

Genetic evaluation of competition years, as a kind of measurement of durability in Hungarian show-jumping horses

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The aim of the study was to investigate the possibilities to use “number of years in competition” as a measure of durability in the genetic evaluation of Hungarian show-jumping horses. Competition results recorder between 1996 and 2009 in show-jumping competitions were used to estimate genetic parameters for number of years in competition. The results were collected by the Show-jumping Group of the Hungarian Horse Breeder’s Society. For estimation of genetic parameters for number of years in competition different linear mixed models were tested. In the first model, sex and birth year were taken into account as fixed effects. In the second model, an adjustment was made for age at first result in competition. The model fit was compared based on their determination coefficient. Variance components were estimated with VCE-6 software package. The determination coefficients of the models were 0.09 and 0.20, while the estimated heritability for number of years in competition was 0.27 and 0.23, respectively.

Key words: Sport horse, show-jumping, genetic evaluation, durability

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