

Hydrodictyon Reticulatum (Hydrodictyaceae, Chlorophyta), A New Recorded Genus and Species of Freshwater Macroalga in Taiwan

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Abstract

Hydrodictyon reticulatum (water net), a colonial, unattached, filamentous green algae, was found in rice paddies in northern Taiwan. This species is a new addition to the algal flora of Taiwan. It is distinctive from other green algae in having a cylindrical colony with six-edged mesh structure (that is visible to the naked eyes). In this study, we describe morphological characters in detail, and also use partial atpB sequences to examine its phylogenetic relationships to the sisters.

Key words : AtpB gene; Hydrodictyon; Taiwan; Water net

中文摘要

水網藻(Hydrodictyon reticulatum L. Lagerheim)為群體、非附著型式的絲狀綠藻，首次在臺灣北部稻田中發現，為台灣淡水藻相的新紀錄屬及種。與其他淡水綠藻不同處在於其用肉眼可見到六邊形網狀構造，以此構造形成一圓柱形的個體。本文對此新紀錄種屬之形態作詳細描述外，同時以部分葉綠體 ATP 合成酵素之 B 次單位(atpB)基因序列確定其親緣關係的分類地位。

關鍵字：葉綠體 ATP 合成酵素之 B 次單位基因；網藻屬；臺灣；水網藻