

Dichodontium pellucidum (Hedw.) Schimp. (Dicranaceae), a Species New to Moss Flora of Taiwan

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ABSTRACT: *Dichodontium pellucidum* (Hedw.) Schimp., a species of Dicranaceae, is reported as a new record to the moss flora of Taiwan. *Dichodontium* Schimp. is characterized by fusiform gemmae, mammillose laminal cells, and differentiated guide cells and stereids in costa. This genus is distinguished from the related genus *Oreoweisia* (B.S.G.) De Not. by the divided peristomes, and is distinct from another allied genus *Cynodontium* Schimp. by its lanceolate leaves.

KEY WORDS: *Dichodontium*, new record, Taiwan, divided peristomes

INTRODUCTION

Dichodontium, a genus of the Dicranaceae, is one of the poorly studied mosses. Five taxa were recorded from Asia and mostly were reported in the floristic studies (Wijk *et al.*, 1967). One species, *D. asperimum* Broth. in Sasaoka (1928), was ever recorded from Taiwan. Nevertheless, the absence of Latin description and assigned type specimens, i.e., *nom. nudum* (cf. Redfearn *et al.*, 1996), in the original description invalidates this new scientific name. In this study we report *D. pellucidum* (Hedw.) Schimp. as a new record to the moss flora of Taiwan.

Dichodontium is a member of the cluster that has bulging laminal cells, including other genera, such as *Cynodontium* Schimp. and *Oreoweisia* (B.S.G.) De Not. This genus is characterized by the divided peristomes, differentiated guide cells and stereids in costa, bulging and mammillose laminal cells, and gemma. It is distinguished from *Cynodontium* by the gemma and lanceolate leaves without broad bases, and is distinct from another allied genus *Oreoweisia* by the divided peristomes.

***Dichodontium pellucidum* (Hedw.) Schimp., Coroll. Bryol. Eur., p.12, 1856.**

Fig. 1

Dicranum pellucidum Hedw., Sp. Musc., p. 142, 1801.

Plants in turfs. Stems erect, ca. 1.0-1.7 cm, with axillary, fusiform gemmae; central strand present. Leaves keeled, lanceolate, 1.7-2.4 x 0.3-0.4 mm, bluntly acute at apex; margins toothed above, entire below; costa single, stout, reaching below the leaf apex;

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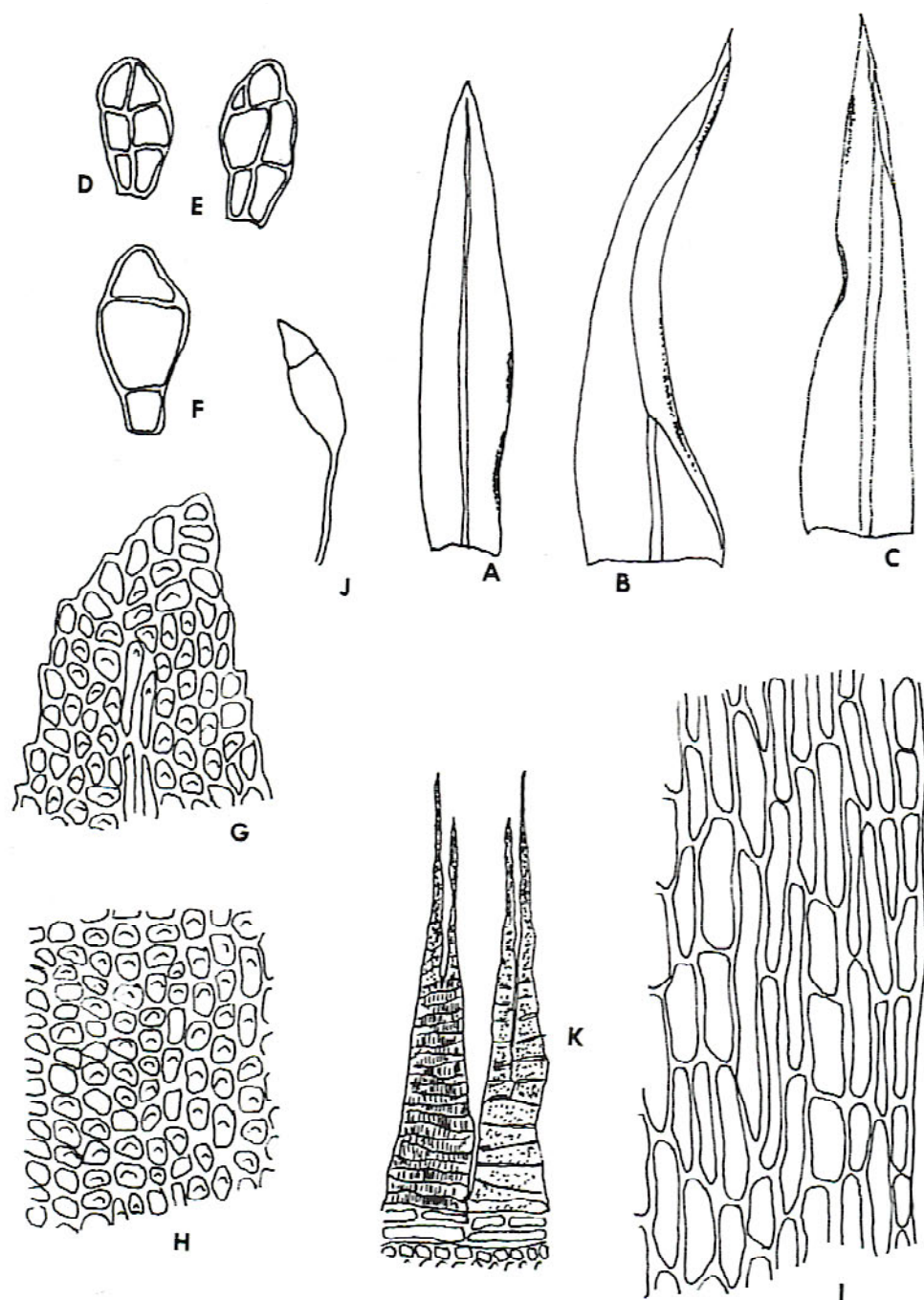


