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

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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 glochidiatah 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, Alysicapus veginalis 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 veginalis, 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

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