

**A note on heat shock protein 70 expression in goats subjected to road transportation under hot, humid tropical conditions**

ABSTRACT

The influence of two different stocking densities (0.20 m<sup>2</sup>/animal and 0.40 m<sup>2</sup>/animal) in transit under the hot, humid tropical conditions on heat shock protein (hsp) 70 induction was investigated in 60 Boer does. The animals were road transported for 3 h and the control group was kept under normal conditions in the farm. Irrespective of stocking density, transportation significantly increased hsp 70 densities ( $P < 0.05$ ) in the kidneys. The hsp 70 response in the kidneys was more profound compared with those of heart tissues. Higher stocking density was more stressful to the goats based on hsp 70 expression. These results suggest that, irrespective of stocking density, transportation under hot, humid tropical conditions evoked hsp 70 reactions.

**Keyword:** Transportation; Heat shock protein; Goats