

Characterization of the Romanian Lipizzaner horse breed by biochemical markers

Mariana Rebedea, I. Cureu, Aneta Nîțulescu

Institute of Biology and Animal Nutrition, Balotesti

SUMMARY

It is well known that the frequency of the different blood markers represent one of the best ways to characterize a racial population (Rendel, 1982). Thus, by determining the frequency of the genes of the different markers, we can observe several genetic phenomena such as the assessment of the state of homo- or heterozygosis, the implications of some systematic or dispersion processes that may act within a population at a given time (migrations, genetic drift), the concentration of genic frequency induced by studs, assessment of the state of genetic equilibrium of a population, respectively the knowledge of markers' dynamics throughout a long period of time. During the past years, much research was done on several horse breeds in countries with advanced animal breeding (Cothran et al., 1993; Gugliucci et al., 1992; Lubas et al., 1989; Muller et al., 1987; Schleger, 1974; Zurkovski et al., 1992). Furthermore, the characterization of horse breeds by blood markers tried to elucidate aspects related to the phylogeny of horse breeds contributing to the development of animal breeding systematics (Cothran et al., 1993; Lubas et al., 1989).

Considering that Romania is an important center of Lipizzaner horse breeding (both as number and value), we considered it necessary to conduct a study of characterizing this breed with blood markers.

Keywords: Lipizzaner horse, genes, biochemical markers, frequency