

**ENTODON TAIWANENSIS AND FLORIBUNDARIA
TORQUATA, NEW SPECIES OF MOSSES
FROM TAIWAN⁽¹⁾**

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The following two new species of mosses are found and established in the course of a microscopic examination of the moss plants collected from Chitou (溪頭) for the study on the epiphytic bryophyte communities in the maidenhair tree (*Ginkgo biloba*) plantation supported by a National Science Council grant to the senior author. Both of the plants appear to be of relatively frequent occurrence, though not indeed common, on boles of the maidenhair trees in the plantation.

Entodon taiwanensis Wang & Lin, sp. nov.

Plantae in cortice arte appressae, virides vel flavidae virides, nitidae. Caules ad 2 cm longi, cum foliis 0.3 cm lati, complane foliati, versus apices attenuati, laxe ramosi. Rami 0.6 cm longi. Folia caulina imbricata, e basi constricta, apice sensim attenuate acuto, oblongo-ovalia, 2.1-2.4 mm longa, 0.78-1.1 mm lata; margines recurvi, superne minute serrulate, costis gemellis, brevibus, indistinctis, cellulis laminalibus linearibus, parietibus tenuibus, mediis $99-141 \times 7-9 \mu$ in diam., superioribus brevioribus, basilaribus et alaribus laxis, rectangularibus vel quadratis, $14-28 \mu$ in diam., parietibus tenuibus. Folia ramea oblongo-lanceolata, parviora, cellulis alaribus apprime in ramis juvenibus e marginibus basilaribus ad costas extensis, caetera caulinis similia. Seta lutescens, erecta, 1.1 cm longa, 0.18 mm lata, sicca dextrorsum tortilis. Theca oblongo-cylindrica, erecta, ca. 2.4 mm longa, 1 mm crassa, laevis. Peristomium duplex, sub ore insertum; exostomii dentes lineari-lanceolati, 62μ lati, 310μ longi, fusci, in 1-2 sectionibus super orem horizontaliter striolati, in striolas obliquas et tum in striolas verticales sursum sensim transmutai, supra laeves;

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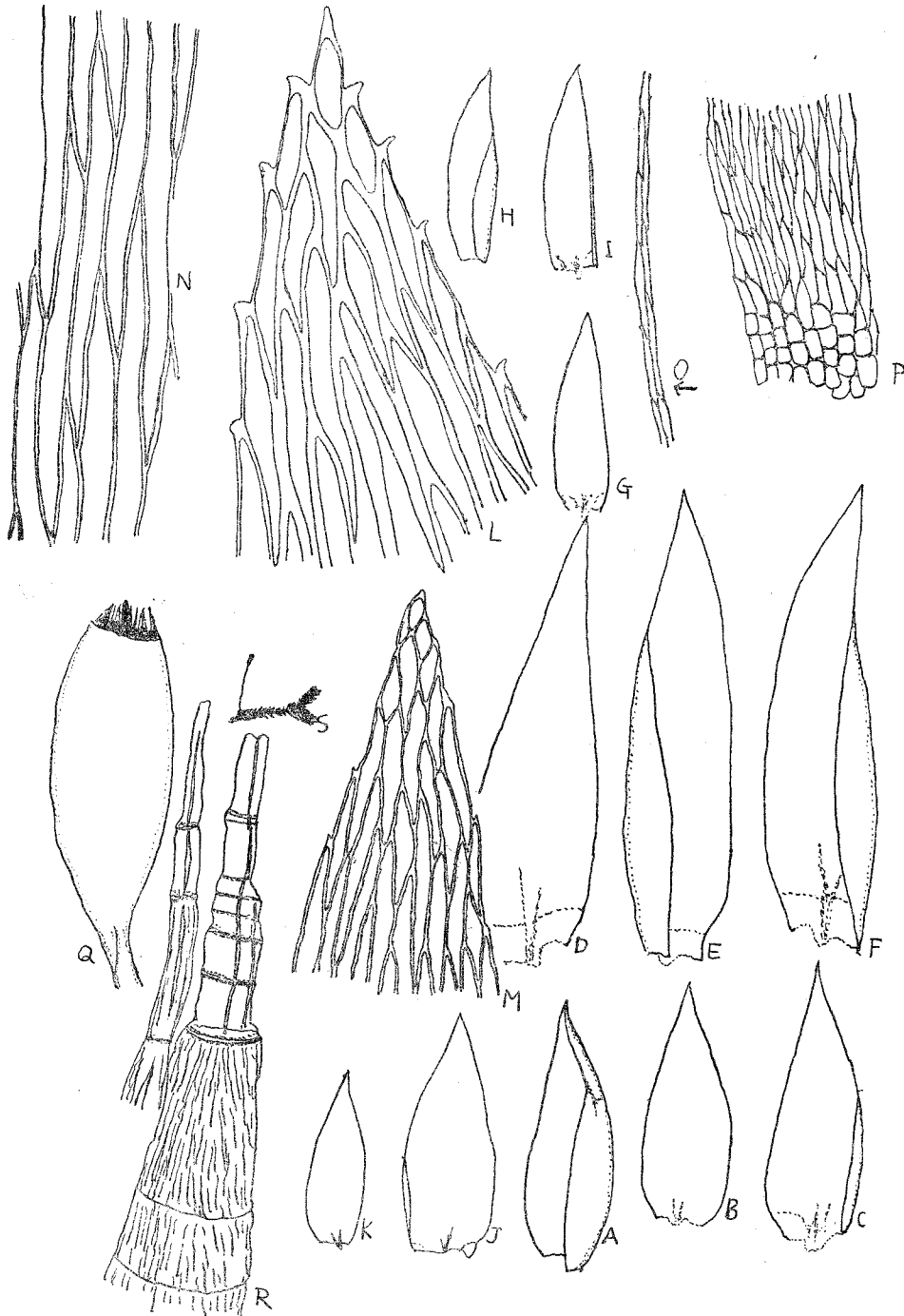


