

Research paper

Drymaria villosa Cham. & Schldl. (Caryophyllaceae), a Newly Naturalized Plant in Taiwan

Tian-Chuan Hsu¹ Shih-Wen Chung^{2,*}

【Abstract】 *Drymaria villosa* Cham. & Schldl. (Caryophyllaceae) is recently recognized from northern and central Taiwan as a newly naturalized plant. It is a newly naturalized species as a potentially aggressive weed in Taiwan. Description, illustration and distribution map of this species is provided. A key to the genus *Drymaria* in Taiwan is also given. In outline, *Drymaria villosa* Cham. & Schldl. is similar to *D. cordata* (L.) Willd. ex Roem. & Schult. They are broad-ovate to reniform leaf blade, but differs in stems and leaves pilose.

【Key words】 Caryophyllaceae, *Drymaria villosa*, naturalized plant, flora, Taiwan.

研究報告

臺灣新歸化植物：毛荷蓮豆草

許天銓¹ 鐘詩文^{2,*}

【摘要】 近年作者於台灣北部及中部發現之新歸化植物毛荷蓮豆草。此植物為具有潛在危害的農田雜草，本文提供其形態描述、圖片及分布圖，及台灣荷蓮豆草屬之檢索表以資辨識。它與荷蓮豆草的葉皆是寬卵形至腎形，但其莖與葉具毛狀物。

【關鍵詞】 石竹科、毛荷蓮豆草、歸化植物、植物誌、臺灣。

INTRODUCTION

The genus *Drymaria* (Caryophyllaceae) comprises about 48 species native in Central to South America and few widespread in the Old

World tropics (Lu & Gilbert, 2001). *D. cordata* Willd. ex Roem. & Schult. (syn. *Drymaria diandra* Bl.), the only species recorded in Taiwan previously (Lu & Gilbert, 2001; Mizushima,

1. 國立清華大學，30013新竹市光復路二段101號

Institute of Molecular & Cellular Biology, National Tsing Hua University, No. 101, Section 2, Kuang-Fu Rd., Hsinchu 30013, Taiwan

2. 行政院農委會林業試驗所，10066台北市南海路53號

Botanic Garden Division, Taiwan Forest Research Institute, No. 53, Nanhai Rd., Taipei 10066, Taiwan

* 通訊作者，10066台北市南海路53號

Botanic Garden Division, Taiwan Forest Research Institute, No. 53, Nanhai Rd., Taipei 10066, Taiwan

Tel: +886-2-23039978 ext.2705. Fax: +886-2-23076220.

e-mail: biflora@gmail.com

1957; Ying, 1996), is possibly introduced in 1900s (Chen, 2008) and has well established its wild population throughout the island. During our recent field survey, another *Drymaria* species *D. villosa* Cham. & Schltld. were found naturalized in northern and central Taiwan. It is possibly introduced along with horticultural materials because its wild populations were often found in cultivated areas. Herein, description, illustration and a distribution map of *D. villosa* is presented. A key to the *Drymaria* species in Taiwan is also given here in aid for identification.

Key to *Drymaria* species in Taiwan:

1. Stems and leaves glabrous or minutely papillose; leaves 1.5-2.5 cm long; petals shorter than sepals.....*D. cordata*
1. Stems and leaves pilose; leaves 0.5-1.3 cm long; petals subequaling to or longer than sepals.....*D. villosa*

INTRODUCTION

Drymaria villosa Cham. & Schltld., *Linnaea* 5: 232. 1830; Duke, *Ann. Missouri Bot. Gard.* 48: 253. 1961; Ke, *Fl. Xizang* 1: 659, pl. 227, f. 227(11-17). 1983; Ke, *Fl. Reipubl. Popularis Sin.* 26: 60. 1996; Beaman, *Fl. Nicar.* 590. 2001; Lu & Gilbert, *Fl. China* 6: 5. 2001.

毛荷蓮豆草 Fig. 1-2

Annual herb. Stem branched, slender, pilose.

Stipule slender, 0.5-1.5 mm long. Leaf blade broad-ovate to reniform, 0.5-1.3 cm long and wide, apex acute or mucronate, sparsely pilose on both surfaces, petiole 1-2 mm long. Inflorescence a terminal cyme, peduncle 1-5 cm long, pedicel 0.2-2 cm long, pilose. Sepals 5, ovate-elliptic, ca. 3 mm long, 1 mm wide, pilose adaxially. Petals 5, white, ca. 3 mm long, deeply 2-lobed, lobes obtuse or emarginate at apex. Stamens 5, 2-3 mm long.

Ovary ovoid, ca. 0.5 mm long; styles 3, connate below middle. Capsule ovoid, 2-3 mm long. Seed reniform, 0.5-0.6 mm long, tuberculate.

Distribution: Native to Central and South America, naturalized in Africa, Indonesia, India, Malaysia, Nepal and South China. Taiwan, in forest margin, gardens or lawns of northern and central part below 700 m alt (fig3.). Flowering and fruiting all over the year.

