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## Evaluation of genetic diversity and structure of Vietnamese goat populations using multi locus microsatellite markers

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### Abstract

Goats are an important component of the Vietnamese livestock industry but little is known about their genetic diversity, differentiation and population structure. We evaluated genetic diversity of seven indigenous goat populations located in different provinces (CoVBV (Co goats from Ba Vi), (CoVSL) Co goats from Son La, CoVTH (Co goats from Thanh Hoa), CoVNT (Co goats from Ninh Thuan), CoVHg (Co goats from Ha Giang), BTVBV (Bach Thoa goat from Ba Vi) and BTVNT (Bach Thoa goats from Ninh Thuan)) and used microsatellite markers to assess the gene flow and population structure among them. The basic diversity measures viz. allelic diversity and heterozygosity were low in Vietnam goats as compared to West Asian and European goats. The overall mean  $F_{IS}$  was significantly positive in Co goats (0.203) whereas it was only 0.003 in Bach Thoa goats. Considerable genetic differentiation existed among goat

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