

A NEW SPECIES OF *SINOJACKIA* HU
(*STYRACACEAE*) FROM HUNAN,
SOUTH CENTRAL CHINA

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The new species *Sinojackia oblongicarpa* C.T. Chen & T.R. Cao (*Styracaceae*) is described and illustrated.

Keywords. Chinese flora, *Sinojackia oblongicarpa*, *Sinojackia sarcocarpa*.

INTRODUCTION

Sinojackia is a genus of about six species endemic to China. During recent surveys concerned with studies on the phylogeography of *Styracaceae*, we visited the localities of most species of the genus. A distinct character, thorns on trunks, was noticed for the first time. This character leads to the virtual exclusion of *Sinojackia dolichocarpa* C.J. Qi which possesses a number of other characters distinct from the present genus (Chen, 1995). In addition, new material was collected. The following new species was discovered in Hunan Province.

***Sinojackia oblongicarpa* C.T. Chen & T.R. Cao, sp. nov. Fig. 1.**

Species fructu carnosio proxima *S. sarcocarpace* Luo, sed habitu fruticoso, floribus minoribus, 1.2–1.5cm longis, fructu oblongo differt.

Type: China, Hunan, Huaihua Co., Hejiatian, in bushes along stream, 260m, 11 xi 1995, C.T. Chen 9511046 (holo. IBSC).

Deciduous shrub, to 4m high; trunk with branching thorns, 2.5–5cm diam. at breast height; bark glabrous, greyish brown. Current year's shoots green, sparsely stellate pubescent; second year's branches reddish brown, glabrous, longitudinal striate, bark vertically fissured and peeling off. *Buds* with orbicular green scales, densely stellate pubescent. *Leaves* alternate, simple, papery; petiole 3–5mm long; blade oblong-elliptic, 6–11 × 2.5–6cm, apex acuminate or acute, base rounded or rarely cuneate, margins remotely glandular serrulate, with 7–9 lateral veins on each side of midrib; young leaves sparsely stellate pubescent abaxially and along veins adaxially, glabrescent, prominently and closely reticulate adaxially, smoother and more shiny green abaxially. *Inflorescences* laxly racemose, 2–5-flowered, 4–8cm long, lateral at nodes on second year's branches; rachis and pedicels slender, stellate pubescent, pedicels jointed, 0.8–3.5(–4)cm long. *Flowers* 1.2–1.5cm long, bisexual, pendulous,

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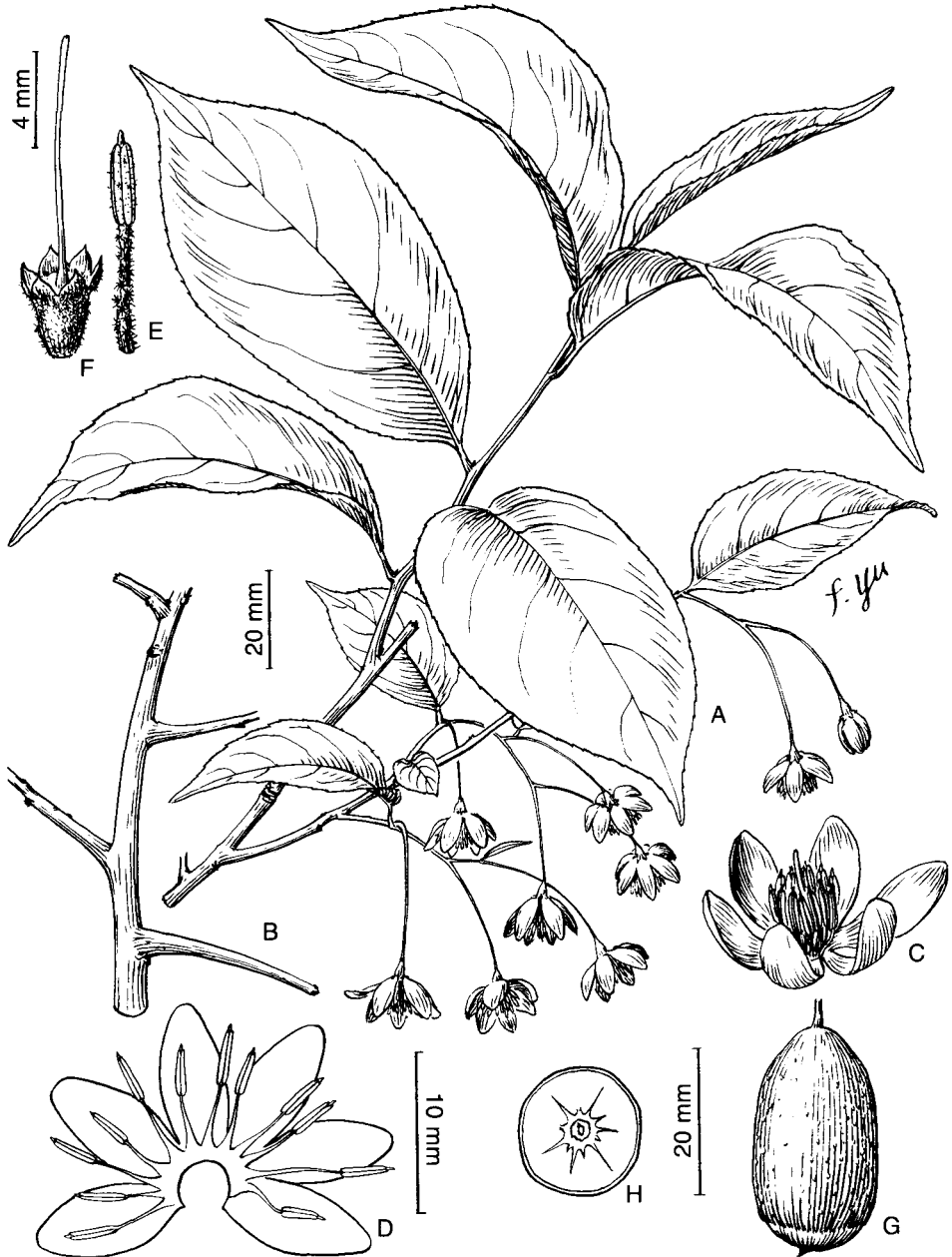


