

研究報告

金門植物誌疏漏屬-楔穎草屬 (禾本科)

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【摘要】本文描述金門植物誌疏漏屬：楔穎草屬 (*Apocopis* Nees, 禾本科) 及其成員：瑞氏楔穎草 (*A. wrightii* Munro)；此一禾草分布於東亞與東南亞之亞熱帶地區，金門產的亞族群位於太武山向陽裸露草地，為金門新紀錄屬成員。

【關鍵詞】楔穎草屬、金門、疏漏種、禾本科。

Research Paper

Apocopis Nees (Poaceae), neglected genus to the Flora of Kinmen

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【Abstract】A neglected genus to the flora of Kinmen, *Apocopis* Nees (Poaceae), and a newly recorded species, *A. wrightii* Munro, were described and illustrated in this article. Populations of this species distribute in subtropical regions of East and Southeast Asia. The subpopulation in the Kinmen island locates in sunny and rocky grasslands.

【Key words】*Apocopis*; Kinmen; Neglected species; Poaceae.

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Introduction

The native and alien floras of Kinmen had been revised by Lu (2011ab), Kung et al. (2017), Jung (2018, 2019) and Liao & Chen (2019), and all of them were comprised Poaceae species. In author's serial botanical surveys recently, an unknown grass species (Figures 1 and 2) was collected at two sunny slopes in Mt. Taiwu, eastern Kinmen island (Figure 3). After revising relative literatures (Bor 1973; Chen & Phillips 2006; Quattrocchi 2006; Teerawatananon et al. 2010; Hu & Wu 2011; Lu 2011b; Jung 2018, 2019; Liao & Chen 2019), the author confirmed this species as *Apocopsis wrightii* Munro (Andropogoneae, Panicoideae), which was native to grassy slopes in tropical and subtropical area of eastern and southeastern Asia, including central and southern China. In addition, the author found a specimen deposited in herbarium of Taiwan Forestry Research Institute (TAIF) from Kinmen in 1997 (*Bin-Lin Shih & Tien-Tsai Chen 8914*), which was misidentified as another dominant grass: *Eulalia leschenaultiana* (Decaisne) Ohwi. Based on these records, the author considered that local population of this grass is sustainable in Kinmen. After revised the related references and herbarium sheets, the author regarded this genus and species as a newly recorded to the flora of Kinmen. The genus *Apocopsis* Nees includes about fifteen species distributes in East Asia, Southeast Asia and Polynesia, and four species in China. This genus is characterized by: spike-like racemes, fragile rhachis, and truncate apex of lower glumes in sessile spikelets (Hooker 1897; Bor 1973; Dassanayake 1994; Chen & Phillips 2006; Quattrocchi 2006; Teerawatananon et al. 2010; Hu & Wu 2011). Here I provide a description, photos (Figure 2) and illustration of *A. wrightii* (Figure 3) for the identification of the local population.

Taxonomic treatment

Apocopsis Nees, Proc. Linn. Soc. London. 1: 93. 1841. Hooker, Fl. British India VII: 142, 1897; Bor, Grasses Burma, Ceylon, India and Pakistan: 94, 1973; Dassanayake, Revised Handbook Fl. Ceylon VIII: 37, 1994; Chen and Phillips, Fl. China 22: 598, 2006; Quattrocchi, CRC World Dict. Grasses vol. 1: 150, 2006; Teerawatananon et al., Thai Forest Bulletin (Botany) 38: 150, 2010; Hu and Wu, Fl. Hong Kong, vol 4: 198, 2011. 楔穎草屬
Apocopsis wrightii Munro, Proc. Amer. Acad. Arts. 4: 363. 1860. Chen and Phillips, Fl. China 22: 598, 2006; Quattrocchi, CRC World Dict. Grasses vol. 1: 151, 2006; Teerawatananon et al., Thai Forest Bulletin (Botany) 38: 157, 2010; Hu and Wu, Fl. Hong Kong, vol 4: 198, 2011. 瑞氏楔穎草 Figures 1, 2 and 4

