

## **A Set of Microsatellite Markers for Population Genetics of Copper-Winged Bat (*Myotis rufoniger*) Using Saliva DNA**

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**Abstract :** The copper-winged bat (*Myotis rufoniger*) is the widely distributed medium body-sized bat in Asia, including Korea. This bat population has been decreasing because of habitat loss. This study reported the isolation and characterization of ten polymorphic microsatellite loci in endangered *M. rufoniger*. To do genetic studies, we use saliva DNA of bats during winter sleep period. The number of alleles per locus ranged from 2 to 9, and the observed and expected heterozygosities ranged from 0.063 to 0.750 and from 0.063 to 0.865, respectively. The average polymorphic information content (PIC) value of these markers was 0.37. Two loci of *M. rufoniger* showed departure from Hardy-Weinberg equilibrium (HWE). This demonstrated that the ten microsatellite loci can be used as genetic markers for further investigation of the copper-winged bat.

**Keywords :** copper-winged bat, microsatellite, population genetics, South Korea

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