

## **Camel Range Land Characteristics in Umelqura and East of Gezira Localities, Gezira State, Sudan**

**Elimam, M. E., Mohamed, S. A. A. and Ombabi, Y. A.**

Goat Research Centre, Faculty of Agricultural Sciences, University of Gezira, P.O. Box 20, Wad Medani, Sudan

### **ABSTRACT**

Information on rangeland characteristics is scarce in the Butana plain, especially in Umelqura (UMG) and East of Gezira (EGL) localities which are important for camel production in the Gezira State. Consequently, a study was conducted to study rangeland inventory, frequency distribution, biomass and proximate analysis in the two localities. Eight sites were surveyed in UMGL and 9 sites in EG from May 2009 to June 2010. A 1x1m quadrat was thrown three times on different sites to determine plants inventory, distribution and biomass. The collected plants were identified, counted, weighed, dried and analyzed in triplicates for proximate analysis. Data were analyzed according to SPSS. Thirty five herbaceous plants were identified in the two localities (22 herbs and 13 grasses) and they varied in types and numbers in the two localities and were higher in UMGL (28) than EGL (21). Herbs belonged to 17 families (2 for grasses and 15 for forbs) and Poaceae was the main family (13 plants). Plants numbers and types varied among sites in the two localities and no plant was found in all sites. Tabar was the main plant in UMGL existing in all sites. The main plants in EGL were Turba, Um genegra, Sharaya and khudra and were found in 8 sites. There were monthly and seasonal variations in plants numbers and types among sites in the two localities. No plant existed in all month in the two localities. Plants numbers were highest in October in the two localities and least in May in EGL and June in UMGL. Plants numbers and types were highest in autumn and least in summer in the two localities. Some plants existed in all season as Donbolab, Gubbein, Khudra, Tuffa, Turba, Um genevera, Gaw and Sharaya in EGL and Adar, Donbolab,

Fakha, Huskanit, Nal, Gaw, Tabar, Tuffa, Um galout and Um malbaina existed in all seasons in UMGL. There were variations among sites, month and seasons in range plants frequency distribution and biomass in the two localities. There were variations among areas, month and seasons in range plants proximate analysis in the two localities and CP was generally higher in plants in the two localities.

It was concluded that were variations among sites, month and seasons in range plants inventory, frequency distribution, biomass and proximate analysis. Range plants characteristics were good in EGL and UMGL in Butana plain. It is recommended to apply proper management techniques and to monitor rangeland regularly for optimum exploitation.

**Keywords:** Rangeland Inventory, Frequency Distribution, Biomass and Proximate Analysis