Perennial. Culms tufted or creeping at base then ascending, 30-60 cm tall, branching at base or lower nodes, 6-7-noded. Leaf sheaths glabrous; blades linear, 3-7×0.6-1 cm, basal and upper ones shorter, base oblique, tuberculate-pilose, margin tuberculate-pilose, apex acuminate; ligule membranous, apex truncate, ca. 1 mm, margin ciliate. Racemes 2, closely compressed to each other, to 5 cm (awns excluded), basal spikelets larger but awnless; rachis internodes and pedicels 1.5-2 mm, pedicels hispidulous, hairs to 2 mm long. Sessile spikelet 4.5-6 mm; lower glume 4.5-6 mm long, obovate, chartaceous, glabrous or hispidulous at base, intercostal region greenish yellow with a red-brown band across submargin of apex, veins 7, greenish, straight, connected by transverse veinlets at submargins, apex truncate and notched, upper margin ciliate; upper glumes 5-7 mm long, elliptic, 3-nerved, lateral veins keeled, intercostal regions sparsely hispidulous, awn red, truncate, margin ciliate; lower florets

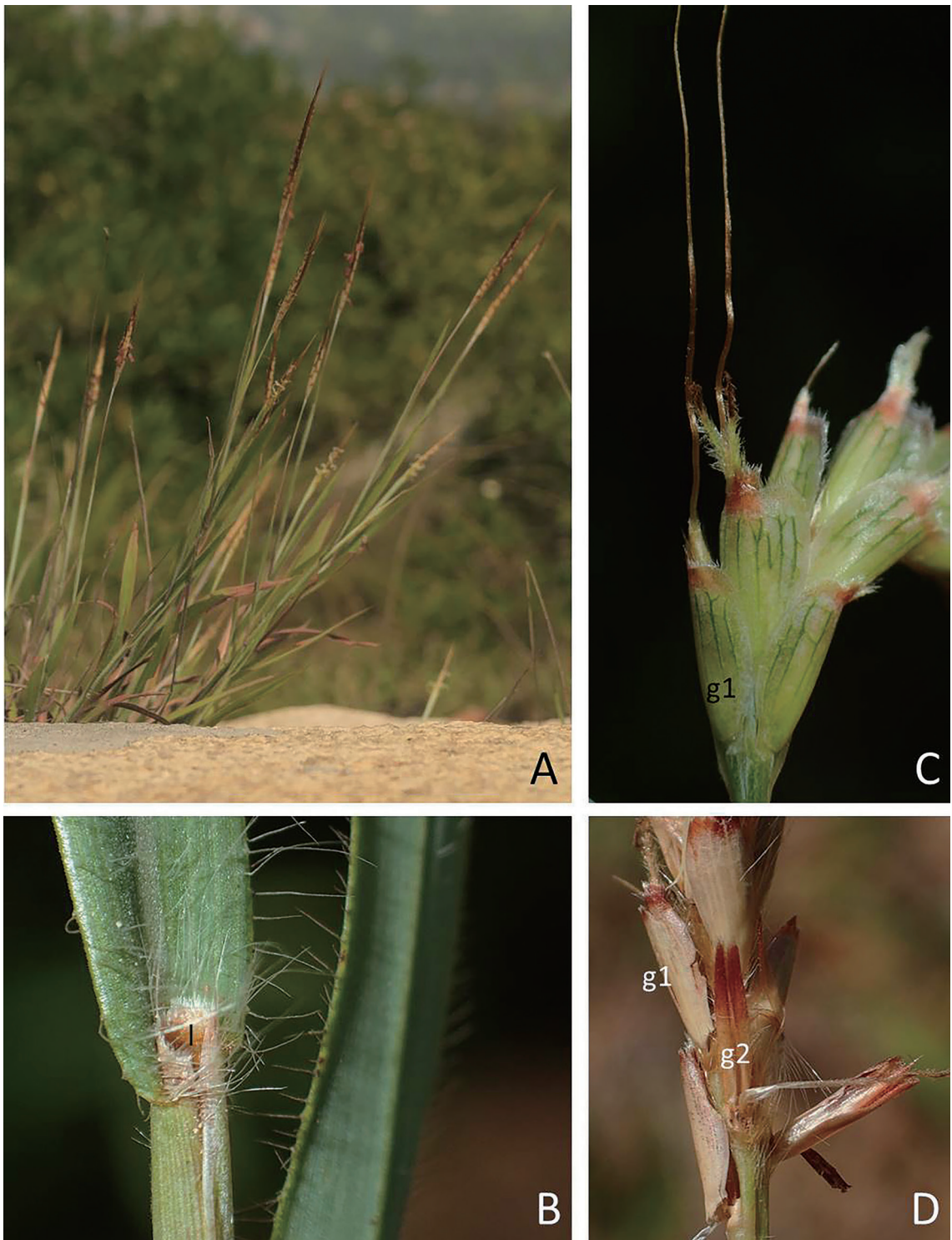


Figure 1. *Apocopsis wrightii* Munro. A: Habit. B: Leaf base, showing the tuberculate-pilose leaf margins. C: Spikelets when flowering. D: Spikelets when fruiting. (g1: lower glume, g2: upper glume, l: ligule)

