

## Assessment of Forage Utilization for Pasture-Based Livestock Production in Udubo Grazing Reserve, Bauchi State

**Authors :** Mustapha Saidu, Bilyaminu Mohammed

**Abstract :** The study was conducted in Udubo Grazing Reserve between July 2019 and October 2019 to assess forage utilization for pasture-based livestock production in reserve. The grazing land was cross-divided into grids, where 15 coordinates were selected as the sample points. Grids of one-kilometer interval were made. The grids were systematically selected 1 grid after 7 grids. 1 × 1-meter quadrat was made at the coordinate of the selected grids for measurement, estimation, and sample collection. The results of the study indicated that *Zornia glochidiata* has the highest percent of species composition (42%), while *Mitracarpus hirtus* has the lowest percent (0.1%). *Urochloa mosambicensis* has 48 percent of height removed and 27 percent used by weight, *Zornia glochidiata* 60 percent of height removed and 57 percent used by weight, *Alysicarpus vaginalis* has 55 percent of height removed, and 40 percent used by weight, and *Cenchrus biflorus* has 40 percent of height removed and 28 percent used by weight. The target is 50 percent utilization of forage by weight during a grazing period as well as at the end of the grazing season. The study found that *Orochloa mosambicensis*, *Alysicarpus vaginalis*, and *Cenchrus biflorus* had lower percent by weight which is normal, while *Zornia glochidiata* had a higher percent by weight which is an indication of danger. The study recommends that the identification of key plant species in pasture and rangeland is critical to implementing a successful grazing management plan. There should be collective action and promotion of historically generated grazing knowledge through public and private advocacies.

**Keywords :** forage, grazing reserve, live stock, pasture, plant species

**Conference Title :** ICBGPDP 2023 : International Conference on Botanical Geography and Plant Distribution Patterns

**Conference Location :** Lagos, Nigeria

**Conference Dates :** August 03-04, 2023