

Acalypha chuniana (Euphorbiaceae), a new species from Hainan Province, China

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Acalypha chuniana H.G. Ye, Y.S. Ye, X.S. Qin & F.W. Xing *sp. nova* (Euphorbiaceae), a new species from Hainan Province, China, is described and illustrated. It is compared with the morphologically close *A. siamensis*.

Key words: *Acalypha*, Euphorbiaceae, new species, taxonomy

The genus *Acalypha* (Euphorbiaceae) consists of about 462 species distributed mainly in tropical and subtropical areas, although some species occur in temperate regions (Govaerts *et al.* 2000). There are about 17 species including two cultivated ones of *Acalypha* in China (Qiu *et al.* 1996). During an investigation on the flora of limestone regions in Hainan Province in 2003, a peculiar *Acalypha* specimen was collected by the authors. More material of the same species was gathered in the same province in 2004 and 2005. The specimens were examined in the Herbarium of South China Botanical Garden of the Chinese Academy of Sciences (IBSC). As they do not resemble any hitherto described species, the authors conclude that they represent a new species morphologically somewhat resembling *A. siamensis*.

Acalypha chuniana H.G. Ye, Y.S. Ye, X.S. Qin & F.W. Xing, *sp. nova* (Figs. 1 and 2)

Affinis *A. siamensis*, sed *foliis ellipticis, basi rotundatis vel leviter cordatis, margine crenatis,*

venis retiformibus obscuris, ovariis dense hirsutis, stylis 3 differt.

TYPE: China. Hainan Province, Changjiang County, Qicha Town, Wangxia, on limestone mountains, at alt. 700 m, 15.IV.2004 *Fu-Wu Xing et al.* 14983 (holotype IBSC; isotype TNM). — ADDITIONAL SPECIMENS EXAMINED (paratypes): China. Hainan Province, Changjiang County, Qicha Town, Wangxia, on limestone mountains, 18.VII.2003 *Fu-Wu Xing et al.* 14186 (IBSC); Hainan Province, Dongfang City, Donghe Town, Nanlang Village, Mt. Jiulongshan, on limestone mountains, 8.I.2005 *Xin-Sheng Qin et al.* 735 (IBSC); Hainan Province, Baisha County, Baoding Village, riverside, 22.VII.1936 *Xin-Qi Liu* 27569 (IBSC).

Shrub 1–2.5 m high, branches slender, reddish, densely pilose when young, becoming sparsely pilose with age. Stipules triangular, ca. 1 mm long. Petioles ca. 1–5 mm long, pubescent. Leaves alternate or 2–5 fasciated at cushion-shaped short branches; leaf blades papery or almost leathery, elliptic, 0.8–2.2 cm long, 0.5–1.1 cm broad, base rounded or shallowly cordate, apex obtuse, margin sparsely and shallowly crenate; glabrous, midvein pubescent adaxially, lateral veins 3–4 pairs ascending at ca. 45° to