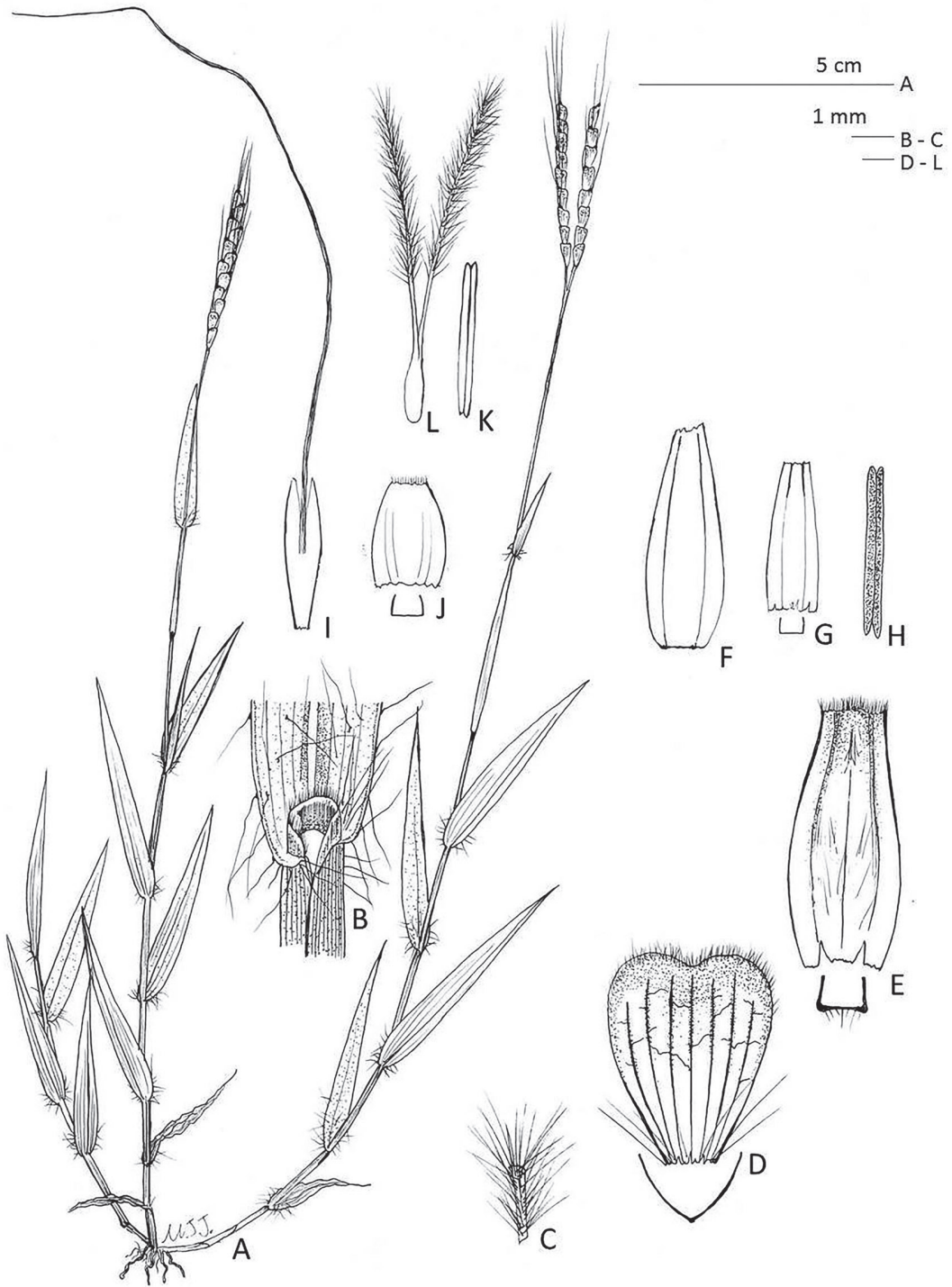


Figure 2. *Apocopsis wrightii* Munro. A: Habit. B: Joint between blade and leaf sheath. C: Pedicel. D: Lower glume. E: Upper glume. F: Lower lemma. G: Lower palea. H: Anther of lower floret. I: Upper lemma. J: Upper palea. K: Anther of upper floret. L: Pistil.

male, lower lemmas and lower paleas oblong-lanceolate, lower lemmas ca. 6 mm long, lower paleas ca. 4.5 mm long, 2-nerved, membranous, apex irregularly truncate, anther to 5 mm long; upper florets bisexual, upper lemma membranous, 3-5 mm long, oblong, base attenuate, apex 2-denticulate, awned; awn 1.7-3 cm long, rising from middle part, geniculate; upper paleas ovate, to 6 mm long, 2-keeled, apex truncate, margin ciliate, anthers 3, similar to lower florets' ones, ovary elliptic, glabrous, stigma to 5 mm long. Pedicelled spikelet wanted.

Specimens examined: TAIWAN. Kinmen County, Jinsha Town, Mt. Taiwu, 19 Aug. 1997, *Bin-Lin Shih & Tien-Tsai Chen 8914* (TAIF),

same loc., 10 Jul. 2019, *Ming-Jer Jung 6167* (TAIF), same loc., 21 Aug. 2019, *Ming-Jer Jung 6186* (TAIF), same loc., 15 Oct. 2019, *Ming-Jer Jung 6209* (TAIF), Jinhu Town, Mt. Taiwu, 9 Jul. 2019, *Ming-Jer Jung 6160* (TAIF), same loc., 21 Aug. 2019, *Ming-Jer Jung 6185* (TAIF), same loc., 15 Oct. 2019, *Ming-Jer Jung 6207* (TAIF). — **Isolectotype:** CHINA. Hong Kong, Cum-Sing Moon, 8 May 1854, *Wright s. n.* (K, K 433910, photo, Figure 4, <http://specimens.kew.org/herbarium/K433910>), Teerawatananon et al., *Thai Forest Bulletin (Botany)* 38: 157, 2010.

