Transferability of microsatellite loci from exotic Cervidae to Brazilian brocket deer (Mazama spp, Mammalia: Cervidae)

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ABSTRACT. Transferability of microsatellite loci between closely related species has been reported in several species. This helps reduce costs involved with the development of primers for newly investigated species. Fifteen microsatellite primers developed for Rangifer tarandus, Cervus elaphus, C. axis, and Moschus berezovskii were tested on five species of Brazilian brocket deer of the genus Mazama (M. americana, M. bororo, M. gouazoubira, M. nana, and M. nemorivaga). These primers were tested with DNA extracted from blood samples of two individuals of each species obtained from the Núcleo de Pesquisa e Conservação de Cervídeos (NUPECCE) of Universidade Estadual Paulista (UNESP). Fourteen of the 15 primers tested amplified microsatellite regions of all five species of Mazama, confirmed by sequencing of the amplified fragments. We conclude that these primers could be used for population studies of brocket deer.

Key words: Microsatellite; Heterologous primers; Brocket deer; Mazama