

## A NEW SUBSPECIES OF MALLOTUS OREOPHILUS (EUPHORBIACEAE) FROM SOUTH-CENTRAL CHINA

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*Mallotus oreophilus* subsp. *latifolius* (Euphorbiaceae), which differs from subspecies *oreophilus* in having leaves consistently wider than long, is described as new from Sichuan Province, China.

***Mallotus oreophilus* Muell.-Arg. subsp. *latifolius* Boufford & T. S. Ying, subsp. nov.**

FIGURE

*Mallotus oreophilus similis* sed in foliis latioribus subreniformis vel transverse oblongis differt.

Shrubs or small trees 1.5–13 m tall. Leaves subreniform to oblong, the blades 6–14 cm long, 6.5–20 cm wide, base truncate to very broadly cuneate, apex abruptly short acuminate, upper surface glabrous or with sparse stellate hairs along the main veins, lower surface densely stellate tomentose. Petioles, rachis of inflorescence, flower buds and fruiting capsules densely stellate tomentose. Branchlets glabrescent with stellate hairs.

**TYPE:** China. Sichuan Province: Dujiangyan Municipality (formerly Guan Xian); between Guanmengzi and Guihuashu, upstream from Longxi along the Longxi River, elev. 1120 m, tree ca. 20 m tall, on moist slope, 3 Sep 1988, D. E. Boufford & B. Bartholomew 24496 (holotype, PE; isotypes, A, CAS, HAST, IBSC, KYO, L, TI).

**ADDITIONAL SPECIMENS EXAMINED.** China. SICHUAN: Changning Xian, *Chuanjingyi Team* 0561 (PE); Emei Xian, C. Y. Chiao & C. S. Fan 184 (A), C. L. Chow 6148 (A), W. P. Fang 7842 (PE), 7843 (PE), 7914 (A, PE), 7915 (PE), 12690 (A, PE), 16497 (A), 16640 (PE), 16897 (A), 18863 (A), 18928 (PE), K. C. Kuan 710 (PE), 1521 (PE), *Sino-U. S. S. R. Exped. Team* 1845 (PE), 2472 (PE), T. H. Tu 189 (PE), F. T. Wang 23148 (A, PE), K. H. Yang 54677 (PE), 54897 (PE), 55595 (PE), 56137 (PE); Guan Xian, S. Chang 00525 (PE), Y. S. Liu 1954 (A), S. S. Chien 5692 (A), W. P. Fang 2103 (A), F. T. Wang 20909 (A); Hongya Xian, S. Chang 1723 (PE), T. W. Yao 4060 (PE); Mabian Xian, F. T. Wang 23096 (A); Pingshan Xian, *Chuanjingyi Team* 0607 (PE), 0952 (PE); Tianquan Xian, S. Chang 01762 (PE), *Chuanjingyi Team* 00411 (PE); Ya'an Xian, C. Y. Chiao 2049 (A), T. P. Wang 8494 (PE); Yibin Xian, *Chuanjingyi Team* 1247 (PE); Yingjing Xian, T. W. Yao 3762 (PE).

*Mallotus oreophilus* subsp. *latifolius* differs from the typical subspecies in the shape of the leaf. Subspecies *oreophilus* has the blades ovate to widely ovate, acute to acuminate, and clearly longer than wide; in subspecies *latifolius*

