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Cavy as Alternative Genetic Resource for Animal Protein Production in DR Congo

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Abstract

Domesticated cavies (Guinea-pigs) are commonly used in sub-Saharan Africa for meat consumption, income generation and manure production in mixed crop-livestock systems. It has been used for several millennia and continues to be used as an animal for slaughter by the natives of the Andean countries and is used as a laboratory and pet animal worldwide. However, it was not until the 20th century that these rodents begun being domesticated in Africa and currently many countries in SSA are rearing cavies for meat consumption, and cavy production systems in several countries are known. In this work, we evaluated the genetic diversity and population structure of cavies from four regions (South and North Kivu, Katanga and Kinshasa) of Democratic Republic of Congo. We screened 343 samples with 16 simple sequence repeats (SSR). A total number of 113 alleles were found in the four studied populations with an average of 5.77 alleles per locus per population, the highest number being recorded in South Kivu (7.23) and the lowest in Kinshasa (4.69). The observed heterozygosity were less than expected with 50.7

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