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البحث الرابع

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مشترك مع آخرين بالتخصص وخارج التخصص– منشور	4

Title	**Effect of selenium yeast and/or vitamin E supplemented rations on some physiological responses of Ossimi ewes post-lambing under two different housing systems.**
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ABSTRACT

This study was carried out to investigate the effect selenium yeast and/or vitamin E supplemented rations under two different housing types on reproductive performance post-lambing of Ossimi ewes. Thirty days pre-lambing, eighty pregnant Ossimi ewes averaged 40.38±0.93 and 39.49±1.12kg live body weight were housed under two different housing systems, the first (semi open with concrete floor and roofed with west-east direction, 1st H) and second (fully shaded roofed with single asbestos sheets and was topped with rice straw bales and natural earthen ground with north-south direction, 2nd H) housing type, respectively. Ewes were divided into two equal groups (40 ewes each) according to age, body weight and parity. Each group was settled in one of the housing type and randomly divided into four subgroups(ten ewes per each); group A was kept as a control and was fed the basal diet consist of roughage (rice straw) and concentrate mixture, group B selenium yeast (SY) was fed the basal diet supplemented with 0.3 mg of SY per kg of diet, group C vitamin E (VE) received the same basal diet supplemented with 40 mg VE per kg of diet and group D fed the basal diet supplemented with both SY and VE.

Results reported that semi open type house (1stH) had significantly higher (P<0.01) Air temperature (AT) at morning and afternoon than that in fully shaded type house (2nd H). Daily average AT was lowest value (24.82 °C) in 2nd H than 1stH (30.90 °C). Relative humidity (RH) was significantly higher at morning than afternoon in two housing types. THI values ranged from 61.20 to 64.17and 87.10 to 91.34 in the morning and afternoon, respectively in the two hosing systems. However, the THI average, at morning and the afternoon values in 2nd house was lower (P< 0.05) THI than that of semi open type (1stH). The average values of thermo-regulatory parameters of ewes post-lambing in the morning and afternoon as affected by SE and VE supplemented rations under two different housing systems presented were significantly decreased in SY+VE group followed by SY and VE groups compared to control group in the morning and afternoon in two different housing types. Present data showed significantly (P<0.01) higher in most of hematological parameters (Hgb, RBCs, HCT, PLT, WBCs and differential leucocyte count) under the conditions of subsistence in the 2nd H compared with 1st H. antioxidant enzymes levels showed higher values in SY+VE group compared with the level observed another groups specially control group. Treated ewes by both SY and VE reached to first estrus post-lambing at earlier time and recorded heavier body weight and shorter estrus duration than the other ewes in first and second house. There was significant (P<0.01) increased in mean serum P4 concentration in all treated groups compared with control group at all time under two hosing systems, indicating the presence of functional corpus luteum in some of the animals. Also, that administration of SY plus VE gave significantly (P<0.01) higher P4 and E2 concentrations at day 8, 12, 16, 20 and 24 post-lambing. It could be concluded that SY and/or VE supplemented rations can improve physiological responses post-lambing of ewes under different housing systems.