

**CONSERVATION OF TWO ENDANGERED FERNS,  
*ARCHANGIOPTERIS SOMAI* AND *A. ITOI* (MARATTIACEAE:  
PTERIDOPHYTA), BY PROPAGATION FROM STIPULES**

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**ABSTRACT**

*Archangiopteris somai* Hayata and *A. itoi* Shieh are ferns endemic to Taiwan and are categorized as endangered and critically endangered species respectively. Five fresh stipules were removed from each of 10 sporophytes of *A. somai* and *A. itoi* growing in Wu-lai, northern Taiwan. After rinsing in clean water and placing on medium (4:1, soil: peat moss) 50 stipules of each species were cultured at room temperature with 12 hr fluorescent light each day. After one year plantlets were produced by 40% of *A. somai* stipules and 90 % of *A. itoi* stipules. Within each species, the mean sprouting rate and sprouting time of stipules from stems of different sizes did not differ significantly. Sprouting and non-sprouting stipules were not significantly different in size. The relationship between average sprouting time and stipule size was very weak (*A. somai*) or non-existent (*A. itoi*). The growth of the mother plants from which stipules were stripped was not significantly different from their growth in the previous year, nor did it differ from the growth of control plants. This simple method of propagation from stipules provides an effective means of propagating these two species for horticulture, *ex situ* conservation and *in situ* restoration.