## GENETIC DIVERSITY AND POPULATION STRUCTURE OF SWEDISH SHEEP BREEDS

## (ГЕНЕТИЧНЕ РІЗНОМАНІТТЯ ТА СТРУКТУРА ПОПУЛЯЦІЇ ШВЕДСЬКИХ ПОРІД ОВЕЦЬ)

**Ксон Е.В.** – здобувач вищої освіти МНАУ групи Т1/1

Науковий керівник: Марковська А.В., доцент кафедри іноземних мов МНАУ

Дана стаття висвітлює генетичне різноманіття та структура популяції шведських порід овець. Стаття розкриває питання про структуру популяції п'яти шведських порід овець: Finewool, Gute, Klövsjö, Roslag i Varmland, які мали примітивний ретротип.

**Ключові слова:** генотип, популяція, генетичне різноманіття, Finewool, Gute, Klövsjö, Roslag i Varmland, ретротип.

This article provides genetic diversity and population structure for Swedish breeds. The article shows questions about the population structure of five Swedish sheep breeds: Finewool, Gute, Klövsjö, Roslag and Varmland, which have a malty retrotype.

**Keywords:** genotype, population, genetic diversity, Finewool, Gute, Klövsjö, Roslag and Varmland, retrotype.

Genetic diversity and population structure of Swedish sheep breeds was studied using pedigree data and molecular genetic information.

Both pedigree information and microsatellite genotypes showed that inbreeding has been successfully managed in the ancient Gute sheep breed, despite it being a small local population.

The population structure of five Swedish sheep breeds was studied using endogenous retroviruses as molecular markers. Swedish Finewool, Gute, Klövsjö, Roslag and Värmland sheep all had a primitive retrotype at the highest frequency. In addition, Swedish Finewool, Gute, Roslag sheep had moderate frequencies of a retrotype indicating influence of modern sheep breeds [1].

Studying variants in two coat colour genes, ASIP and MC1R, and their association with black coat colour revealed different selection histories in the five Swedish sheep breeds studied.

High density SNP analysis showed that Dalapäls, Fjällnäs, Gotland, Gute and Klövsjö sheep were distinguishable and unique from one another and the individuals within each breed clustered closely together. When these breeds were compared with other European breeds and Southwest Asian breeds, they grouped with other north European short-tailed sheep breeds.

In the developed world, conducive to economic return, it is; Closing it, dressing it or shelter for owners is the second factor. We understand that there is a wide variety of economic benefits that can be gained even more, but still retain owners or tribes sometimes more. In addition, sheep can be signs of wealth or prestige; They can be used through work or open a cause. These reasons can lead to a change in the structure of the pack, wh The main household products for sheep aimed at health improvement are fibers (clothing, cross or carpet wool, hair), food (meat, milk) and hides (leather, wool skins, fur). By-products, such as manure for fuel or fertilizers, are useful but not usually intended for improvement [2].

Any livestock enterprise includes not only production, but also the entire post-production chain from producer to consumer – collection, preparation,

marketing, processing and consumption – which can often affect production as a breed or the environment.

## Література:

- 1. [Електроний ресурс]
   // Режим доступу :

   <a href="https://pub.epsilon.slu.se/14322/">https://pub.epsilon.slu.se/14322/</a>
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   // Режим доступу

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