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Plant Species Composition and Frequency Distribution Along a Disturbance Gradient in Kano Metropolis Nigeria

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Abstract : The study explores changes in plant species composition along disturbance gradient in urban areas in Nigeria at Bayero University Kano campuses. The aim is to assess changes in plant species composition and distribution within a degraded dryland environment in Kano Metropolis, Nigeria. Vegetation sampling was conducted using plots quadrat and transect methods, and different plant species were identified in the three study sites. Data were analyzed using ANOVA, t-tests and conventional indices to compare species richness, evenness and diversity. The study found no significant differences in species frequency among sites or sampling methods but observed higher species richness, evenness and diversity values in grasses species compared to trees. The study addressed changes in plant species composition along a disturbance gradient in an urban environment, focusing on species richness, evenness, and diversity. The study contributes to understanding the vegetation dynamics in degraded urban environments and highlights the need for conservation efforts. The research also adds to the existing literature by confirming previous findings and suggesting re-planting efforts. The study suggests similarities in plant species composition between old and new campus areas and emphasizes the importance of further investigating factors leading to vegetation loss for conservation purposes.

Keywords: species diversity, urban kano, dryland environment, vegetation sampling

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