Transportation and translocation effects on leucocytic and behavioural responses: a comparison between the Red Jungle Fowl and Broiler

ABSTRACT

Red Jungle Fowl (RJF) (120 days old; mean body weight 614 g) and Commercial Broiler chickens (CB) (35 days old; mean body weight 1800 g) were used to study the effects of road transportation and translocation on leucocytic and behavioural reactions. The birds were raised in floor pens at a farm in Jenderam Hilir, Selangor. The birds were translocated by road transportation for 60 min to the Poultry Research Unit, University Putra Malaysia and assigned in battery cages with wire floors. Immediately following transportation, the heterophil to lymphocyte ratios in RJF and CB were elevated. The ratios returned to basal level two days following translocation. Translocation to battery cages resulted in higher frequency of standing, pacing and pecking at non-nutritive materials in RJF compared to their CB counterparts. It was concluded that physiologically both RJF and CB were equally stressed following transportation and translocation. However, as measured by stereotypic pacing, RJF were more frustrated than their CB counterparts.

Keyword: Red jungle fowl; Broiler chickens; Translocation; Stress; Behaviour, Malaysia