Fig. 1. *Dichodontium pellucidum* (Hedw.) Schimp. A-C: Leaves (x 33). D-F: Gemmae (x 330). G: Apical cells of a leaf (x 330). H: Median laminal cells of the leaf (x 330). I: Cells at leaf base (x 330). J: Capsule (x 13). K: Peristome teeth with dorsal view at left and ventral view at right (x 150).

guide cells and stereids differentiated. Laminal cells hexagonal, 7-13 μm , bulging and mammilose; marginal cells subquadrate, pellude; basal cells rectangular, thin walled; alar cells not differentiated.

Dioicous. Seta solitary, ca. 1.0-1.3 cm long. Capsules suberect, ca. 1.1 x 0.8 mm; stomata present. Operculum rostrate, annulus absent. Peristomes divided to half of the length, papillose on both surfaces.

Specimen examined: Taiwan, Taichung Co., Mt. Tahsueishan, March 20 1965, *Y.-C. Huang s. n.* (HAST)

Illustrations: Noguchi (1987): Fig. 75A; Crum and Anderson (1981): Fig. 78.

Distribution: Taiwan, Yunnan, Japan, Himalaya, N. America, Europe, Greenland

Additional specimens examined: *Cynodontium gracilendcens* (Web. & Mohr) Schimp.: Taiwan, Hsinchu Co., Tapachienshan, 3500 m alt., *T.-Y. Chiang 4942* (TAI). *Oreoweisia laxifolia* (Hook.) Kindb.: Taiwan, Nantou Co., Mt. Yushan, *T.-Y. Chiang 29259* (HAST).

This genus is diagnosable by the axillary, fusiform gemma, which is an unusual feature in the Dicranaceae. *D. pellucidum* differs from its allied, var. *yezoense* Nog., by the bluntly acute leaf-apex versus obtuse one in the latter taxon. This species is widespread in temperate regions and the tropical mountains. It is reported here as the first record to the moss flora of Taiwan.

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裂齒苔，台灣產苔類植物新紀錄屬

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摘 要

裂齒苔 (*Dichodontium pellucidum*)，曲尾苔科的一種，為台灣產苔類植物新紀錄種，本屬的特徵為具有紡錘形芽胞，具乳突狀的葉細胞以及在中肋有分化的厚壁層及副細胞，與近緣的石毛苔屬相較，本屬具有分裂的蒴齒片，與另一近緣屬狗牙苔之差異則在不具較闊葉基的披針形葉。

關鍵詞：裂齒苔、新紀錄、台灣、分裂的蒴齒片。

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