Specimens examined:

TAIWAN. Taipei City: Taipei Botanical Garden, 28 Mar 2009, *T. C. Hsu* 2192 (TAIF). Taipei County: Wulai Township, Fushan Botanical Garden, 18 Dec 2008, *T. C. Hsu* 2095 & *S. W. Chung* (TAIF). Nantou County: Yuchih Township, Wucheng Village, 19 Feb 2008, *T. C. Hsu* 1230 & *S. W. Chung* (TAIF). CHINA. Yunnan Prov., Tengchong Co.: Langyasheshan, 9 Oct 2008, *T. C. Hsu* 1827 (TAIF). INDONESIA. West Java Prov., Cianjur Regency: Cibodas, 30 Jan 2010, *T. C. Hsu* & *S. W. Chung* 2498 (TAIF).

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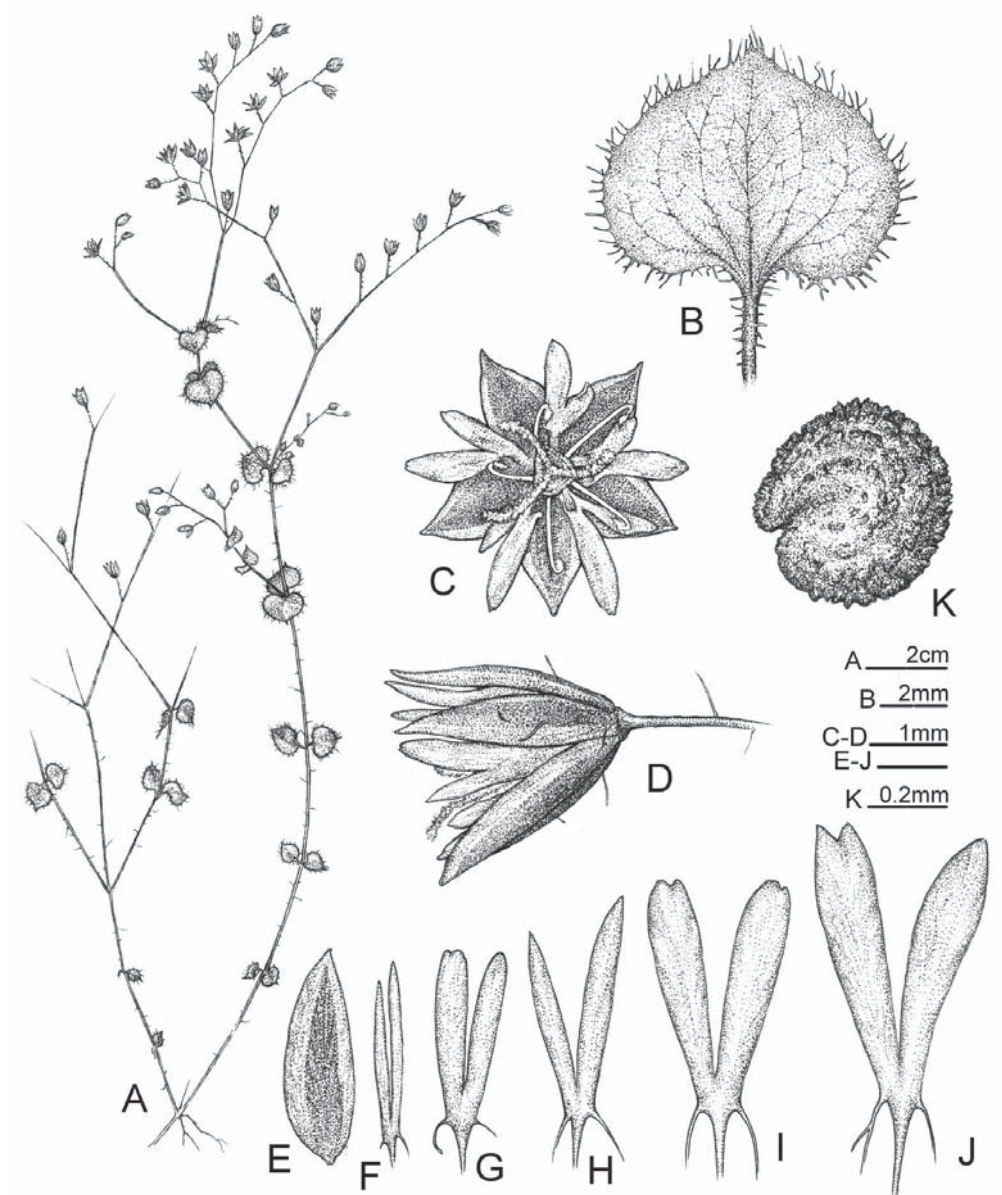


Fig. 1. *Drymaria villosa* Cham. & Schldtl. A: Habit. B: Leaf. C-D: Flower. E: Sepal. F-J: Petals, various shapes. K: Seed.

