

Evaluation attempt of interrelation between two bonitation systems of half-blood stallions and their movement efficiency rates

S u m m a r y

Observations included 291 half-bred stallions (divided into Polish noble half-bred, Wielkopolska, Małopolska, Anglo-Arab and foreign half-bred), trained within a 100-day test in 2001-2003. Movement efficiency tests were carried out three times, with a 1-month interval, and consisted of riding on a 30-metre path in the following arrangement – 3 repetitions of walk, trot and gallop. Step measurement and frequency were also taken during the test. Additionally, step indices for a particular gait were worked out. Conformation evaluation was also accomplished using own system (own bonitation system), which allowed further verification of own method of bonitation of body conformation and its relations with movement efficiency parameters of half-blood stallions. This method also facilitated the comparison of interrelation range between conformation marks and movement traits of horses within different analysed bonitation systems. The results enabled us to formulate the following suggestions:

- Own method of conformation bonitation, both in the analysis of stallions' breed and generally, showed far more statistically significant interrelations between their conformation traits and movement efficiency in comparison with to the bonitation method used by PZHK;
- The analysed situation indicates potentially greater usability of the proposed own method of evaluating body conformation;
- The cases of diverse arrangement of statistically significant interrelations between body structure traits and movement efficiency of stallions of certain breeds indicate that conformation traits, despite some homogeneity, have a different relationship with production traits.