NOTE

Diodia teres Walt. (Rubiaceae), a Newly Recorded Weed in Fujian

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ABSTRACT: *Diodia teres* Walt., an annual herb native to tropical and subtropical America, is found to be a newly recorded weed in Fujian. It is similar to *D. virginiana* L. except that it is characterized by the 4~8 fimbriate stipules and 4 persistent sepals in the capsule. The morphological description and illustration of *D. teres* and a key of *Diodia* in Taiwan and Fujian are provided in the present work.

KEY WORDS: *Diodia teres*, Fujian, Kinmen, New record, Rubiaceae, Taxonomy, Weed.

INTRODUCTION

Diodia is a common weed originally native to North America (Osada, 1976; Hsien and Chaw, 1987; Kearney and Peebles, 1964). It was introduced to Japan probably before 1969 (Osada, 1976) and to Korea since 1960s (Kil et al., 2004). *Diodia teres* is a species of flowering plant in the coffee family known by the common name "poorjoe". It has prostrate or erect stem to 70 cm long in its native habit. Its leaves are oppositely arranged with fimbriate stipules. A flower is cradled by leaf bases and with white to purplish petals. Capsule is composed of a pair of hairy nutlets. It grows mostly in sandy areas. Although this species was also regarded as *Diodella teres* (Walt.) Small, its systematic position is still uncertain (Bacigalupo and Cabral, 1999). We adopt the traditional treatment of this genus and consider it as a species belonging to *Diodia.* While examining the Rubiaceous specimens in the major herbaria in Taiwan we came across a collection of *D. teres* Walt., which was collected from Kinmen, Fujian province and also represented the first record in China. As an aid to other taxonomic researchers, we provide detailed description and illustration of *Diodia teres*, based on the material from Kinmen, Fujian.

TAXONOMIC TREATMENT

Diodia teres Walt., Fl. Carol. 87. 1788.

圓莖鈕扣草 Fig. 1

Annual herb, 30-65 cm tall. Stem prostrate or erect, with many branches, ca. 1.5 mm in diameter, pubescent. Leaves opposite, simple, sessile, pubescent sparsely both sides, narrowly ovate or narrowly elliptic, 1.5-2.8 cm long, 2.5-4.5 mm wide, acuminate at apex, broadly cuneate at base; margin scabrous, ciliolate; midrib obvious on adaxial surface, secondary veins 3-4 pairs on each side, obscure; stipules membranous, fimbriate, 4-8 lobed, 5-8 mm long, adnate to leaf base. Internode 2.5-4.8 cm long. Flower solitary, axillary, sessile; calyx lobes 4, ovate or lanceolate, ca. 1 mm long, unequal, pubescent; corolla purplish, 4-lobed, funnelform, pubescent abaxially, tube ca. 5 mm long, lobe ca. 1.2 mm long, ca. 1 mm wide, ovate; stamens 4, adnate to the throat of corolla, alternate to corolla lobes, exserted slightly; ovary 2, inferior; style ca. 5 mm long, filiform; stigma enlarged, bi-globose. Fruit ellipsoid, ca. 2.8 mm long, ca. 3 mm in diameter, pubescent, with 1-2.5 mm long persistent calyx lobes, splitting into 2 nutlets when matured. Seed 1 in each coccus.

Distribution: native to North America, but naturalized in Japan and Korea.

Habitat: mostly common in sandy areas such as desert dunes and river floodplains.

Specimen examined: FUJIAN, Kinmen, Kin-hu Town, Dong-cun village, 118°25′0″E, 24°27′0″N, 4 Sep 2002, *I-hua Chiang 319* (TAI).

Notes: Hsieh and Chaw (1987) reported the occurrence of a new generic record, *Diodia virginiana* L., in Taiwan. The occurrence of *Diodia teres* in Fujian is here documented for the first time.

Diodia teres Walt. is very similar to *D. virginiana* L. They can be distinguished by the following characters:

1a. Leaves sessile; calyx lobes 4; corolla purplish with funnelform tube, ca. 5 mm long, lobes ca. 1.2 mm long; style ca. 5 mm long; stigma enlarged, bi-globose. Fruit ca. 2.8 mm long, ca. 3 mm in diameter .....…… *Diodia teres* Walt.
1b. Leaves petiolate, petiole ca. 3 mm long; calyx lobes 2; corolla white with filiform tube, ca. 15 mm long, lobes 4~5 mm long; style 13 mm long; stigma filiform, 4 mm long. Fruit 6-9 mm long, 4-6 mm in diameter ……..... *Diodia virginiana* L.