Fig. 1. *Entodon taiwanensis* Wang et Lin, sp. nov.

(A-C). Stem leaves, $\times 16$. (D-F). Branch leaves, $\times 32$. (G-I). Branch leaves, $\times 16$. (J). Dorsal leaf on stem, $\times 16$. (K). Dorsal leaf on branch, $\times 16$. (L). Leaf apex, $\times 697$. (M). Leaf apex, $\times 343$. (N). Lamina cells, $\times 697$. (O). Leaf margin, $\times 172$. (P). Alar group of leaf, $\times 172$. (Q). Capsule, $\times 16$. (R). Portion of exostome and endostome, $\times 343$. (S). Plant, $\times 0.8$.

endostomii processus lutescentes, $17\ \mu$ latus, $198\ \mu$ longus, perforatus, laevis vel leviter verticale striolatus; cellulae exothecii hexagonis vel pentagonis, ad orificium in 7 seriebus transverse rectangulares vel quadratae. Annulus nullus. Columella ultra exostomii dentes exserta. Sporae globose, minutissime papillosoe, $17\ \mu$ in diam.

Taiwan. NANTOU: Luku Hsiang, Chitou, on the trunk of *Ginkgo biloba*, 3 m high above ground; alt. 1200 m; Coll. C.K. Wang and S. Lin; Holotype in Herb. TUNGH no. 3223, Dec. 22, 1973.

