عنوان مقاله:

Effect of growth stages and systems on range vegetation characteristics in el Rosa, north Kordofan, Sudan

محل انتشار:

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نویسندگان:

.a.m.m.a el hag - *Agriculture Research Corporation (ARC) El- Obeid Research Station, Sudan. P.O. Box ۴۲۹*

a.a hassabo - *School of Animal Production, Faculty of Agricultural Technology and Fish Science, University of Al .Neelain*

.i bushara - *Department of Animal Production, Faculty of Agricultural Sciences, University of Dalanj, Sudan*

.m.o eisa - *Department of Animal Production, Faculty of Agriculture, Omdurman Islamic University*

خلاصه مقاله:

The range vegetation characteristics were studied in closed and open systems at flowering and seeding in (El Rosa) El khuwei locality at September and November 2009. Sampling was using 2Km2 plots in a radiating manner from the centre of plot. CRD was used to analyses all parameters. Results of biomass, plant density and plant cover in the closed systems at the flowering were significantly ($P < 0.0001$) higher. These parameters were significantly lower in the open system at seeding. Bare soil and litter were significantly ($P < 0.0001$) higher in the open system at seeding. Total forage productivity kg/ha was significantly ($P < 0.05$) higher in the closed system at the flowering and least in the open system at seeding. Carrying capacity was significantly ($P < 0.0001$) higher in closed system at seeding and leas in open at flowering. Stoking rates in the closed system at flowering were significantly ($P < 0.0001$) higher and least in the open system at seeding. Plant frequencies were higher in the closed system at the two growth stages than open system like Huskneet (Cenchrus biflorus) Bano (Eragrostis tremula) Gaw (Aristida sp) Difra (Echinocloa colonum) Aboelrakhus (Andropogon gayanus) Fisiya (Fimbristyls hispidula) and Tmrfar (Oldenlandia senegalensis) had higher frequencies. However leflef (Luffa aegyptiaca) and Himeira (Hymenocardia acida) had lower frequencies. Simeima (Sesamum alatum) Buid (Commelinia subulata) Abodaib (Ceraotheca sesamoid) Shuleny (Zornia glochidiata) and Rabaa (Zalea sp) were found only in the closed system at flowering. Nuida (Sida cordofolia) were only found in the open system at the two growth stages. It was concluded that the closed system had higher plant density and cover, biomass, plant frequencies and forage production. Bare soil and litter were higher in open system at seeding. Carrying capacity was higher in the closed system at seeding. Stoking rates in the closed system at flowering were higher. Indicate that direct effects on different system vegetation characteristics, productivity, caring capacity and stocking .rates

کلمات کلیدی:

Biomass , Plant cover and density , Bare soil , Litter , Frequency