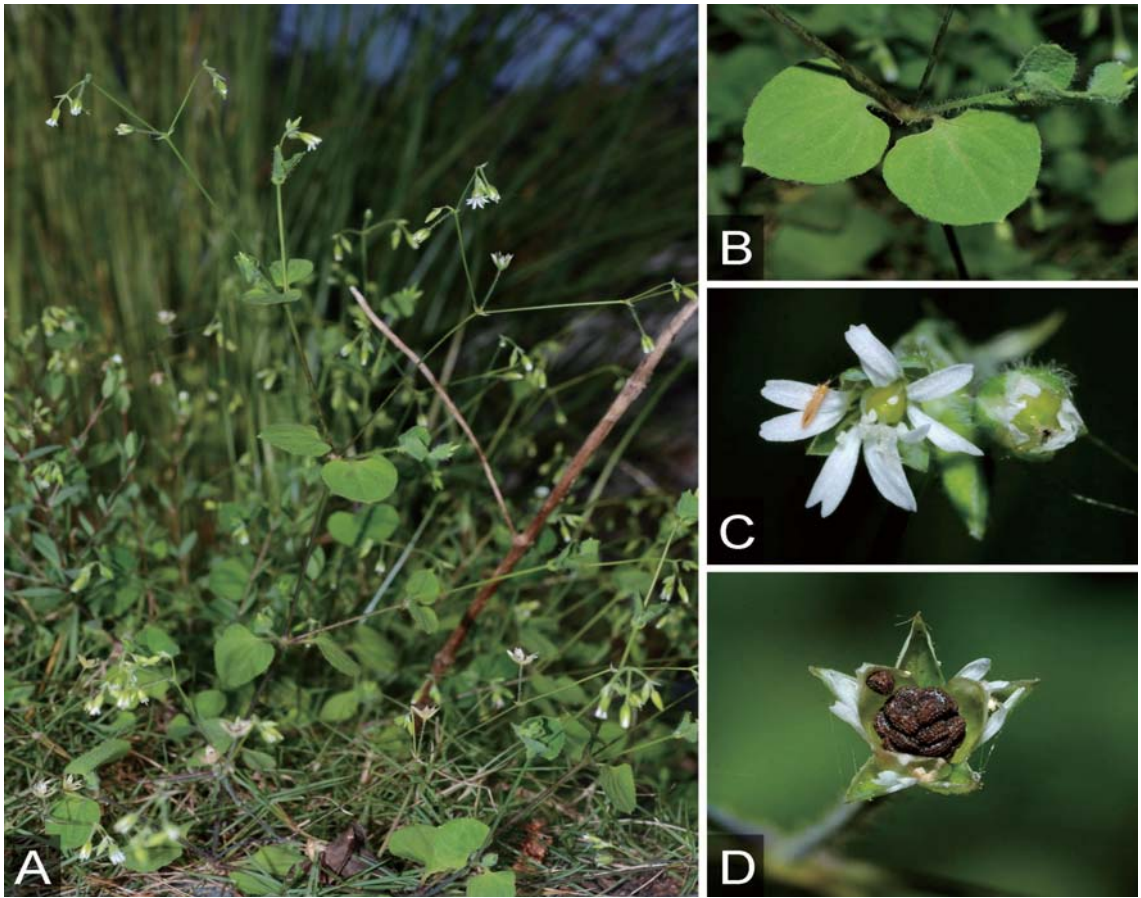


Fig. 2. *Drymaria villosa* Cham. & Schltl. A: Habitat and habits. B: Leaves. C: Flower. D: Dehiscent capsule and seeds.

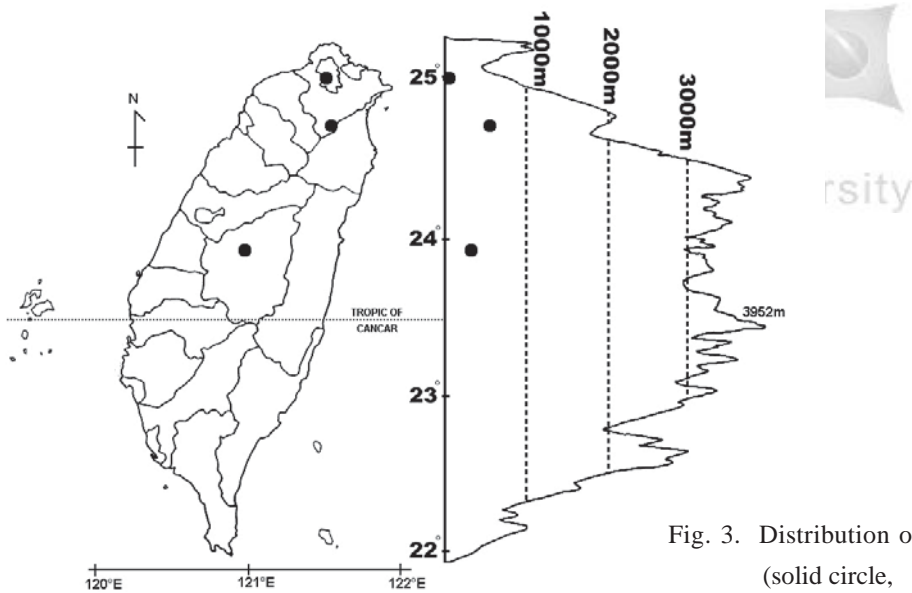


Fig. 3. Distribution of *Drymaria villosa* (solid circle, “●”) in Taiwan.