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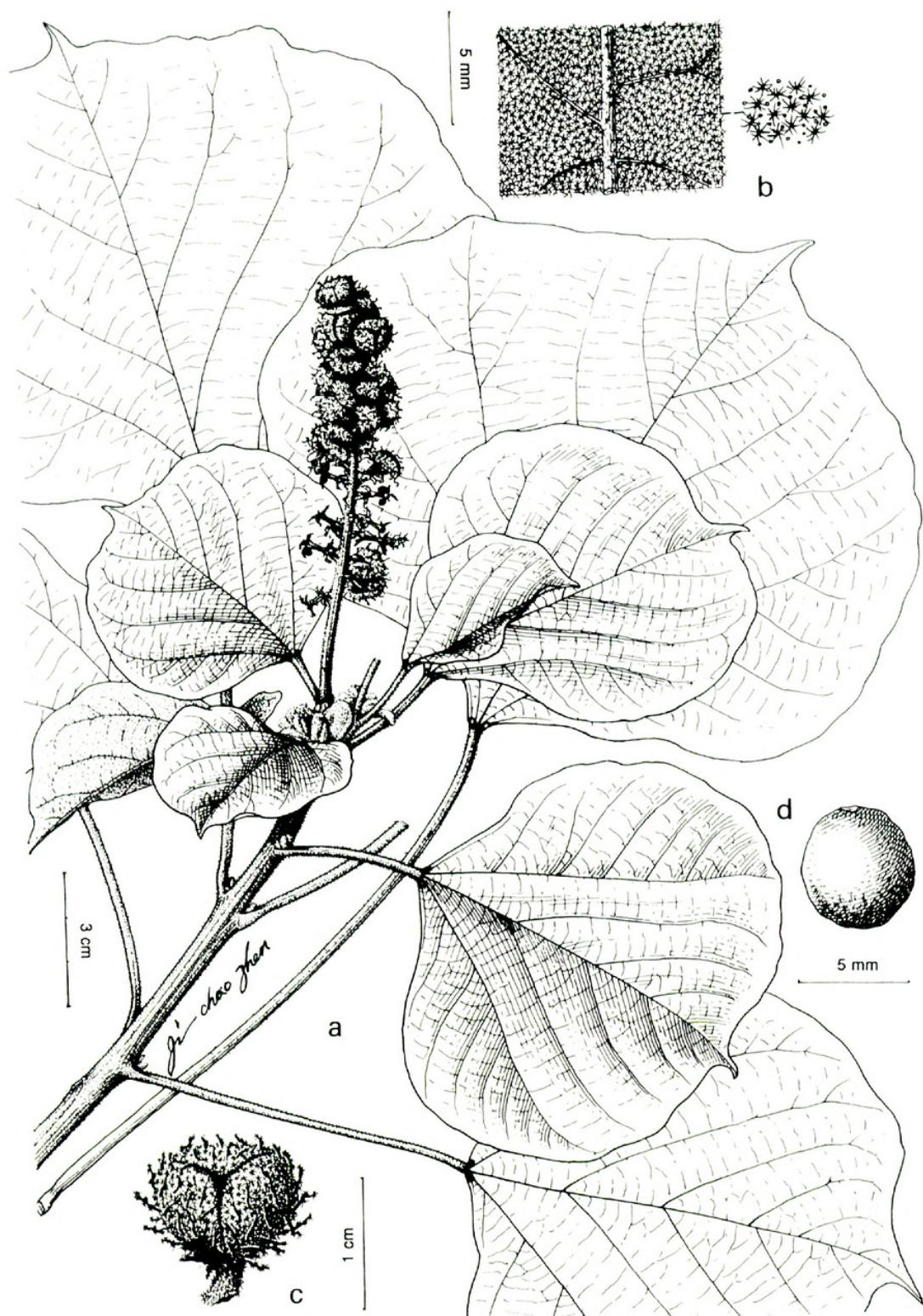


FIGURE. *Mallotus oreophilus* subsp. *latifolius*: a, habit; b, lower surface of leaf showing stellate hairs; c, mature capsule; d, seed. Based on Boufford & Bartholomew 24496 (PE).



Map of China showing distribution of *Mallotus oreophilus* subsp. *latifolius*.

the leaves are subreniform to oblong and consistently wider than long. The relatively short, acuminate leaf tip in subspecies *latifolius* arises abruptly from the otherwise rounded to subtruncate apical edge of the blade making it quite pronounced. Subspecies *latifolius* occurs in the mountains on the southern and western edge of the Sichuan Basin (see MAP). *Mallotus oreophilus* subsp. *oreophilus* ranges from south-central China through the Himalayan region to the eastern Himalaya (Shaw, 1968).

We have seen a single specimen from Yunnan Province, Mengse [Mengzi] Xian (*A. Henry* 10925 (A)), well south of the range of subspecies *latifolius*, that appears intermediate between typical subspecies *oreophilus* and subspecies *latifolius*.

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## LITERATURE CITED

- SHAW, H. K. AIRY. 1968. Notes on Malesian and other Asiatic Euphorbiaceae XC: new or noteworthy species, transferences, etc., in *Mallotus* Lour. Kew Bull. 21: 379–400.



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