

Subject Safiya's Abstract
From Muhammad Audu <misahaudu@gmail.com>
To: <gado.aishatu@futminna.edu.ng>
Date Today at 12:26 PM

Yusuf, S.*, Gado, A. A., Daudu, O. A. Y., Dangana, M. C.,
Abubakar, A., Audu, M. A. I. and Nasir, Z. A.,

Department of Plant Biology, Federal University of Technology,
Minna, Nigeria.

ABSTRACT: Biodiversity loss have emerged as bottleneck befalling the agricultural production including cowpea. Rising insecurities, socio-economic changes, abnormal onset and cessation of rainfall and soil conditions has led to a dramatic reduction of cowpea landraces cultivated recently and probably to the disappearance of local populations. Germplasm exploration is the basis for crop improvement and foundation of agricultural production. This study was designed to evaluate the distribution and diversity of cowpea germplasm using seeds morphology. The study was conducted between the months of November to December 2021. A total of 43 germplasm was collected. The germplasms were randomly collected across the three Geopolitical zones of Niger state. The data was collected using participatory research tools and techniques such as direct observation, group discussions, individual interviews, field visits and questionnaires. The results revealed that *Vigna unguiculata*. *Vigna unguiculata* recorded the highest accessions (39), followed by *Vigna angularis* (1), *Vigna mungo* (2), *Vigna radiata* (1). *Vigna unguiculata* showed the highest occurrence in most parts of the three geopolitical zones while *Vigna angularis* and *Vigna radiata* were found in Zone A), *Vigna mungo* were found in Zone A and zone B. Zone A had the highest germplasm accessions (22), zone C (13). Zone B (8). This result showed an uneven distribution of the species of cowpea and this could be as a result of the increasing insecurity ravaging some parts of the state. There by promoting the movement of the farmers from one area to another. Hence germplasm collection can serve as means of conserving crop diversities from total loss.

Keywords: cowpea, food security, genetic diversity, germplasm