

THE EFFECT OF ADMIXTURE OF NEW BLOOD ON THE GENETIC STRUCTURE OF THE HUNGARIAN LIPIZZAN HORSE POPULATION

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The rapid development of animal husbandry in recent decades is profoundly changing the genetic structure of domestic animal populations. The stock size of the varieties and utilization types corresponding to the fashion trends of the age, which undoubtedly have outstanding primarily breeding properties, is increasing significantly, at the same time many genotypes containing valuable traits are disappearing permanently. The protection of gene reserves has become an important task of livestock farmers in the 21st century, which required research into gene conservation. The history of the Lipizzan horse breed creates a special situation for dedicated breeders living in all the successor states of the Austro-Hungarian Monarchy. This almost unique situation makes a number of opportunities and obligations that must be reflected in the conservation of the entire genetic stock of the variety, which results in its long survival. In our research, we examined the effect of admixture of new blood in the Hungarian Lipizzan horse population. The imports of mares in recent years have had a number of positive effects on the Lipizzan horse breeding in Hungary. With the purchases of breeding animals, all the mare families of Fogaras in Hungary can be found again, the preservation of which is especially important due to their origin in Mezőhegyes. With the import of the 9 original, Croatian and Slovenian mare families that have arrived in Hungary, new genotypes appeared in the Hungarian herd which have not been so far in the Hungarian population. In the Hungarian population, the individuals which classified in these families continue to be bred with the breeding animals already in Hungary, thus they entered the Hungarian population. In recent decades, there has been an exemplary cooperation between state studs in Hungary and other breeding countries in terms of breeding animal exchanges (admixture of new blood). As a result, mainly stallions entered the Hungarian population. The maintenance of these processes is justified for the future as well, as its application together with the mare imports helps the survival of the entire genetic stock of the breed in the Hungarian population, at the same time it protects the whole breed. Overall, it can be said that with the help of the mentioned processes, the degree of inbreeding in the Hungarian population decreased and the genetic structure characteristic of the breed became more complete.