, B. Bois 248 (P).

*Ardisia malipoensis* C. M. Hu, sp. nov. (subg. *Crispardisia*), Fig. 3. Type; China, Yunnan, Malipo Xian, in broad-leaf evergreen forest, K. M. Feng 22781 (holo-, IBSC).

Species affinis *A. merrillii* Walker, sed inflorescentia pauciflora, ex umbellis persaepe bifloris-corymbosim composita, petalis roseo-purpureis differt.

Frutex 0.4—1m altus, ramulis subteretibus initio sparsim minute ferrugineo-lepidato-puberulis. Folia elliptica, 6—11cm longa et 2.5—4.5cm lata, apice acuminata, basi cuneata, margine subintegra, glandulis marginalibus obscure instructa, sicca firme chartacea, supra



glabra, subtus sparsim lepidoto-puberula, costa supra plana, subtus elevata, nervis lateralibus 5—8-paribus prominenter elevatis, curvato-ascendentibus, intra marginem 5—8mm anastomosantibus, rete venularum utrinque prominulo, nervo colectivo c. 1mm intra marginem conspicuo; petioli 5—8mm longi, plus minusve ferrugineo-lepidoto-puberuli. Inflorescentiae ex umbellis nominaliter bifloris corymbosim compositae, in apicibus ramulorum specialium floriferorum 3.5—6cm longorum prope apicem 2-foliatorum instructorum; pedunculi 3—5mm longi, ramis 1—3, glabris saepe atro-punctatis, 6—12mm longis; bractae 2, ovato-ellipticae c. 2mm longae, atro-punctatae; pediceli 5—9mm longi. Sepala basi breviter coalita, ovato-elliptica, 2—2.5mm longa, apice obtusa vel rotundata, atro-punctata. Corolla roseo-purpurea, fere ad basin lobata, lobis ovatis c. 3mm longis, apice plus minusve acuminatis, atro-punctatis. Antherae ovato-lanceolatae vix 2mm longae, dorso minute punctatae; filamenta inconspicua. Ovarium ovoideum; stylus c. 2mm longus. Drupa globosa c. 6mm diam.

This species is rather similar to *A. merrillii* Walker in the conspicuously raised nerves of leaves, but it is readily distinguished by the few-flowered inflorescence and the reddish purple flowers.

Additional material. — CHINA. Yunnan; Malipo Xian, Laojun Shan, alt. 1500—1700m, in mixed forest K. M. Feng 13805 (PE).

*Ardisia crassirhiza* Z. X. Li et F. W. Xing, sp. nov. (subg. *Crispardisia*). Fig. 4. Type: China, Hainan, Changjiang Xian, Bawang Ling, Wangxia, in thin forest on calcareous formations, alt. 700m, Z. X. Li & F. W. Xing 4180 (holo-, IBSC).

Species affinis *A. crassinervis* Walker, a qua imprimis differt radicibus crassis submoniliformi-tuberculosis, sepalis oblongo-ellipticis, haud imbricatis.

Frutex c. 1m altus, radicibus fasciculatis, carnosis, submoniliformi-tuberculosis ad 2cm diam. Caulis erectus, partibus novellis plus minusve glanduloso-puberulis. Folia anguste elliptica vel elliptico-obovata, 2.5—4.5cm longa et 1.5cm lata, basi cuneata, apice acuta, margine leviter recurva, crenis inconspicuis et glandulis marginalibus utrinque 2—4 praedita, chartacea, utrinque glabra, non vel obscure punctata, nervis lateralibus 4—6-paribus tenuibus, prope marginem junctis, venulis invisibilibus; petioli 3—4mm longi. Inflorescentiae simplices, subumbellatae, (3—)8—10-florae, in apicibus ramulorum specialium lateralium floriferorum 4—8cm longorum, apicem versus foliis paucis (4—6) instructorum; pediceli 3—5mm longi. Flores 8—10mm longi. Sepala basi breviter coalita, oblongo-elliptica, c. 4mm longa, apice subrotundata vel obtusa, haud imbricata. Corolla ante anthesin roseo-purpurea, sub anthesi albida, tubo c. 1mm longo, lobis ovato-lanceolatis, c. 8mm longis, apice acutis vel obtusiusculis, sparse atro-punctatis. Antherae lanceolatae 6mm longae, dorso atro-punctatae; filamenta vix 0.5mm longa. Ovarium ovoideum; stylus gracilis c. 7mm longus. Drupa globosa, 4—4.5mm diam, obscure punctata.

The new species strikingly resembles *A. crassinervis* Walker in aspect, but may be distinguished by its fleshy submoniliform roots and its sepals being oblong-elliptic and not imbricated at base.