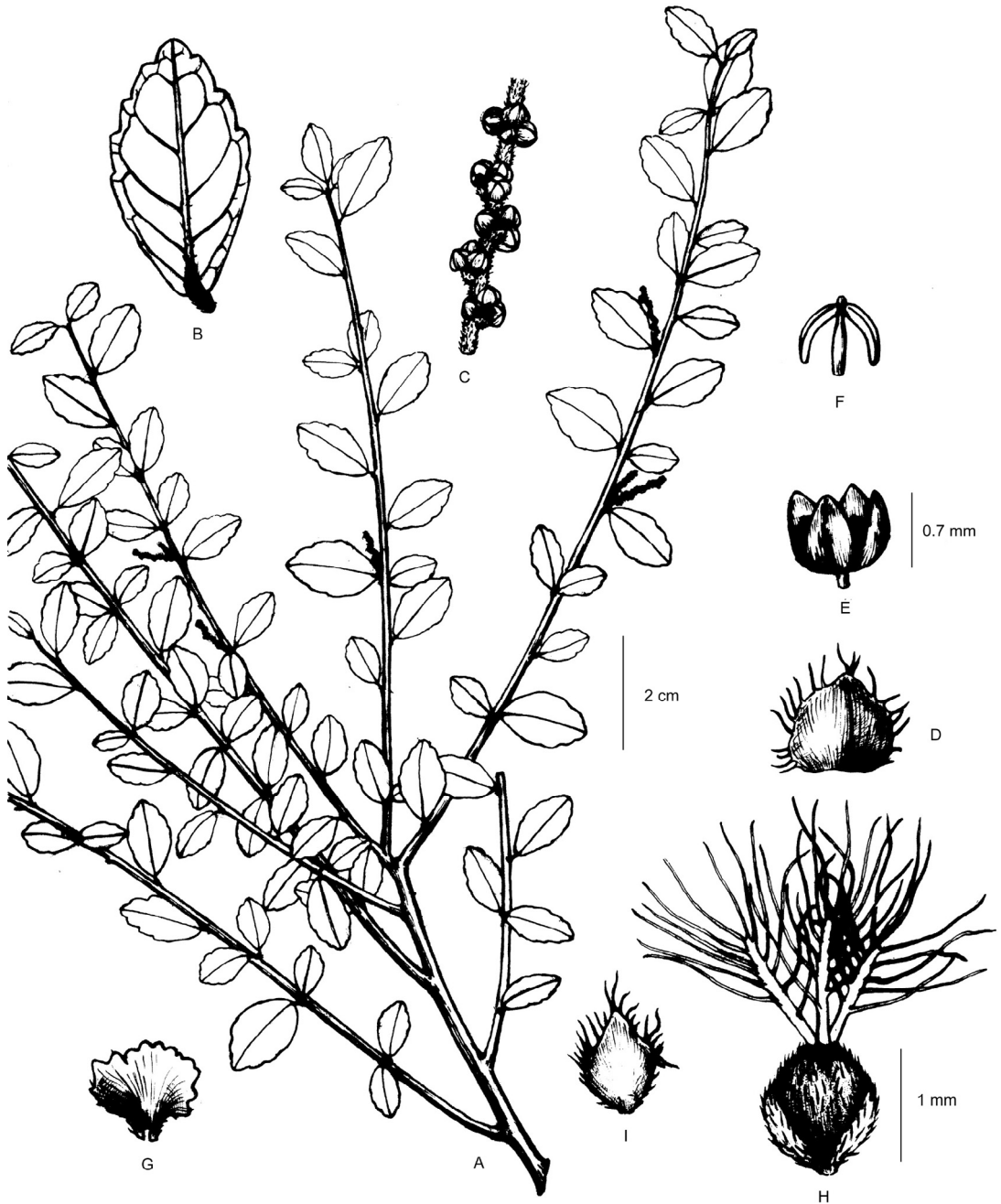


Fig. 1. *Acalypha chuniana* (from holotype, drawn by Liu Yun-Xiao). — **A:** Branch. — **B:** Back of leaf. — **C:** Male inflorescence. — **D:** Bract of male flower. — **E:** Male flower. — **F:** Stamen. — **G:** Bract of female flower. — **H:** Female flower. — **I:** Sepal of female flower.

midvein, reticular veins obscure. Inflorescences spiciform, pubescent, axillary, 0.7–2.5 cm long, androgynous, with 2 or 3 female flowers at base, upper part bearing male flowers, sometimes with

only 1–2 female flowers fascicled. Male flowers minute, bracts deltoid, margin ciliate, ca. 1 mm long; sepals 4, ovate, ca. 0.8 mm long, 0.4 mm wide; stamens 7–8. Female flowers sepals ovate,

