

Z 117 Genetic Variation and Diversity of the Genus *Bufo* in Korea

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Horizontal starch gel electrophoresis for 9 populations of *Bufo stejnegeri* and 8 populations of *Bufo gargarizans* from Korea and 2 populations of *B. gargarizans* from China was performed to assess the degree of genetic variation and genetic diversity. A total of 23 presumptive loci encoding 17 allozymes were identified. The degree of average genetic variation of *B. stejnegeri* was  $P=25.1\%$ (8.7-30.4%),  $H_o=0.103$ (0.043-0.143),  $H_e=0.095$ (0.045-0.126). *B. gargarizans* from Korea and China were  $P=18.5\%$ (8.7-26.1%),  $H_o=0.058$ (0.035-0.087),  $H_e=0.057$ (0.041-0.076) and  $P=10.9\%$ (8.7-13.0%),  $H_o=0.028$ (0.020-0.035),  $H_e=0.026$ (0.020-0.032), respectively. *B. stejnegeri* was more variable genetically than *B. gargarizans*. *Ldh-2* and *Pgm-2* were genetic markers between *B. gargarizans* and *B. stejnegeri* in Korea. The degree of genetic differentiation(Nei's D) among the Korean populations of each species was moderate, whereas the degree of genetic diversity between Korean and Chinese populations of *B. gargarizans* was higher( $D=0.209$ ). The level of genetic differentiation between *B. stejnegeri* and *B. gargarizans* was  $D=0.510$ .

Z 118 Hybrid Sterility of *Moroco lagowskii* and *M. oxycephalus* in Korea

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*Moroco oxycephalus* and *M. lagowskii* form hybrids at sympatry. To study of the hybrid's sterility, we performed histological analysis of their testes and ovaries. The morphology and the histological structure of hybrid male testes are normal, but have a fewer spermatogonia, spermatocyte, spermatid and many concretion tissues. Also there can be found a few testes filled with spermatogonia and spermatocytes, but poorly developed spermatid and fewer number of sperms. In case of hybrid female, the structure of ovaries and the histological observation of oogenesis suspected to be normal. But we found one of 6 specimens displaying abnormal oogenesis, suggesting partial sterility. Therefore we can conclude that postmating isolation mechanisms of the two species exist.