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Phylogenetic analyses reveals two unrecognized species of *Sparganium* (Typhaceae) in the Korean Peninsula

Hee-Young Gil, Young-Ho Ha, Kyoung Su Choi, Kae Sun Chang, and Kyung Choi

Division of Forest Biodiversity, Korea National Arboretum, Pocheon 11186, Korea

Two unrecognized species of *Sparganium* of Korea were found during the our field expeditions and phylogenetic analyses of specimens deposited in the Herbarium of Korea National Arboretum (KH). *S. coreanum* H. Lév. was first reported as a new species based on the specimen (Taquet, 2150) collected from Jeju Island. It has been recognized as synonym or infraspecific taxa of *S. stoloniferum* and *S. eurycarpum* or even never recognized recently. However, phylogenetic tree showed that *S. coreanum* is monophyletic and has sister relationship with *S. eurycarpum*. Furthermore, additional distribution localities were also found by herbarium survey. Morphological characteristics and distribution information of *S. coreanum* will be discussed. Another *Sparganium* species found from Mt. Daeam is occurring either as floating or emergent. Although we could not identify this species since lack of any flowers or fruits for two year surveys, phylogenetic analyses results showed that this species belong to the clade of *S. glomeratum*, which is distributed in high elevation lakes and marshes of Europe, Asia, and North America. Additional survey of morphology and report will be needed.

Key words: Sparganium, herbarium survey, unrecognized species, phylogenetic analyses

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