The character of the sporophyte of this new species is extremely similar

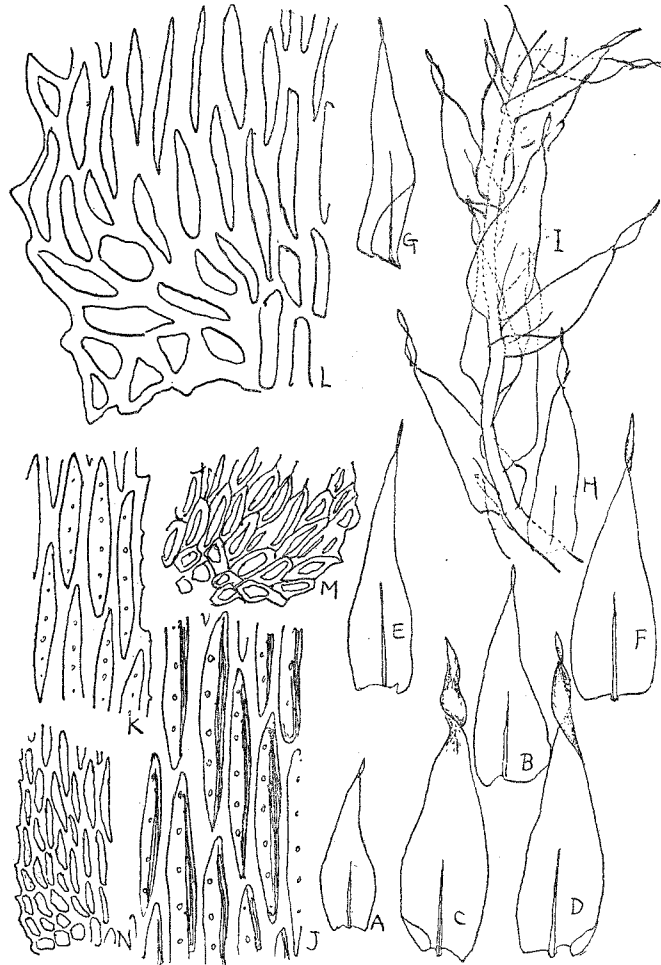


Fig. 2. *Floribundaria torquata* Wang et Lin, sp. nov.

(A-B). Stem leaves, $\times 32$. (C-H). Branch leaves, $\times 32$. (I). Portion of plant, $\times 32$. (J). Lamina cells, $\times 697$. (K). Marginal cells, $\times 697$. (L). Alar cells of leaf, $\times 697$. (M-N). Alar cells of leaves, $\times 343$.

to *Entodon viridulus* Card., but it can easily be distinguished from it by its gametophytes which differ in leaf shape, size and areolation.

Floribundaria torquata Wang & Lin, sp. nov.

Plantae steriles, lutescentes virides, hebetes. Caules ad 1.5 cm longi, cum foliis 1.5 mm lati, flexuosi, irregulariter ramosi. Rami 4 mm longi. Folia mollior et laxe erecto-patentia, ovato-lanceolata vel oblongo-lanceolata, 2-3 mm longa, 0.6-0.75 mm lata, ad apicem in $\frac{1}{2}$ -1 anfracti tortilia, marginibus planis, omnino circa denticulatis, in latere uno folii basis plerumque inflexa; cellulae folii lineari-fusiformes, obscurae, parietibus crassis, lumine in serie uno obscure 5-6-papillatae, 40-56 μ longae, 5-6 μ latae, alaribus vix diversis; costa tenui, simplex, $\frac{1}{3}$ - $\frac{1}{2}$ folii producta. Caetera ignota.

Taiwan, NANTOU: Luku Hsiang, Chitou, on the trunk of *Ginkgo biloba*, 3 m high above ground; alt. 1200 m; Coll. C. K. Wang and S. Lin; Holotype in Herb. TUNGH no. 3193, Dec. 22, 1973.

Very closely related to *Papillaria semitorta* (C. Müll.) Jaeg., *P. fuscescens* (Hook.) Jaeg. and *Floribundaria floribunda* (Dz. et Mb.) Fl., but the new species can be distinguished from *P. semitorta* and *P. fuscescens* by its not having an auriculate leaf base, and from *F. floribunda* by its twisted leaf apex.

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臺灣產之兩種苔類新種：臺灣絹苔 (*Entodon taiwanensis* sp. nov.) 及扭葉絲帶苔 (*Floribundaria torquata* sp. nov.)

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新種臺灣絹苔 (*Entodon taiwanensis* sp. nov.) 隸屬於絹苔科 (Entodontaceae)，與綠葉絹苔 (新稱) (*Entodon viridulus*) 酷似，尤以蒴齒之特徵最為相近，其間不同處僅在於綠葉絹苔之葉最寬處位於中央，葉較小 (1.5-1.8×0.55-0.68 毫米)，葉角細胞幾不達葉基中肋；反之，臺灣絹苔之葉最寬處位在葉基附近，葉較大 (2.1-2.4×0.78-1.1 毫米)，葉角細胞伸延至葉基中肋，非常顯著。

新種扭葉絲帶苔 (*Floribundaria torquata* sp. nov.) 隸屬於蔓苔科 (Meteoriaceae)，與扭葉松蘿苔 (*Papillaria semitorta*)、松蘿苔 (*P. fuscescens*) 和絲帶苔 (*F. floribunda*) 極為相似；唯此新種可藉其不具耳狀葉基得與扭葉松蘿苔及松蘿苔區別，同時藉其葉先端扭旋之特徵與絲帶苔區分。