F203 Allozyme Variation and Population Structure of Korean Alder, *Alnus japonica* (Betulaceae)

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The allozyme variation and population structure of *Alnus japonica* (Thunb.) Steudel in Korea were studied and compared with those of alder from Canada. Nineteen of the 25 loci studied (76.0%) showed detectable polymorphism. The mean genetic variation with populations was 0.207, which was higher than that for two Canadian alder species (*Alnus rugosa* (Du Roi) Spreng. and *A. crispa* (Ail.) Pursh). Analysis of fixation indices, calculated for all polymorphic loci in each population, showed a a substantial heterozygosity deficiency relative to Hardy-Weinberg expectations. The mean population differentiation value of *A. japonica* in Korea (*G*st = 0.095) is similar to those of *A. rogosa* in Canada (*G*st = 0.052). Those low values in two countries, reflecting little spatial genetic differentiation, may indicate extensive gene flow (via pollen and (or) and (or) recent colonization.

F204 Allozyme Variation and Population Structure of *Liriope muscari* in Korea

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Enzyme electrophoresis was used to estimate genetic diversity and population structure of *Liriope muscari* Bailey in Korea. The percent of polymorphic loci within the enzymes was 55.9%. Genetic diversity at the species level and at the population level was high (*H*es = 0.178; *H*ep = 0.168, respectively), whereas the extent of the population divergence was relatively low (*G*st = 0.064). F_{IS}, a measure of the deviation from random mating the within the 11 populations, was 0.311. An indirect estimate of the number of migrations per generation (*Nm* = 3.66) indicates that gene flow is high among Korean populations of the species. In addition, analysis of fixation indices received a substantial heterozygosity deficiency in some populations and at some loci. Mean genetic identity between populations was 0.988. It is highly probable that directional toward genetic uniformity in a relatively the homeogenous habitat is thoght to be operated among Korean populations of *L. muscari.*