ẢNH HƯỞNG CỦA KIỂU CHUỒNG NUÔI THEO NHÓM VÀ CHUỒNG NUÔI THEO CŨI CÁ THỂ ĐẾN NỒNG ĐỘ CORTISOL TRONG NƯỚC BỌT CỦA LỢN NÁI HẬU BỊ

Nguyễn Thị Phương Giang[1], Hán Quang Hạnh[1], Vũ Tiến Việt Dũng[2], Phạm Kim Đăng[1], Vũ Đình Tôn[1], Marc Vandenheed[3] và Chetana Mirle[4]

[1]Khoa Chăn nuôi, Học viện Nông nghiệp Việt Nam; [2]Oxford University Clinical Research Unit – Hanoi; [3]Faculty of Veterinary Medicine, University of Liège; [4]Humane Society International

Email: ntpgiang@vnua.edu.vn

ABSTRACT

Effects of individual stall and group housing systems on the saliva cortisol concentration of the gilts

The study was conducted to determine the effects of individual stall and group housing system on cortisol concentration of the gilts. A total of 20 F1 gilts (Landrace x Yorkshire) with similar body weight and age were randomly allocated into four pens of two housing systems (two pens with individual stalls and the two others with group housing, 5 gilts per pen). Saliva cortisol concentrations of the gilts on the day 0, 1, 3, 7, 15, 30 after grouping and on the day 0, 1, 3, 7, 15, 30, 31, 33, 37, 45 after matting were determined by ELISA test. Results showed that there were significant differences in saliva cortisol concentrations of the gilts between the two housing systems ($P < 0,05$). On the day 0, 1, 3, 15, 30 after grouping, saliva cortisol concentrations were 0,16 µg/dL; 0,36 µg/dL; 0,19 µg/dL; 0,06 µg/dL and 0,05 µg/dL in the group housed gilts and were 0,05 µg/dL; 0,09µg/dL; 0,08 µg/dL; 0,15 µg/dL and 0,17 µg/dL in the individual housed gilts, respectively. On the days 1, 3, 7, 31, 37, 45 after matting, saliva cortisol concentrations were 0,27 µg/dL; 0,31 µg/dL; 0,22 µg/dL; 0,28 µg/dL ; 0,27 µg/dL and 0,28 µg/dL in the group housed gilts and 0,15 µg/dL; 0,15 µg/dL; 0,16 µg/dL; 0,20 µg/dL; 0,32 µg/dL and 0,33 µg/dL in the individual housed gilts, respectively. Within one housing system, saliva cortisol concentrations were significantly different among the days of sampling ($P<0,05$).

Key words: *Cortisol; saliva; gilts; group housing; individual stall.*