

**SYSTEMATICS OF *TRICHOMANES* (HYMENOPHYLLACEAE: PTERIDOPHYTA), PROGRESS AND FUTURE INTERESTS**A. EBIHARA<sup>1</sup>, J.-Y. DUBUISSON<sup>2</sup>, K. IWATSUKI<sup>3</sup> & M. ITO<sup>1</sup><sup>1</sup>Department of System Sciences, Graduate School of Arts and Sciences, the University of Tokyo, 3-8-1 Komaba, Tokyo 153-8902, Japan,<sup>2</sup>Université Pierre et Marie Curie, 12 rue Cuvier, F-75005 Paris, France,<sup>3</sup>The Museum of Nature and Human Activities, Hyogo, Yayoigaoka 6-chome, Sanda 669-1546, Japan<sup>1</sup>(Email: ebihara@kahaku.go.jp; present address: Department of Botany, 4-1-1 Amakubo, Tsukuba 305-0005, Japan)Key words: filmy ferns, *rbcL*, *Trichomanes***ABSTRACT**

*Trichomanes* L. sensu lato (s.l.), is a large group of Hymenophyllaceae to which ca. 250 species are attributed, distributed from the tropics to temperate regions around the world. Their life forms and morphology are more diversified than those of the other large filmy-fern genus *Hymenophyllum*. Phylogenetic analyses were performed based on the *rbcL* sequences of 81 *Trichomanes* taxa, covering most of the major groups within the genus, in addition to morphological, anatomical and cytological investigations, that offer a number of insights concerning evolution of the genus. Eight robustly supported clades are recognized within *Trichomanes*, while some traditional trichomanoid taxa (e.g., *Pleuromanes*) are transferred to the *Hymenophyllum* clade.