Sherardia arvensis L., A Newly Naturalized Plant in Taiwan

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[Abstract] Sheradia arvensis L. is recently found in the central part of Taiwan. This monotypic genus is newly naturalized in Taiwan, too. The morphology of Sherardia is very similar to Galium. It is distinguished from Galium by its densely clustered flowers in a capitulum. The habitat, the periods of the flowering and fruiting, distribution, photographs, and a detail line drawing, along with some taxonomic notes are given.

[Key words] Sherardia arvensis, Taxonomy, Taiwan.

臺灣新歸化茜草科植物 ---- 雪亞迪草

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【摘要】雪亞迪草(Sherardia arvensis L.)屬茜草科(Rubiaceae)植物,首次在南投縣信義鄉塔塔加附近被採集,爲臺灣新歸化植物,本屬亦爲新歸化屬。本篇報告描述其形態特徵、地理分布及生育環境,並提供彩色圖片與繪圖。

【關鍵詞】雪亞迪草,分類學,臺灣。

I. INTRODUCTION

Sherardia L., a monotypic genus with Sherardia arvensis L., is native to Europe (Tutin et al., 1989). This genus is related to Galium L., but can be distinguished from it by flowers in capitula (Linnaeus, 1753; Tutin et al., 1989). Recently, this species is naturalized in central parts of Taiwan. It has been recorded as a naturalized species in Japan (Nagada, 1972) and North America (Britton, &

Brown, 1970). The specimens examined were deposited in the Herbarium of Department of Forestry, National Chung - Hsing University (TCF) and the Herbarium of Division of Botany, Taiwan Endemic Species Research Institute. The morphology, habitat, the periods of the flowering and fruiting, distribution, of this species were described with 3 photographs and a detail line drawing in this note.

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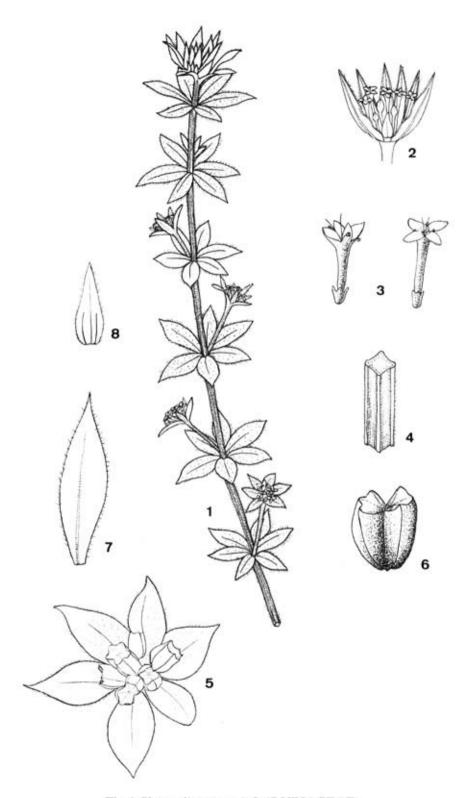


Fig.1 Sherardia arvensis L.(RUBIACEAE)

1.Flowering branch; 2.Flowers; 3.Flower; 4.Stem; 5.Fruits; 6.Fruit; 7.Leave; 8.Bract.

II. DESCRIPTION OF TAXA

Sherardia arvensis L., Sp. Pl. 102. 1753; Nagada T., Illustrated Japanese Alien Plants 53.1972.

Slender annuals herbs. Stems up to 40 cm, procumbent, somewhat scabrid with small deflexed prickles. Leaves in whorls of 6, lower leaves obovate-cuspidate, soon withering; upper leaves 5-20 x 1-5 mm, oblanceolate, mucronate. Flowers 4-10 in small terminal or axillary heads, with up to 6-8 connate bracts forming an involucre. Corolla 4-5mm, lilac, infundibuliform with a long tube, 4-lobed. Calyx 6, toothed, persistent in fruit. Stamens 4, inserted on the tube of the corolla; filament slender; anthers small ,oblong, exserted; Style filiform, bifid, branches unequal; stigmas capitate. Ovary 2-locular with 1 ovule in each loculus. Fruit 2-7mm, scabrid, dry; mericarps 2, 1-seeded. 2n=22.

Distribution: Endemic to Europe, now is widely introduced and naturalized to North America (Ontario to eastern Massachusetts and New Jersey, also in Bermuda), Japan, and Taiwan.

Habitat: It is growing in sunny grassland at altitude ca. 2,700 m, flowering in June to October, and fruiting in August to December.

Nantou: Hsinyi, Tataka, Tseng s.n. Apr.28, 1991; Tseng s.n. Dec.8, 1993; Tseng s.n. Aug.18, 1995; Tseng s.n. Mar.26, 1996; Tseng1113, Sep.16, 1997 (TCF, Taiwan Endemic Species Research Institute Herbarium).

III. LITERATURE CITED

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Photo.1. Whole plant of Sherardia avensis



Photo.2. Flowers and fruits of Sherardia avensis



Photo.3. Leaves in whorls of Sherardia avensis