Additional material. — CHINA. Hainan; Changjiang Xian, Bawang Ling, Wangxia, alt. 700m, C. M. Hu 9002.

*Maesa acuminatissima* Merr. in Philip. Journ. Sci. 23, 257. 1923 et in Journ. Arn. Arb. 20, 349. 1939. (Sect. *Maesa*). Type: China, Hainan, five finger mountains, in heavily wooded ravine, alt. 1400m, McClure 9454 (holo-, PNH, iso-, US).

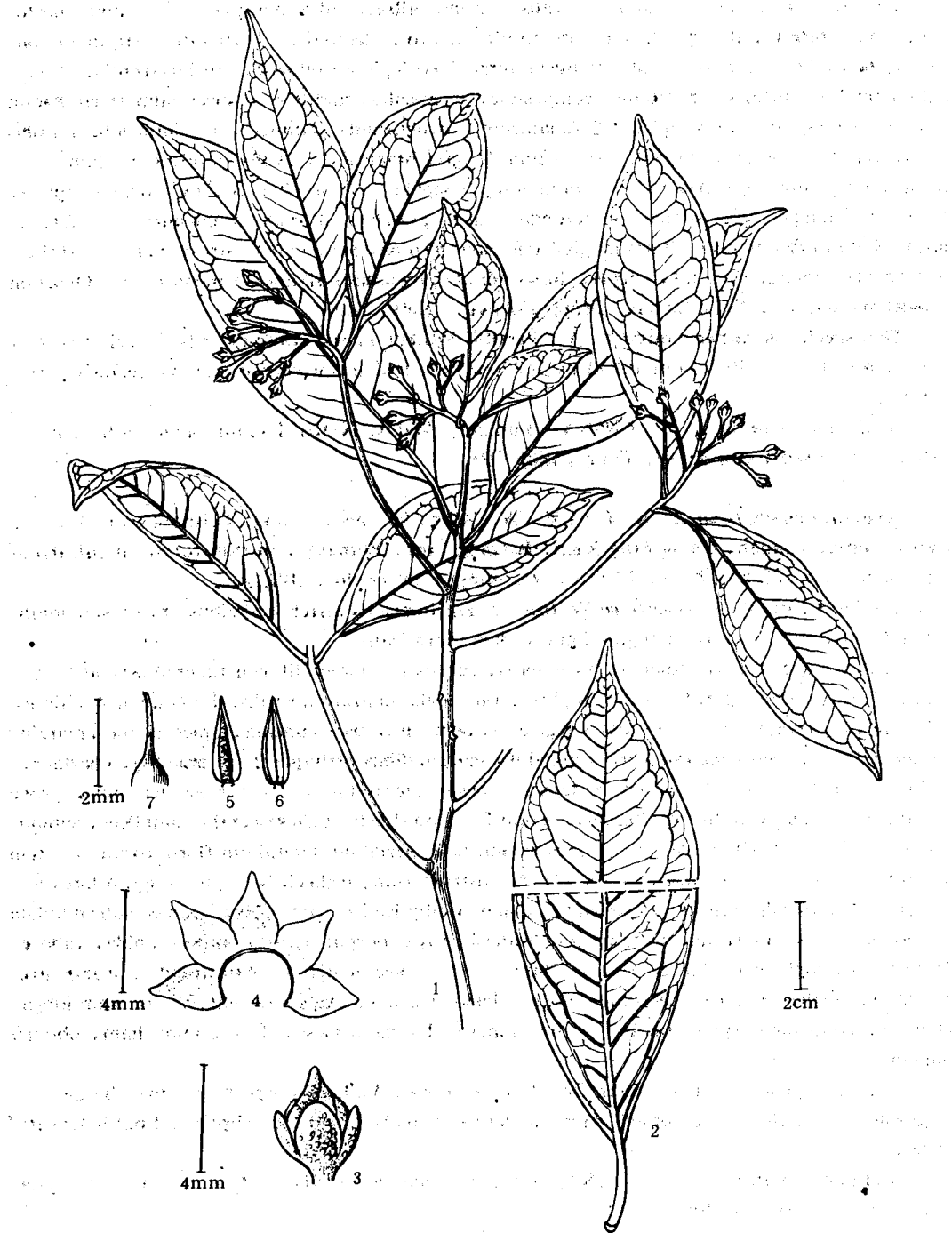


Fig. 3 *Ardisia malipoensis* C. M. Hu (K. M. Feng 22781).

