Iwona Janczarek

Evaluation of interdependence between selected biometric measurements of half-bred stallions and parameters of their free jumps

S u m m a r y

The observations were carried out in the Training Centres in 2002-2005. 305 half-bred stallions were tested. They represented the following breeds: Polish Warmblood (123 horses), Wielkopolski (43), Małopolski with Anglo-Arabian (76) as well as foreign breeds (63). The stallions were subjected to 22 biometric measurements and basic quantity parameters of their free jumps were evaluated (length and index): 5 jumps over doublebarre obstacle from 100 to 120 cm high. Interdependencies between subsequent measurements of all the stallions including their breed and parameters of their jumps were defined by means of simple correlations. The results were completed by statistical analysis including all biometric measurements, as well as jumping parameters evaluated. Summarizing, the following suggestions have been formulated: diversity of results obtained within biometric measurements and parameters of free jumps of half-bred stallions shows their origin differences, which is apparent particularly in the case of Małopolski and Anglo-Arabian stallions; a considerable number of statistically significant correlations shows the connections between horse conformation and their free jump parameters are pronounced; a relative low number of positive, statistically significant correlations may suggest that stallions having smaller-calibre conformation tend to have larger, long jumps over obstacles which was proved especially in Polish Warmblood and Wielkopolski stallions; great variety in the results of the analysis on the influence of individual measurements on jumping parameters suggests a considerable impact of breed on the stallion performance. This type of research should be extended.