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Raising Hu Sheep: Is It Possible in Romania?

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Abstract: Originated from Mongolian sheep after a long process of acclimatisation and artificial selection, the Chinese Hu sheep is valued for its features: adaptability to hot and humid climate, all-year-round cycling, a-seasonal breeding, early sex maturity, fast growing, prolificacy, wavy lambskins (still retained after processing), and white coarse wool (with heterotypical fibbers). They are raised indoors all year round. Scientists have focused on Hu sheep derma papilla cells, differentially abundant proteins, genetic diversity, genome resequencing, genome-wide association, growth traits, homozygosity, ovarian DNA, phenotype traits, pleomorphic adenoma gene 1, selection signature, and skeletal muscle development. The authors of this paper investigate these research topics aiming at identifying ways of acclimatizing this sheep breed in Romania.

• Introduction

Hu sheep are a Chinese indigenous breed known for their unique key features :

- Adaptability ("the quality of being able to adjust to new conditions" – Oxford Languages): Hu sheep are well-suited to hot, humid climates and are raised indoors all year round;
- Economic importance ("the significance or impact that a particular industry, sector, company, or policy has on the overall economy" – Definitions.net): Hu sheep lambskins are a traditional export item from Zhejiang and Jiangsu provinces;
- Origin ("the point or place where something begins, arises, or is derived" – Oxford Languages): Hu sheep originated from Mongolian sheep and were introduced to the Taihu Lake Basin (31° 14' 0" N) in China;
- Physical characteristics / traits ("observable features of an organism, such as size, colour, shape, etc., determined by genes and environmental influences" – Fiveable): Hu sheep have big, drooping ears, protruding eyes, a convex nose line, white and coarse wool with distinctive wave-like stripes in lambskins;
- Reproductive traits ("complex quantitative traits involving multiple genes, loci and interactions" – Reproductive Traits): Hu sheep exhibit early sexual maturity, a-seasonal breeding, and high fecundity, with ewes lambing twice a year.

• Material and method

The material used in this paper consists in a corpus of articles on Hu sheep published in the last five years. The research method used is corpus analysis.

• Results and discussions

- Adaptability traits make Hu sheep a valuable breed for farmers looking to maintain productivity in diverse and challenging conditions.
- Economic importance factors – genetic diversity, lambskins, meat, reproductive efficiency, and wool – make Hu sheep an economically important breed, supporting both local and international markets (Figure x).
- Hu sheep's origin (Taihu Lake Basin, 31° 14' 0" N) makes it adaptive to the climate conditions in Romania (44° 25' 0" N);
- Physical traits make Hu sheep easily identifiable and adaptable.
- Reproductive traits make Hu sheep highly productive and valuable for farmers looking to maximize their breeding programs (Figure 1).

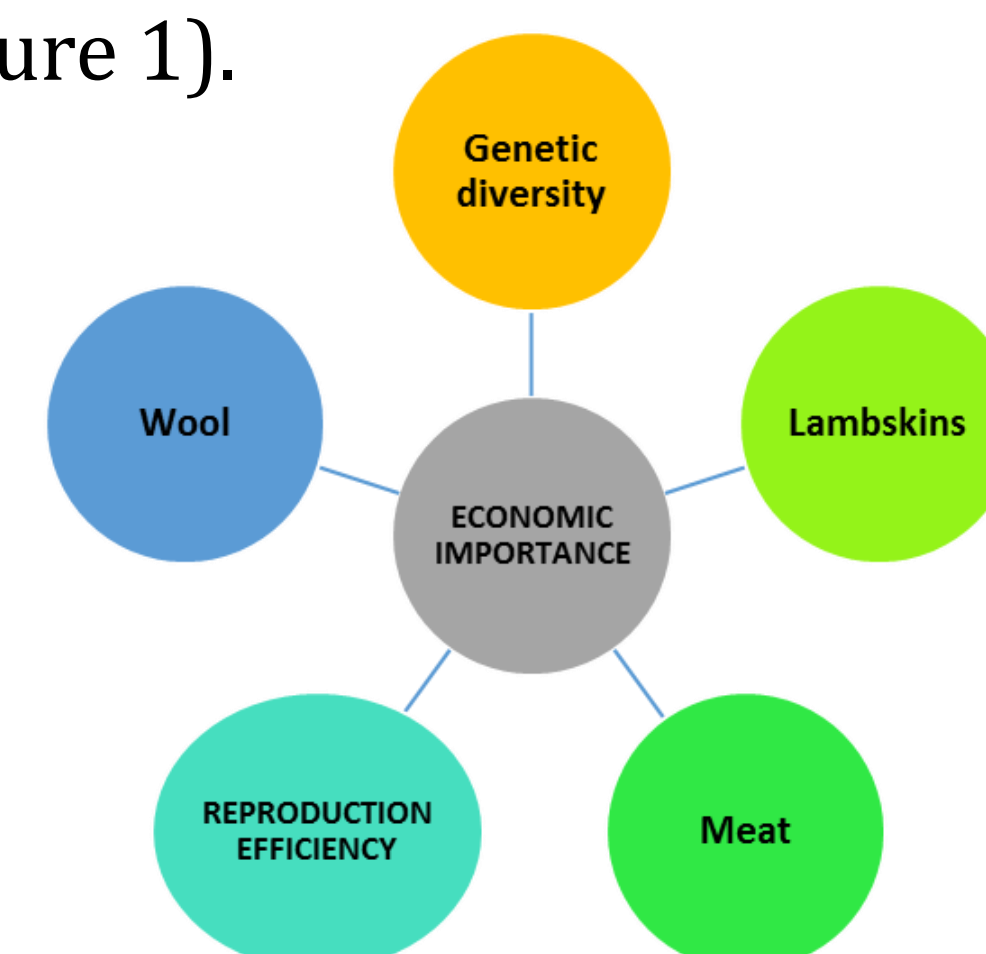


Figure 1. Hu sheep economic importance factors

• Conclusions

Adapting Hu sheep to the conditions in Romania would involve several steps to ensure their well-being and productivity: Breeding programs, i.e., utilising selective breeding to enhance traits that are beneficial for the Romanian environment, such as disease resistance and adaptability to local forage; Climate acclimatization, i.e., gradually introducing Hu sheep to Romania's climate, allowing them to acclimate to temperature variations and humidity levels.