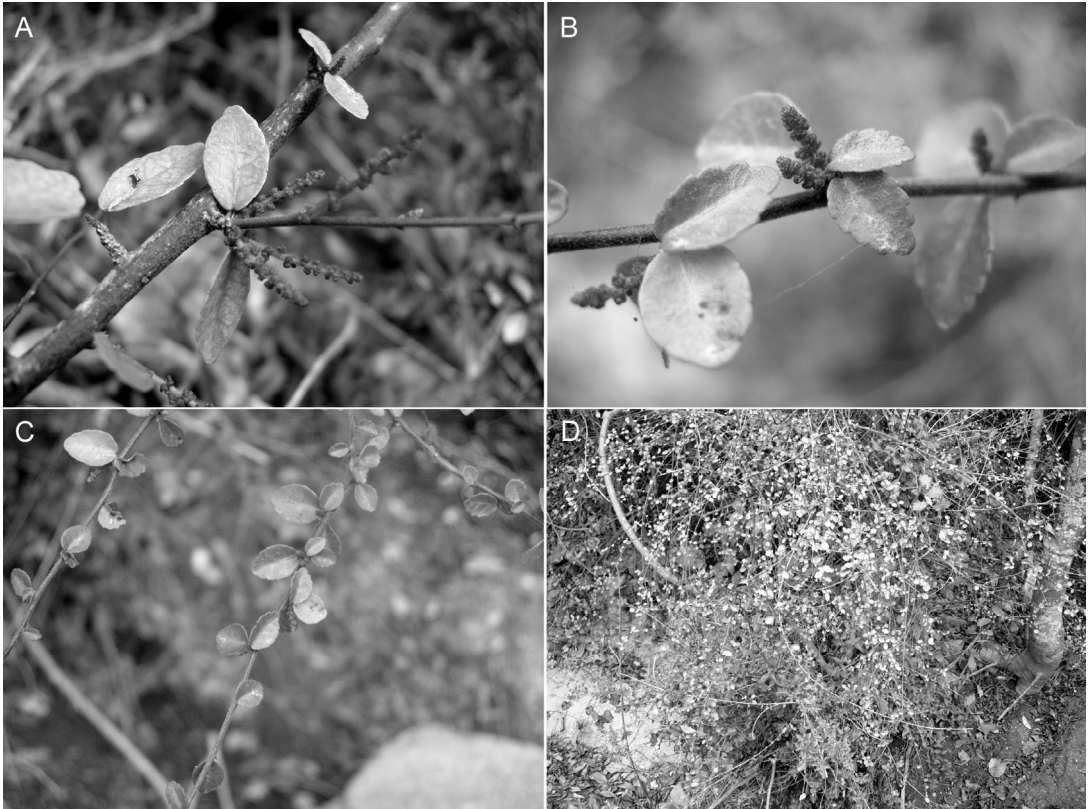


Fig. 2. *Acalypha chuniana* (Photographed by X. S. Qin from Hainan Province). — **A–C:** Branches. — **D:** Habit.

margin ciliate, ca. 1 mm long; bracts flabellate, ca. 1 mm long when young; ovary subglobose, densely hirsute, ca. 0.8 mm in diam.; styles 3, connate at base, filiform and lacinate. Flowering in March–November. Fruits not seen.

Acalypha chuniana is common in sparse forests or on mountaintops in limestone regions in Hainan Province of China, at altitudes between

400 and 1000 m. However, it has been misidentified as *A. siamensis* in China for a long time. A comparison of the two species is given in Table 1. The new species was named after Prof. Chun Woon-Young (1890–1971) to honour his contributions to botanical science in China; he was also the founder and the late director of South China Institute of Botany in Guangzhou.

Table 1. Main differences between *Acalypha chuniana* and *A. siamensis*.

Characters	<i>A. chuniana</i>	<i>A. siamensis</i>
Leaves	0.8–2.2 × 0.5–1.1 cm; papery or almost leathery; elliptic, base rounded or shallowly cordate; margin sparsely and shallowly crenate; veins inconspicuous on both surfaces, lateral veins 3–4 pairs	1.5–10 × 1–5 cm; leathery; rhomboid, base cuneate or subcuneate; margin crenate-serrate; veins prominent at back surface, lateral veins 5–7 pairs
Inflorescences	0.7–2.5 cm long, 2 or 3 female flowers at base	1.5–7 cm long, 3 or 4 female flowers at base
Female flowers	styles 3; ovaries densely hirsute	styles 2; ovaries with long, gland-tipped papillae
Habitat	in sparse forests or on limestone mountaintops	sandy open country or in sparse forests

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References

- Govaerts, R., Frodin, D. G. & Radcliffe-Smith, A. 2000: *World checklist and bibliography of Euphorbiaceae (and Pandaceae)*. — Royal Bot. Gardens, Kew.
- Qiu, H. X., Huang, S. M. & Zhang, Y. T. 1996: Euphorbiaceae.— In: *Delectis florae reipublicae popularis sinicae agendae academiae sinicae edita* (ed.), *Flora Reipublicae Popularis Sinicae*. 44(2): 98–113. Sci. Press, Beijing. [In Chinese].