

**Determination of Sodium and Chloride in Feed of Camels and Goats under Open Range System at El- khuwei Locality, West Kordofan State, Sudan.**

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**ABSTRACT**

This study was conducted at El-khuwei locality, west Kordofan, Sudan, during the flowering and seed setting stages 2011. The main objective of this study was to determine sodium and chloride in the feed of camels and goats at the flowering and seed setting stages. Sampling was done by locating 2 km<sup>2</sup> each stage. Within each stage randomly selected randomly collected 60 samples of feed camels and goats. The data was analyzed used a completely randomized design (CRD). SPSS (Statistical Package for Social Sciences) was used for the statistical analysis. The results indicated that stage effect were significantly difference ( $P < 0.001$ ) higher sodium Na (5.28 ppm) level and chloride Cl (0.03 ppm) level at flowering stage and least sodium Na (3.74 ppm) level and chloride Cl (0.01ppm) level at seed setting stage. It can be concluded that increased sodium and chloride at the flowering stage and decreased sodium and chloride at seed setting stage. It can be recommended that need feed supplementation sodium and chloride concentrations of grazing animals with the mixture mineral deficient during the seed setting stage.

**Keywords:** Seasons, Feed, Sodium, Chloride, Camels, Goats, Sudan