FIG. 1. *Sinojackia oblongicarpa* C.T. Chen & T.R. Cao. A, flowering branch; B, branching thorn; C, flower; D, opened corolla showing androecium; E, stamen; F, calyx and style; G, fruit; H, cross-section of fruit. Scales: A & B, 20mm; C & D, 10mm; E & F, 4mm; G & H, 2cm.

stellate pubescent on most parts, the basal 1–2 in each inflorescence subtended by a leafy bract; bracts with petiole 1–2(–4)mm long, blade 1.5–4(–5.5)cm long, base rounded, subcordate or broadly cuneate; uppermost flowers with a small lanceolate bract adnate to pedicel, rarely ebracteate. *Calyx* densely stellate pubescent, (5–)6(–7)-toothed; teeth triangular, 0.8–1.5mm long, 0.5–1mm wide at base. *Corolla* white, deeply (5–)6-parted, lobes imbricate, elliptic or oblong-lanceolate, 9–12mm long, 5–6mm wide. *Stamens* erect, (10–)12, unequal, 8–10mm long; filaments curved, slightly arcuate, stellate pubescent, shortly united at base; anthers oblong, longitudinally dehiscent, connective shortly produced. *Ovary* inferior, 4-locular; ovules axile, 8 in each loculus, biseriate, most of which usually undeveloped; style terminal, slender, glabrous, 9–11mm long; stigma obscurely 3-lobed. *Fruit* indehiscent, oblong, reddish brown, 2.5–3.5cm long, 1.6–2cm diam., apex conical acute or obtuse, short-beaked, 0.5–0.7cm long, rounded at base; exocarp thin, rarely stellate pubescent; mesocarp fleshy, thickened to 5–6mm, when dry wrinkled, corky, soft or hard; endocarp bony, 6- to 12-gonal in cross-section; seed solitary, c.1.5cm long, seed coat smooth. Fruiting pedicels 1.5–3cm long. *Flowering* March–April.

Sinojackia oblongicarpa is similar to *S. sarcocarpa* Luo in having fleshy fruits, but can be distinguished by its shrubby habit, smaller flowers (1.2–1.5cm long) and oblong fruits. *S. sarcocarpa* is a tree with larger flowers (1.5–2cm long) and ovoid-oblong or subglobose fruits.

Sinojackia oblongicarpa is a very rare and noteworthy species confined to streamsides in a small valley in W Hunan, S Central China; geographically it is vicarious to *S. sarcocarpa* Luo in Sichuan, W China. It is of potential value because of its snowy white flowers, and its mature fleshy fruit is eaten by birds. As the species occurs only by stream- or riversides, its seeds must be disseminated by water rather than by birds. The hard, bony endocarp would seem to make germination of the seed very difficult, which may be one of the reasons for the rarity of this species and of others in the genus.

Additional specimens examined. CHINA. Hunan: Huaihua Co., in bushes along stream, 260m, 22 iv 1995, C.T. Chen 9504001 (IBSC); same locality, 200–210m, 30 vii 1990, T.L. Cao 90066 (CSFI).

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