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FACTORIAL ANALYSIS OF SOME INDICATORS IN CHRONIC OSTEO-ARTICULAR MODEL OF RABBITS

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Abstract

The using the of animals in the procedure of research project are strictly regulated by EU and Romanian low. Currently, the assessment of pain, suffering or distress in animals used in procedures is based on the physiological responses and behavioral changes that the animal exhibits. In long time models is better to take into consideration more quantifiable variables. The aim of the paper was to study some variables such us body mass, feed conversion, average daily gain, feed intake or feed rests associated with chronic osteo-articular rabbit model (OA) in rabbits. A number of 30 (3-31/2 month old) rabbits in 4 groups (non OA, OC-control, OA-treatment 1 and OA-treatment 2) where observed for 8 weeks period. By the trial period, the initial (F=14.648 at P<0.000) and final body weight (F=17.141 at P<0.000) and average daily gain (F=3.596 at P=0.029) were associated with the OA, also group x weight interactions [F= 2.692 at p = 0.026] was found. The main effect of time was statistically significant (F=11.210 at p=0.000) on ADG and the interaction group x time was also effective (F=2.244 at p=0.009); the interaction was also significant for interaction group x feed consumption (F= 2.325 at p = 0.004). Generally, the results of the study were clearly influenced by treatments and sometimes by the environmental conditions and the interactions between factors in a multivariate analysis but repeated measuring of body mass (weekly) is enough for following the welfare of rabbits in chronically OA animal models.

Key words: osteo-articular, rabbit model, (OA) body mass.