1. Flowering branch; 2. A leaf showing the venation; 3. Floral bud; 4. Corolla opened up; 5—6. Stamens; 7. Pistil.

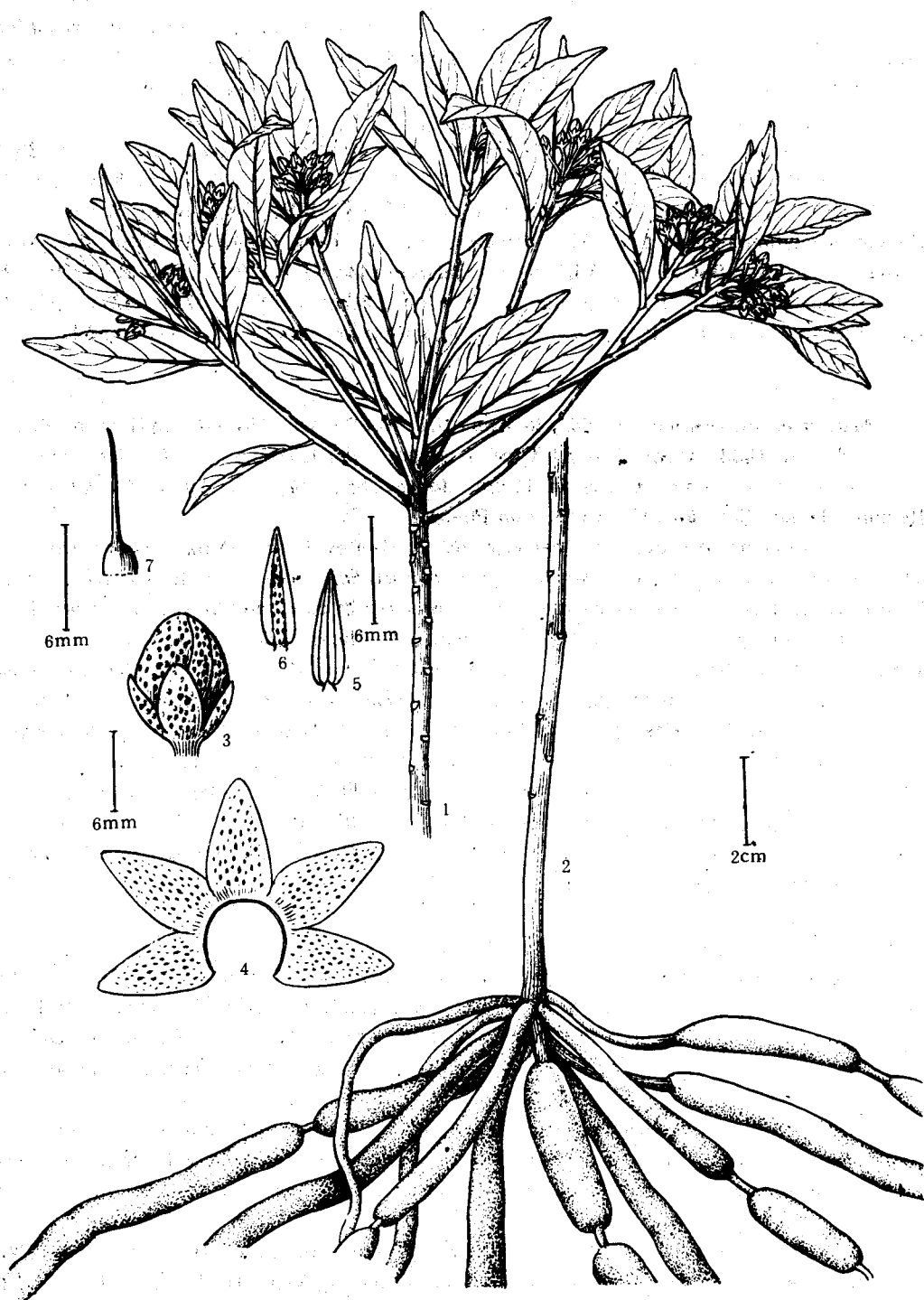


Fig. 4 *Ardisia crassirhiza* Z. X. Li et F. W. Xing (Z. X. Li & F. W. Xing 4108).  
 1—2. Habit, 3. Floral bud, 4. Corolla opened up, 5—6. Stamens, 7. Pistil.

*Maesa striata* Mez var. *opaca* Pitard in Lecomte, Fl. Gen. Indo-Chine 3; 784. Fig. 88; 2—4. 1930. Type; Vietnam, Bac Thai, Eberhardt 3933 (lecto-, P, here designated).

E. D. Merrill (1939) correctly reduced *A. striata* var. *opaca* Pitard to *A. acuminatissima* Merr., But it seems to be overlooked by subsequent authors. Although J. Pitard described it as a variety of *A. striata* Mez, this plant is much closer to *A. ramentacea* (Roxb.) A. DC., but can be easily distinguished from that species by its lanceolate, membranaceous, caudate-acuminate leaves and its slender elongated pedicels.