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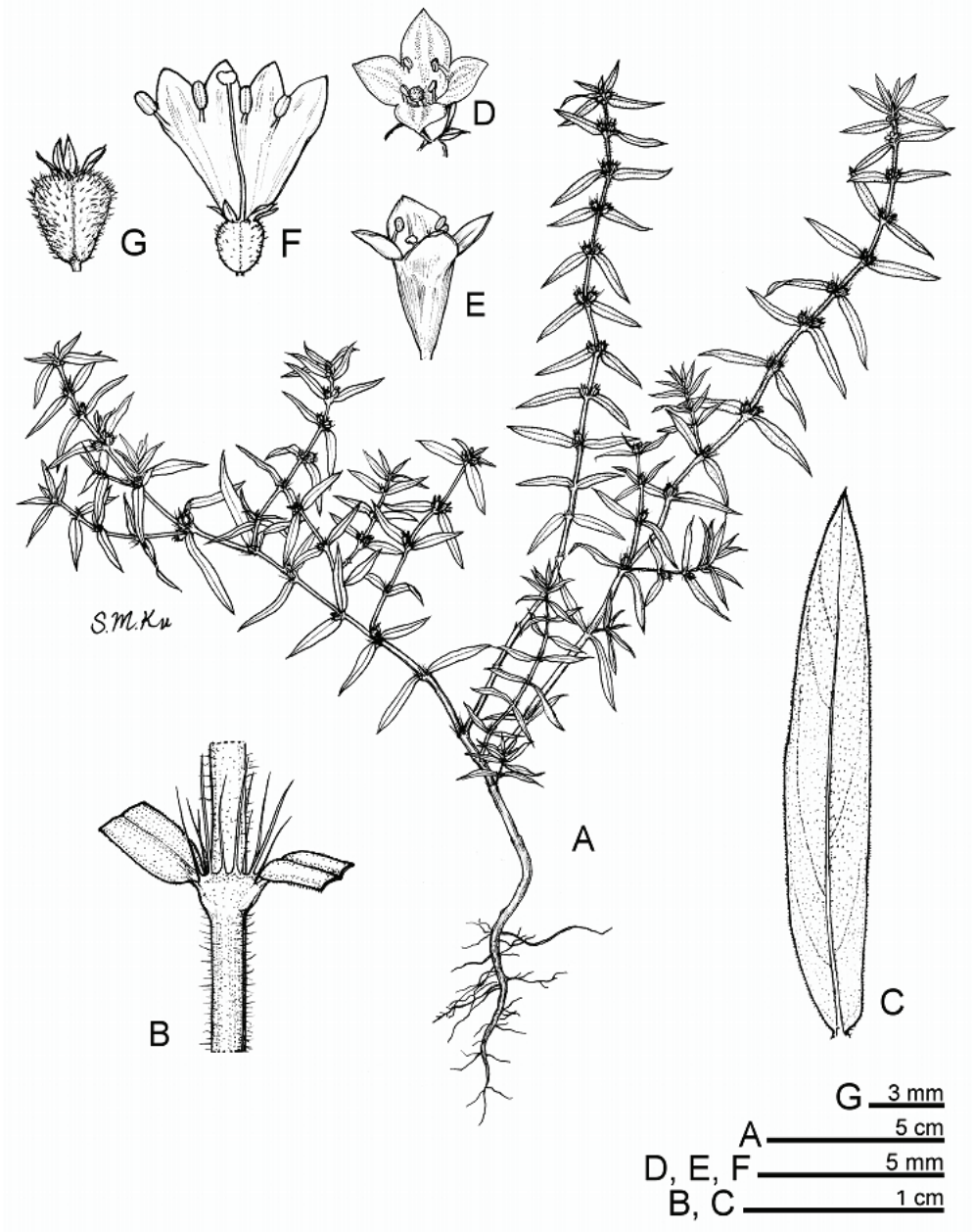


Fig.1. ***Diodia teres*** **Walt. A: Habit. B: Stipule. C: Leaf. D: Flower, viewed from above. E: Corolla. F: Flower, corolla cut open to show style, stigma, stamens. G: Fruit.**

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福建新記錄茜草科植物－圓莖鈕扣草

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摘要：「圓莖鈕扣草」原產美洲熱帶及亞熱帶，本文報導其歸化於福建省金門縣，為福建省新紀錄植物。它和同屬植物「雙角草」形態相似，但圓莖鈕扣草具有四至八條撕裂狀托葉，蒴果具四枚宿存萼片等特徵易與之區分。本文提供圓莖鈕扣草的形態描述和線繪圖，並對產於臺灣和福建「雙角草屬」的兩個種製作檢索表以供區分鑑定。

關鍵詞：圓莖鈕扣草、福建、金門、新紀錄、茜草科、分類、雜草。

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