Z109 Genetic Variation and Speciation of *Rana dybowskii* and *R. amurensis* in Korea

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Isozyme analysis on 29 populations of Brown frogs, *Rana dybowskii* and *R. amurensis* from Korea was performed to estimate the degrees of genetic variation and genetic diversity. A sum of 19 loci were screened from 14 enzymes and general proteins. The genetic variation of Kangnung population of *R. dybowskii* was the highest (Ho=0.188, He=0.158) whereas Kosong population of *R. amurensis* was the lowest (Ho=0.027, He=0.033). The average genetic variation of *R. dybowskii*($\overline{Ho}$=0.117, $\overline{He}$=0.127) is higher than that of *R. amurensis*($\overline{Ho}$=0.076, $\overline{He}$=0.081). The level of genetic differentiation between *R. dybowskii* and *R. amurensis*($\overline{D}$=0.478, $\overline{S}$=0.604) was the average value of interspecific level for the vertebrate species, in general.

Z110 A systematic study on the Brown frogs of the Genus *Rana* from Korea and Japan

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Surveys of electrophoretic variation in isozyme and general proteins were conducted to assess systematic interrelationships for three brown-frog species of the genus *Rana* from Korea(*R. dybowskii* and *R. amurensis*) and Japan(*R. dybowskii* and *R. tsushimensis*). Among *R. dybowskii* populations from Korea, a few populations showed specific level of discrete genetic differences($\overline{D}$=0.546, $\overline{S}$=0.559). It is confirmed that Korean and Japanese *R. dybowskii* are conspecific($\overline{D}$=0.094, $\overline{S}$=0.851). The average genetic relatedness among *R. amurensis* and *R. tsushimensis* and two taxa of *R. dybowskii* was estimated.