

## Analysis of the effects of the training and kind of jump on horse jumping parameters

### Summary

The aim of paper is to analyze the effects of the training, kind of the jump effect, the successive number of the jump and horse on jumping parameters. Ten Wielkopolska breed horses, at the age of 4-5 years, were filmed in free jumping and in jumping under the rider. Investigations were conducted at the beginning and at the end of training on the oxer obstacle standing in the end of the jumping line. Twenty linear and angular jumping parameters of taking off, landing and flying phase were measured. Data were analyzed by analysis of variance using procedure GLM of SAS program. The effect of the horse was statistically significant for all parameters; the effect of the training was significant for five parameters and the effect of the kind of the jump – for ten parameters.

**KEY WORDS:** horses / training / jump biomechanics