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A Study of Isoetes L. in Korea

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Isoetes L. is a pteridophyte which belongs to Isoetaceae. It has various habitats of submersed, amphibious, terrestrial and alpine. It has two type of spores; megaspore and microspore. Isoetes was divided to four sections by the criteria of megaspore by N. E. Pfeiffer (1922). Isoetes japonica A. B_R and I. coreana Chung et Choi was reported in South Korea. Both species are submerged or amphibious. I. coreana (Sect. Cristatae) produces megaspore with irregular, branching crested ornaments on surface. The other species I. japonica (Sect. Cristatae) produces megaspore that has evidently reticulate ornaments. So these two species are distinguishable easily. But reconsideration of the fact whether I. japonica exist or not in South Korea has became to be required. Because a interesting Isoetes material was collected from Island Che-ju. This Isoetes differs from other Isoetes species on the base of many morphological characters. To confirm the identity and phylogenetic relationships among Korean Isoetes we compared ITS sequences for three taxa.

Keywords: Isoetes L., megaspore, ITS, phylogenetic relationship