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DENTAL SEXUAL DIMORPHISM IN LOCAL POPULATIONS OF *MACACA FUSCATA*

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Sexual dimorphism is one of the most focused topics in various areas of biology. The aim of this study is to investigate geographic variation in dental sexual dimorphism among Japanese macaques (*Macaca fuscata*). In the present study, geographic variation of sexual dimorphism in dental metrics was examined among eight populations of wild Japanese macaques. The present sample includes populations on the main islands (Honshu & Kyushu) and populations from small islands (Yakushima & Kinkazan islands) and a semi-isolated area (Boso Peninsula). These populations live under various environmental conditions, ranging from subtropical to cold temperate zone, from lowlands to high mountains. Maximum monthly snow accumulation also varies from 0 cm to over 1 m. Measurement was taken from more than three hundreds of adult monkeys. Size and shape sexual differences were compared between local populations. The present analysis has revealed: 1) Males and females have similar shape within each local population. 2) Isolated and semi-isolated populations (Yakushima, Kinkazan, Boso) have smaller dentition than non-isolated populations (Hakusan, Nagano, Nikko, Shimane, Fukui). 3) Degree of sexual dimorphism shows a weak tendency of negative correlation to size in dentition of Japanese macaques.

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