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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  $12 \pm 10$  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.