Next-generation sequencing identification and characterization of microsatellite markers in *Aconitum austrokoreense* Koidz., an endemic and endangered medicinal plant of Korea

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**ABSTRACT.** We used next-generation sequencing to develop 9 novel microsatellite markers in *Aconitum austrokoreense*, an endemic and endangered medicinal plant in Korea. Owing to its very limited distribution, over-harvesting for traditional medicinal purposes, and habitat loss, the natural populations are dramatically declining in Korea. All novel microsatellite markers were successfully genotyped using 64 samples from two populations (Mt. Choejeong, Gyeongsangbuk-do and Ungseokbong, Gyeongsangnam-do) of Gyeongsang Province. The number of alleles ranged from 2 to 7 per locus in each population. Observed and expected heterozygosities ranged from 0.031 to 0.938 and from 0.031 to 0.697, respectively. The novel markers will be valuable tools for assessing the genetic diversity of *A. austrokoreense* and for germplasm conservation of this endangered species.

**Key words:** *Aconitum austrokoreense*; Microsatellite marker; Endemic and endangered medicinal plant; Next-generation sequencing; Genetic diversity