1 A Cladistic Analysis of *Potamogeton* Based on Their Morphology

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Potamogeton L. includes approximately 100 species according to Hagstrom (1922). Their morphological characters are extremely variable so that many authors have published different classification systems for *Potamogeton*. In this study, we tried to clarify each taxonomic identity of fifty taxa of *Potmaogeton* including twelve species of Korean pondweeds. Thirty-seven morphological characters were chosen for the cladistic analyses of the genus. As a result, we suggest that *Potamogeton* can be divided into seven clades on the base of their morphology; maakianus clade (11 taxa), alpinus clade (18 taxa), malaianus clade (2 taxa), richardsonii clade (3 taxa), zosteriformis clade (1 taxon), crispus clade (1 taxon), and pusilus-filiformis clade (4 taxa). The maakianus-zosteriformis-crispus-pusilus-filiformis clades are grouped into the linear-leaved homophyllous group although pusilus-filiformis clade is clustered into distantly separated clade. The alpinus clade which is the largest one in *Potamogeton* is corresponded to the heterophyllous group. The malaianus-richardsonii clades are grouped into the broad-leaved homophyllous group.

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