

## EFFECT OF MINERALS SUPPLEMENTATION DURING PRE-NATAL ON GROWTH, BLOOD PARAMETERS AND WOOL CHARACTERISTICS IN LAMBS

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### ABSTRACT

The present work was conducted on Finnish Landrace-Rahmani crossbred (1/2F.1/2R) pregnant ewes and their produced lambs. The experimental work started in April 1996 (starting at the 4<sup>th</sup> month of pregnancy) and lasted for 11 months (by the 1<sup>st</sup> wool cut of lambs, at 9 months of age).

Ewes were divided into almost similar two groups according to their age and body weight. The group I was used as a control group and was fed according to the requirements recommended by the AOAC (1984) and received 1.0 kg concentrate feed mixture (CFM) + 0.5 kg clover hay/head/day. Group II, Treatment group in addition to the same feeding and managerial procedures followed for control group and free choice minerals mixture blocks (Bichema, Egypt) were allowed for ewes up to weaning their lambs.

The means values of plasma calcium (Ca), phosphorous (P), Magnesium (Mg), copper (Cu), zinc (Zn) and cobalt (Co) and in treated ewes in relation to the control group were evaluated and statically differences between them were estimated. The means of Ca, P, Mg, and Co were higher significantly [(9.48, 4.79, 2.92 mg/100 ml) and 0.10 µg/100 ml] in treated group vs. [(8.65, 3.91 and 2.08 mg/100 ml) and 0.03 µg/100 ml] in control group, respectively in ewes. In lambs, the means of Ca, P, Mg, Zn and Co were higher significantly [(11.31, 6.71, 4.64 mg/100 ml) and 84.42 and 0.14 µg/100 ml] in treated group vs. [(9.23, 4.56, 2.79 mg/100ml)] and 70.57 and 0.09 µg/100 ml] in control group, respectively.

In lambs, the mineral supplementation effects on hemoglobin (12.72 vs. 10.28 g/100 ml.), live body weight (22.17 kg) vs. 20.96 kg in control and daily body weight were 135.95 vs. 132.97 kg in mineral supplementation group vs. control group, respectively were significant.

The importance of minerals supplied to ewes and lambs were reflected from the present experimental results.

**Keywords:** minerals, growth, blood parameters, wool characteristics, lambs.