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TAXONOMIC NOTES ON SOME MYRTACEAE OF CHINA

CHEN JIE (CHEN CHEIH)¹ AND LYN A. CRAVEN^{2,3}

Abstract. One new species, one new variety, and one new combination at the rank of variety are proposed for three taxa of Chinese *Syzygium*: *S. bubengense*, *S. buxifolium* var. *verticillatum*, and *S. jambos* var. *tripinnatum*. The genus *Pyrenocarpa* is reduced to *Decaspermum*, with one new name proposed: *D. teretis*.

Keywords: *Syzygium*, *Decaspermum*, *Pyrenocarpa*, Myrtaceae, China.

Research toward preparation of an account of Myrtaceae for the *Flora of China* has resulted in the conclusion by CJ that two new taxa of *Syzygium* Gaertner should be recognized and that a third taxon, *S. tripinnatum* (Blanco) Merrill, is more appropriately treated as a variety of the widespread *S. jambos* (Linnaeus) Alston. *Pyrenocarpa* Hung T. Chang & R. H. Miao was established for two species defined from a formerly more broadly defined species, that is, *Decaspermum hainanense* (Merrill) Merrill. The name *Pyrenocarpa* apparently is invalid: a type species was not designated by Chang and Miao (1975). The morphological differences between *Decaspermum* J. R. Forster & G. Forster and *Pyrenocarpa* are considered by LAC to be relatively minor, and the two genera are combined.

Syzygium bubengense C. Chen, *sp. nov.* TYPE: CHINA. Yunnan: Xishuangbanna, Bubeng, alt. 800 m, mixed forest, 30 April 1982, *Nat-rang Expedition 31949* (Holotype: A). Fig. 1.

Affinis S. nanpingensi Y. Y. Qian *a quo foliis petiolisque qui brevioribus; cymosipaniculis longioribus (5–7 cm longis); hypanthiis late infundibularis, glandulosipunctatis, lobis late brevitrangulatis, ca. 1 mm longis, 1.5 mm latis; petalis ovate semirotundis, 2–3 mm longis, 4 mm latis, glandulosipunctatis; staminibus ad 8 mm longis differt.*

Trees, ca. 8 m tall; branchlets tetragonous, later becoming terete, bark rufescent, shed in bands. **Leaves** chartaceous, oblong to elliptic, 8.0–10.5 × 3.5–4.5 cm, apex acuminate, acumens 5–10 mm long, base broadly cuneate, adaxial surface brown in dried state, dull, inconspicuously punctate; primary veins prominent, on abaxial surface pale greenish-brown, nerves prominent, 17- to 24-paired, petiole 5–8 mm long. **Cymose-panicles** 5–7 cm long, axillary; branchlets 5–8 mm long. Buds obconical, ca. 8 mm long, 5 mm diam., apex globose. Hypanthia broadly infundibular, glandular punctate, stipe 2–3 mm long; calyx lobes 4(–5), shortly triangular, ca. 1 mm long, 1.5 mm wide; petals 4(–5), free (i.e., not coherent), ovately half-rounded, 2–3 mm long, 4 mm wide, glandular punctate; stamens numerous, up to 8 mm long; style as long as stamens or shorter.

Distribution and Ecology: known only from the type collection. Flowers in April–May.

This species is similar to *Syzygium nanpingense* Y. Y. Qian, from which it can be distinguished on the basis of the differences given in the Latin diagnosis.

Syzygium buxifolium Hooker & Arnott var. *verticillatum* C. Chen, *var. nov.* TYPE: CHINA. Guangxi: Shan Chuen to Chuen Yuen, 12 July 1937, *T.S. Tsoong 83404* (Holotype: A).

Differt a S. buxifolio Hooker & Arnott *var. buxifolio foliis plerumque 3-verticillatis preas*

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FIGURE 1. *Syzygium bubengense* C. Chen (Holotype: A).

sertim ad apicem ramulia; laminis ellipticis ad rotundis, interdum obovatis, 1–2 × 0.5–1.0 cm, nonnumquam 2.5 cm longis, 2.2 cm latis, apice late acutis obtusis vel rotundatis, base cuneatis ad late cuneatis, pagina adaxiali venis interdum impressis.

