



Development of novel polymorphic microsatellite markers for the silver fox (*Vulpes vulpes*)

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ABSTRACT. The silver fox (*Vulpes vulpes*), a coat color variant of the red fox, is one of the most important fur-bearing animals. To date, development of microsatellite loci for the silver fox has been limited and mainly based on cross-amplification by using canine SSR primers. In this study, 28 polymorphic microsatellite markers were isolated and identified for silver fox through the construction and screening of an (AC)_n-enriched library. The number of alleles per locus ranged from 2 to 8 based on 48 individuals tested. The expected and observed hetero-

zygosity and polymorphism information content per locus ranged from 0.2544 to 0.859, 0.2083 to 0.7917, and 0.2181 to 0.821, respectively. The polymorphic markers presented in this study may be useful for future analysis of the genetic diversity and population structure of farmed silver fox and wild red fox.

Key words: Silver fox; Microsatellite marker; Genetic polymorphism