Dynamic comparison of genetic diversity in a Small Tail Han sheep population using meta-analysis

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ABSTRACT. The aim of this research was to identify the dynamic diversity of Small Tail Han sheep in its main producing areas between different years, and provide a basis for a breeding and genetic resources conservation strategy. For this purpose, 15 microsatellites were genotyped for Small Tail Han Sheep sampled in 2014 from Heze, China, and a comparative analysis of these data with those from a previous study was undertaken using meta-analysis. The results reveal that inbreeding has caused a reduction in diversity of Small Tail Han Sheep from 2008 to 2014. Overall,
our results are helpful in understanding the dynamic change in diversity, as well as providing information for a conservation strategy for this population.

**Key words:** Small Tail Han sheep; Diversity; Microsatellite; Inbreeding; Genetic resource conservation