Branchlets 6-angled. **Leaves** ternate especially apically on branchlets; leaf blade elliptic, orbicular, or sometimes obovate, 1.0–2.0(–2.5) × 0.5–1.0(–2.2) cm, secondary and intramarginal veins adaxially usually impressed, base cuneate to broadly cuneate, apex broadly acute, obtuse, or rounded.

Distribution and Ecology: scrub, dense forests, under pine woods, woodlands, mixed forests, on mountain slopes, hill tops, in valleys, ravines; 200–1200 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangxi.

Additional specimens examined: CHINA. Anhui: Wuyuan, 4 November 1925, R. C. Ching 3306 (A); Lishan, 3 August 1925, R. C. Ching 3106 (A). Guangdong: road Ren Hua to Beh Shi Ling, 10 December 1927, W. Y. Chun 5620 (A); Bei Shen and Nan Shung, 11 December 1927, W. Y. Chun 5688 (A); Nanxiong, 14 December 1927, W. Y. Chun 5712 (A); Xinyi, 1 December 1934, C. Wang 38168 (A); Lo Chi Chooi, Lin district, Ng Chung Lam, 14 October 1918, *Herb. no.* 3462 (A); Lianxian, Yao-Shan, 25 October–4 November 1930, C. L. Tso 22615 (A); Wengyuan, 19 October 1935, S. K. Lau 24934 (A); Xinyi, 14 July–20 August 1931, C. Wang 31075 (A); locality unknown, 19 November 1930 S. P. Ko 50956 (A); Lechang, 17 November 1931, S. P. Ko 51898 (A); Ruyuen, 10 November 1933, S. P. Ko 53567 (A); North River region, 11 November 1931–4 August 1932, N. K. Chun 42850 (A); Meixian, 4–31 August 1932, W. T. Tsang 21513 (A). Guangxi: Shan Chuen to Chuen Yuen, 12 July 1937, T. S. Tsoong 83404 (A); Yaoshan, 14 October 1936, C. Wang 40110 (A). Guizhou: Guiyang (Kutschou) and Liping, 21–23 July 1917, H. Handel-Mazzetti 284 (*Diar. Nr.* 2146, 59, 60) (A). Hunan: Changning, (I-Chia-Ao), 30 April 1935, C. S. Fan & Y. Y. Li 116 (A); Changsha, 25 September 1917, H. Handel-Mazzetti 455 (*Diar. Nr.* 2269) (A). Jiangxi: Quannan, 28–30 July 1934, S. K. Lau 3931 (A); Guling, 21 October 1922, W. Y. Chun 4302 (A); 8 January

1909, E. H. Wilson 1576 (A); Nanchang, western hills, October 1929, *Ta-Nan Hsiung* 487 (A); Yifeng, 15 October 1947, Y. K. Hsiung 6412 (A); Hong San (near Kit-tan of S. Jiangxi), June–July 1936, J. L. Gressitt 1553 (A); Huichang, 9 July 1958, C. M. Hu 3303 (A).

Syzygium jambos (Linnaeus) Alston var. *tripinnatum* (Blanco) C. Chen, *comb. nov.*

Basionym: *Myrtus tripinnata* Blanco, *Fl. Filip.* 421. 1837. TYPE: PHILIPPINES. Luzon: Rizal, E. D. Merrill, *Species Blancoanae* 889 (Neotype, here designated: US).

This taxon differs from *S. jambos* (Linnaeus) Alston var. *jambos* in having thinner, chartaceous leaves, longer peduncles ([2.0–]3.0–3.5 cm long), and fruit that are red and ellipsoid when ripe. No type material was preserved by Blanco, and the specimen designated as neotype is from Merrill's series of representative collections (Merrill, 1918) intended to facilitate interpretation of Blanco's work.

