## **HISTORY OF NORDIC HORSES**

## I. ALITALO University of Helsinki, Faculty of Veterinary Medicine

Наведено результати дослідження історії північних коней. Подано основні характеристики різних порід коней. Крім того, порушується наукова проблематика, яка потребує додаткових досліджень.

Свійський кінь, порода, генетичний фон, археологічні знахідки, масті коней.

The Finnhorse originates from the Northern European domestic horses (pic. 1). It is national horse breed of Finland, which is found since 1907 (pure bred). It has three colors: chestnut 90 %, bay 6 %, black 1,2 %. It should be noticed that there are 20000 horses, mainly in trotting sport. Four types: Trotter, Riding horse, Working horse, Pony-sized Finnhorse are distinguished.



Pic. 1. Finnhorse

North Swedish horse has Ancient origin and close related to Norwegian Döle Horse (pic. 2, 3). It is small heavy horse, 155–160 cm height, has any solid color. This horse is used for agricultural and forestry work, and nowadays in trotting sport. The current world record of cold blood trotters is 1.17,9 per kilometre.



Pic. 2. Dölehest, Norwegian trotter



Pic. 3. Norwegian trotter horse. "Dölehest" in Norwegian language

The Icelandic horse originates from different Nordic and Arctic breeds (pic. 4). Pure bred is known more than 1000 years, its import prohibited by the Islandic Parliament in 962 AD. There are five-gaited horse: walk, trot, galopp, tölt (lateral ambling) and flying pace (fast ambling).



Pic. 4. Icelandic horse

Estonian native horse is 2800 years old breed, related to Scandinavian breeds. This horse is 150 cm high, black, bay, chestnut and gray color. It is used for agricultural work and riding (pic. 5).



Pic. 5. Estonian native horse

Jakutian horse is rare native horse adapted to cold climate and snow (pic. 6).



Pic. 6. Jakutian horse

Altai horse adapted to mountain climate. It has strong cardiovascular, respiratory and skeletal system (pic. 7).



Pic. 7. Altai horse

The oldest Finnish archeological finding, a piece of equine bone, is from the bronze ages, about 2600 years old. The horse was domesticated. There is still a quation: where the first horses came from?

Molecular tools and analytical approach for the characterization of farm animal genetic diversity are utilized [2]. In Siberia, cattle and horses were studied by a Finnish research group. It Supports conservation of livestock biodiversity through multidisciplinary studies: a case study at the Yakutian cattle in Siberia was published in 2012 [3].

Also In Estonia, propagation of colors in the Native Horse is investigated. In particular – the occurrence of silver dilution horse coat colors. [4] and silver dopple color in Estonian Native horse breed [1].

There is collaboration with the Estonian researchers, who study this quation. But results are not yet published. The Yakutian horse genes are close to the present Finnhorse genes. And Estonian Native Horse genes are similar. Likely Swedish and Norwegian horses have similar genes as other Nordic breeds.

## Conclusions

- 1. The newest DNA-studies seem to prove that horses have come to Northern countries from the north-eastern part of Eurasia.
- 2. The genetic background of the Nordic horses differs from the Middle Europian horses.

## Literature

- 1. Lasn L., Kallaste A., Viinalaste H., 2010, Proceedings XV Baltic Animal Breeding and Genetics Conference, Riga, Latvia.
  - 2. Lenstra et al. 2012; Animal Genetics, 43, 5: 483-502.
  - 3. Li, Osva et Kantanen; Animal Genetic Resources, 50: 97–104.
  - 4. Sild E., Värv S., Viinalass H. 2012 Veterinarija, 82. XX–XX.

Представлены результаты исследования истории северных лошадей. Приведены основные характеристики разных пород лошадей. Кроме того, поднимается научная проблематика, которая требует дополнительных исследований.

Домашний конь, порода, генетический фонд, археологические находки, масти лошадей.

The results of investigation of history of Nordic horses are presented in this article. The main characteristics of different horse breeds is given. Furthermore scientific problem is brought up and it requires advanced research.

Domestic horse, breed, genetic background, archeological findings, horse colors.