



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

G.X. E¹, Y.F. Huang¹, Y.J. Zhao¹, J.N. He², N. Liu², T. Zhong³, Y.H. Ma⁴, X.Y. Qiu¹ and L.P. Chen¹

¹College of Animal Science and Technology,
Chongqing Key Laboratory of Forage & Herbivore,
Chongqing Engineering Research Centre for Herbivores Resource Protection and
Utilization, Southwest University, Chongqing, China

²College of Animal Science and Technology, Qingdao Agricultural University,
Qingdao, China

³Farm Animal Genetic Resources Exploration and Innovation Key Laboratory of
Sichuan province, Sichuan Agricultural University, Chengdu, Sichuan, China

⁴Institute of Animal Science, Chinese Academy of Agricultural Sciences, Beijing, China

Corresponding author: Y.F. Huang

E-mail: H67738337@swu.edu.cn

Genet. Mol. Res. 14 (4): 14607-14614 (2015)

Received June 23, 2015

Accepted September 2, 2015

Published November 18, 2015

DOI <http://dx.doi.org/10.4238/2015.November.18.24>

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