



Isolation and characterization of polymorphic microsatellite markers for blue fox (*Alopex lagopus*)

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ABSTRACT. The blue fox, belonging to the family Canidae, is a coat color variant of the native arctic fox (*Alopex lagopus*). To date, microsatellite loci in blue fox are typically amplified using canine simple sequence repeat primers. In the present study, we constructed an (AC)_n enrichment library, and isolated and identified 17 polymorphic microsatellite markers for blue fox. The number of alleles per locus is from two to seven based on 24 examined individuals. The expected and observed heterozygosities were in the range of 0.3112 to 0.8236 and 0.2917 to 0.8750, respectively. The polymorphic information content per locus ranged from 0.2583 to 0.8022. These polymorphic markers can be useful for future population genetic studies of both farmed blue foxes and wild arctic foxes.

Key words: Arctic fox; Microsatellite marker; Genetic polymorphism