Additional material. — CHINA. Hainan; S. H. Chun 10809, S. K. Lau 25724, 26283, P. M. Chang & Y. N. Chen 7696, G. A. Fu 602, H. Y. Liang 62371, 62699, 63197, 65275, Q. Huang 318, Tsang & Fung 568 (A, IBSC), C. Wang 35358, 36055, Hainan vegetation Exped, 294, 675. Guangxi; C. C. Chang 12249, T. Chen 450, W. T. Tsang 24715 (A, IBSC). — VIETNAM; Balansa 1445 (P), 2992 (P), 2993 (P), 2994 (P), 2995 (P), 2997 (P), Chevalier 37503 (P), Eberhardt 3683, 3776, 4379 (P), 4504 (P), Fleury 32170 (P), Petelot 6311 (P), Sino-Vietnam Exped. 521, 947, 1964, 1967.

*Maesa membranacea* A. DC, in Ann. Sci. Nat. 2 Ser. 16; 80. 1841 et in DC., Prodr. 8; 78. 1844. (Sect. *Maesa*) Type; Vietnam, Gaudichaud s. n. (G, not seen).

*Maesa laxiflora* sensu Walker in Philip. Journ. Sci. 73; 42. 1940; C. Chen in Fl. Reipubl. Popul. Sin. 58; 15. 1979. non Pitard.

The specimens cited under the name of *M. laxiflora* by E. H. Walker were misidentified. The true *M. laxiflora* Pitard is a species confined to Vietnam, from which this species can be easily distinguished by its leaves being rounded and broadest at base, and by the longer petioles.

Additional material. — CHINA. Hainan; Y. Zhong 3931, F. C. How 72010 (A, IBSC), L. Tang 2946, 3334, H. Y. Liang 64708 (Y, IBSC), C. I. Lei 256 (Y, IBSC), 393 (Y, IBSC). — VIETNAM. Tourane, Gaudichaud 296 (P); Dong Nai, L. Pierre 903a (P, IBSC), Harmand 1948 (P); mt. Bavi, J. & M. S. Clemens 3793 (P); Quang Nam-Da Nang, Eberhardt 2609 (P); Bac Thai, Eberhardt 3896 (P), 2005 (P), 2625 (P); Binh Tri Thien, Eberhardt, 2590 (P), 2453 (P, IBSC); Binh Tri Thien, Poilane 1087 (P); Gia Lai-Cong Tum Poilane 32955a (P); Lam Dong, Poilane 24504 (P); Ba Na, Pres Tourane, Poilane 29179 (P, IBSC); Phy Khanh, C. B. Robison 1242 (P); without precise locality, Bon 1376 (P). CAMBOLDIA. Kandal, Muller 757 (P).

*Maesa consanguinea* Merr var. *confusa* var. nov. (Sect. *Maesa*). Type; China. Hainan, Bao-ting Xian, Tong-za Mao-an, 23 Feb., 1957. L. Tang 3789 (holo-, IBSC).

*Maesa membranacea* sensu Walker in Philip. Journ. Sci. 73; 38. 1940, non A. DC.

A var. *consanguinea* foliis plerumque late ellipticis, margine densius et manifeste denticulatis differt.

Differs from var. *consanguinea* in the leaves being always broadly elliptic and distinctly denticulate on the margin. In the shape of leaves it scarcely differs from *Maesa balañsae* Mez, except by being membranaceous in texture and having copious distinct nervilliform lines (secretory canals).

Additional material. — CHINA. Hainan; Baoting Xian, F. C. How 72408 (A, IBSC); Ding'an Xian, H. Y. Liang 64410 (IBSC, US); Dongfang Xian, H. Y. Liang 64897 (IBSC, US); Ledong Xian, Q. Huang 304, 314, 82—0294; Lingshui Xian, N. K. Chun & C. L. Tso 43942 (IBSC, US); Qiongzong Xian, S. H. Chun 10897; Sanya Shi, G. A. Fu 44, C. Wang 34513 (IBSC, US).

***Maesa chisia* Buch.-Ham. ex D. Don, Prodr, Fl. Nepal, 148. 1825 (Sect. *Maesa*).  
Type: Nepal, Buch.-Ham. s. n. (BM, not seen).**

***Maesa prodigiosa* C. Chen in Acta Phytotax. Sin. 16 (3): 79. Fig. 1; 1—3. 1978. syn.  
nov. Type: Xizang, Neh-la-mu, in thin forest, alt. 578—2185m. Y. T. Chang et K. Y.  
Lang 3073 (holo-, PE).**

This species is widely distributed in northern Myanmar, NE India, and extend from Nepal  
to the border area of south Xizang.

Additional material. —MYANMAR. Griffith 3553 (P), Helfer 127 (P).