Notes: *Apocopsis wrightii* was recorded in subtropical regions of eastern Asia and southeastern Asia, including China, Hong Kong

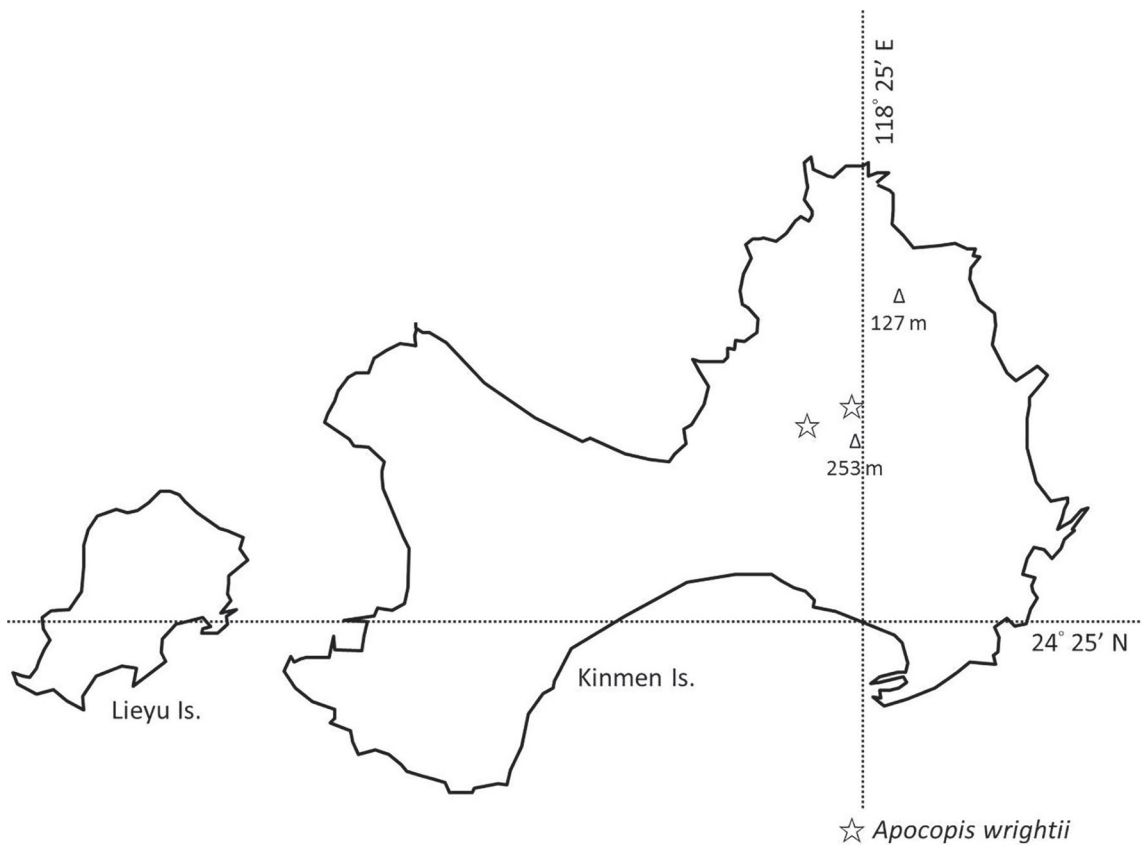


Figure 3. Distribution of *Apocopsis wrightii* Munro (☆) in Kinmen island.



Figure 4. Isolectotype of *Apocopsis wrightii* Munro Wright s. n. (Herb. K, No. 433910 (K)).

and Thailand (Chen & Phillips 2006; Quattrocchi 2006; Teerawatananon et al. 2010; Hu & Wu 2011). The subpopulations of this species in Kinmen island distribute at full-sun rocky slopes in mountain areas (Figure 3). In Kinmen, this grass species could be identified easily from other local Poaceae taxa by its paired racemose racemes, imbricate spikelets, and dominant lower glumes with truncate apexes (Figures 1 & 2). In addition, pedicelled spikelet is wanted and without vestigial structure in *A. wrightii*, which is differed to other Andropogoneae species. Only two subpopulations were found, and each habitat was less than 1 km². According to the IUCN Red List criteria (IUCN 2010) and other relative evaluation (Lu 2011a, Kung et al. 2017), population of *A. wrightii* in Kinmen could be categorized as Critical Endangered (CR, B2b(ii)).

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