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LANDINGS AND CLIMBINGS OF PULLETS IN A CAGE FREE SYSTEM AT HOUSING: EFFECT OF GENOTYPE AND ENRICHMENT

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ABSTRACT: To evaluate the adaptability of hens at housing in a cage free system, 1800 pullets (17 weeks of age) were allocated in 8 pens of an aviary according to a tri-factorial arrangement with two genotypes (Hyline brown vs. Lohmann white) and two types of pens (enriched or not with additional perches). At 17 and 20 weeks of age, the number and rate of successful landings at ground and climbings to the aviary were scored (10 min/hour; 9.00 to 21.00). Unsuccessful movements were associated to collisions. The number (218 vs. 67.6) and the success rate (93.3% vs. 83.8%) of landings were higher in white vs. brown hens ($P<0.001$) and increased from 17 to 20 weeks (89.8 to 196, $P<0.001$; and 85.1% to 92.0%, $P<0.01$, respectively). Similarly, the number (177 vs. 21.6; $P<0.001$) and success rate (99.1% vs. 96.5%; $P<0.10$) of climbings were higher in white than brown hens and increased with age (58.4 to 141, $P<0.001$; 95.7% to 99.8%, $P=0.01$). The enrichment with additional perches did not affect landings or climbings. In conclusions, large differences in the movement activity were measured between genotypes, while the adaptation of hens to the aviary increased with age.

Keywords: laying hens, perches, adaptability, movement, collisions.

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