

## THÈME 04 : Production et santé animale en milieu steppique.

Titre de la présentation affichée :

## Effect of drinking salty water and straw diet on plasmatic minerals of sheep

## **Auteur : TITAOUINE Mohammed**

Affiliation : Université Mohamed Khider Biskra

Co auteurs : Meziane Toufik, Chergui Moussa

## Résumé

In order to study the effect of the soil saltiness on plasmatic concentrations of macro-elements (Ca, P, Mg, Na, K) and trace elements (Fe, Cu, Zn, Mn), two extensive sheep rearing of the region have been chosen according to the level of the water saltiness: sulphated water (S) situated around the chott El beida (Oum ladjoul), and soft water (T) in the north of the region (Smara -El-eulma). In every farm, samples of blood have been taken monthly during one year, on ten sheep of Ouled djellal bread, wormless before, aged of 2-3 years, pregnant of 2 to 3 months in the beginning taking, and fed with the straw. Plasmatic rates of Ca and Mg are determined by atomic absorption Na and K by flame photometry, P and Fe by colorimetric method. The copper, zinc and the manganese are determined by atomic absorption on oven graphite Plasmatic values of macro elements remain in norms but with values a few more elevated in the region of Oum ladjoul where water is sulphated. However, results obtained during the period (October 2018 to September 2019) for trace elements show that animals of the region of Oum Ladjoul do not accuse a deficiency neither copper nor in iron, compared to those of the witness region (Smara El-Eulma). The values of zinc are low in both regions with regard to norms. Water drunk by animals in this region seems not to have an ominous influence on the mineral metabolism. On the other hand, the absorption of sulphated water (S) seems to have a positive effect on the studied minerals. The variations of the effects of the drunk water of this region for a long term and at different physiological stages of animals deserve to be studied.

Mots-clés : malnutrition, water, straw, sheep, mineral