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Genetic Diversity and Structure of *Pyrola japonica* Population

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Enzyme electrophoresis was used to estimate genetic diversity and population structure of *Pyrola japonica* KLENZE in Korea. The percent of loci polymorphic per population was 58.82%. Genetic diversity at the species level was high ($H_{es} = 0.226$; $H_{ep} = 0.179$), whereas the extent at the population divergence was low ($G_{ST} = 0.143$). F_{IS} , a measure of the deviation from random mating within 14 populations, was 0.1842. However, significant differences in allele frequencies among populations were found for all loci ($p < 0.001$ in each case) and, on average, about 86% of the number of migrants per generation ($Nm = 1.50$, calculated from mean G_{ST}) indicates that gene flow low among Korean populations of the species.

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Thermostabilital Variants about Isozymes of Korean Cultivated Radish Populations, *Raphanus sativus* L.

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The present paper examined associated between thermostability variations of enzymes and temperature tolerances of *Raphanus sativus* L. in Korea. Starch gel electrophoresis was used to examine the allozyme variation of ADH, MDH, 6-PGD, IDH, and EST. Heating experiments of electrophoresis under the condition of $40 \pm 10^\circ\text{C}$ for 12 ± 10 min disclosed thermostability differences, called heat-sensitive and heat-resistant types, within each electrophoretic allozyme. In the MDH displayed two loci. A greater frequency of occurrence of heat-resistant allele at the MDH locus was 0.915 (Youngduk population). At IDH enzyme system, the frequency of heat-sensitive allele is very higher than those of other enzyme systems. A consistent trend is seen at the six loci, indicating that the value of p^R allele decrease from the coast of sea to inner land.