Decaspermum J. R. Forster & G. Forster, *Char. Gen. Pl.*, ed. 2, 73. 1776.

Synonym: *Pyrenocarpa* Hung T. Chang & R. H. Miao, *Acta Sci. Nat. Univ. Sunyatseni* 1975: 62. 1975, *nom. inval.*, *syn. nov.*

Decaspermum teretis Craven, *sp. nov.* TYPE: CHINA. Hainan: Yaxian county, S. K. Liou 5797 (Holotype: SYS). [*Pyrenocarpa teretis* Hung T. Chang & R. H. Miao, *Acta Sci. Nat. Univ. Sunyatseni* 1975: 64. 1975, *nom. inval.*]

A. D. hainanense (Merrill) Merrill *ramulis teretis, foliis ellipticis ad obovatis et nervis utroque costae latere 12–15 differt.*

Decaspermum J. R. Forster & G. Forster is a widespread genus occurring from the Andaman Islands, Southeast Asia, and China through Malesia and Northeast Australia to the Southwest Pacific. The genus has been treated taxonomically, essentially throughout its full range, by Scott in a series of three papers (Scott, 1979, 1980, 1985). In a paper apparently not available to Scott, Chang and Miao (1975) segregated a new genus, *Pyrenocarpa* Hung T. Chang & R. H. Miao, from *Decaspermum*. The name *Pyrenocarpa* is invalid under the ICBN (Greuter et al., 2000) as

a type was not designated by Chang and Miao, and apparently it has not since been validated. Chang and Miao's generic concepts were based on specimens included in *D. hainanense* (Merrill) Merrill and, in addition to the species *P. hainanensis* (Merrill) Hung T. Chang & R. H. Miao, they assigned some of the *hainanense* specimens to a second species of *Pyrenocarpa*, that is, *P. teretis* Hung T. Chang & R. H. Miao. *Pyrenocarpa* was established on the basis of its possessing an 11- to 13-loculed ovary and a solitary ovule in each locule. However, 9 locules have been observed by LAC in a specimen of *P. hainanensis*, namely, *F.C. How 71123*

(A). Given the variation in these characters elsewhere in *Decaspermum*, that is, ovary 3- to 10-loculed, ovules 2–4 per locule (*vide* Scott, 1979, 1980, 1985), it is considered that the two Chinese species assigned to *Pyrenocarpa* should be placed within *Decaspermum*. As the generic name *Pyrenocarpa* was invalidly published, the two species names, that is, *P. hainanensis* and *P. teretis*, are also invalid under the ICBN (Greuter et al., 2000). A new name, *D. teretis*, is proposed above in *Decaspermum* for Chang and Miao's new *Pyrenocarpa* species, with the same type and the same specific circumscription.

LITERATURE CITED

- CHANG, H. T., AND R. H. MIAO. 1975. Genus novum Myrtacearum Sinensium. Acta Sci. Nat. Univ. Sunyatseni 1975: 62–65.
- GREUTER, W., J. MCNEILL, F. R. BARRIE, H. M. BURDET, V. DEMOULIN, T. S. FILGUEIRAS, D. NICOLSON, P. C. SILVA, J. E. SKOG, P. TREHANE, J. N. TURLAND, AND P. M. HAWKSWORTH. 2000. *International Code of Botanical Nomenclature (Saint Louis Code)*. Adopted by the 16th International Botanical Congress, St. Louis, Missouri, July–August 1999. Regnum Vegetabile 138. Koeltz Scientific Books, Königstein, Germany.
- MERRILL, E. D. 1918. *Species Blancoanae*. Bureau of Printing, Manila.
- SCOTT, A. J. 1979. The Austral-Pacific species of *Decaspermum* (Myrtaceae). Kew Bull. 34: 59–67.
- . 1980. A synopsis of *Decaspermum* (Myrtaceae) in Southeast Asia and China. Kew Bull. 35: 403–411.
- . 1985. *Decaspermum* (Myrtaceae) in New Guinea. Kew Bull. 40: 149–165.