

THE EFFECTS OF PRESLAUGHTER SHACKLING ON SOME STRESS PARAMETERS, FEAR, AND BEHAVIOURAL TRAITS IN BROILERS

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Abstract. The aim of this study was to investigate the effects of preslaughter shackling durations on some stress parameters, fear reactions and behavioural traits in broilers. Stress effects of shackling were determined in a group of Ross 308 broilers (total number: 272) aged 42 d. Four shackling treatments were used in experimental tests: shackling of broilers for 10 s (Group G₁₀; as control), 30 s (Group G₃₀), 60 s (Group G₆₀), and 120 s (Group G₁₂₀). Results showed that heterophil to lymphocyte (h/l) ratio (1.39) at 120 s shackling group increased ($P<0.01$). It was revealed that shackling had increased blood glucose and cholesterol levels in all treatment groups. The results indicated that shackling duration has no significant effect on Tonic Immobility (TI) duration. The straightening up of the body, vocalisation, and wing flapping activities increased due to increase in shackling duration. It was concluded that shackling duration over 60 s have negative effects on some stress parameters and behavioural traits in broilers; for that reason, broilers should be housed at lower preslaughter shackling durations.

Keywords: broiler, h/l ratio, shackling, stress, tonic immobility.