

## *Taxitheliella richardsii* Dixon

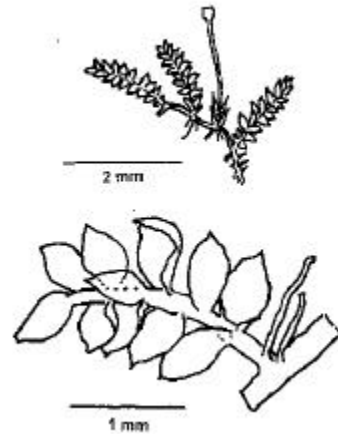
Status: **Critically Endangered (CR)** B1,2c

Class: Bryopsida

Order: Hypnobryales

Family: Hypnaceae

**Description and Biology:** *Taxitheliella richardsii* is a monotypic genus with creeping, slender and highly branched stems. Leaves are laxly complanate, broadly ovate, acute, without a costa, and with little cellular differentiation at the leaf basal corners. Leaf margins are weakly toothed and leaf cells are rhomboidal to shortly fusiform in shape, thin-walled and have many papillae per cell. The seta is about four millimetres long. Capsules are erect and funnel-shaped; the outer peristome is striated and furrowed. The inner peristome has only filiform segments.



The moss *Taxitheliella richardsii* Dix. A. habit; B. branch. Illustration by Benito C. Tan.

**Distribution and Habitat:** Endemic to the lowland rainforest of Gunung Dulit in Sarawak, North Borneo. It is known only from the type collection made by Prof. P.W. Richards in 1932. According to Dixon (1935) who described the genus, the plants grow on rotten logs and lianas in forest undergrowth and form vivid green patches. The lowland rainforests of Malaysian Borneo are very rich in plant species and include several rare Malesian mosses, for example *Fissidens beccarii* (Hampe) Broth., and *Chionoloma longifolium* Dix., both of which are known from the single type collection. These forests are also the habitat of *Taxitheliella richardsii*.

**History and Outlook:** These lowland rainforests in tropical Southeast Asia, including those in Malaysian Borneo, are highly threatened today by excessive logging, and slash-and-burn agriculture practiced by increasing human populations. The reported current economical and social conflicts between the logging company and tribal inhabitants in the Sarawak rainforest highlight the urgency for the conservation of rainforests to prevent the mass extinction of the indigenous flora and fauna, including *Taxitheliella richardsii*.

**References:** Dixon, H.N. 1935. A contribution to the moss flora of Borneo. *J. Linnean Soc. Bot.* 50: 57-140., Touw, A. 1978. The mosses reported from Borneo. *J. Hattori Bot. Lab.* 44: 147-176.

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