**BOOK OF ABSTRACTS**

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GROWTH OF COWPEA (VIGNA UNGUICULATA) AND WEED INFESTATION AS AFFECTED BY CULTIVAR AND N SOURCES IN MINNA, NIGER STATE.

\*Muhiyideen Yusuf,.,**Anthony Uzoma,** Aminat Mamudu and Muhammad Salaudeen

\*Corresponding Author's details

Email Address: gretybee4u@gmail.com

Institutional Address: Dpartment of SLM, FUT Minna, Nigeria

Telephone: 08140001799.

A screen house experiment was conducted early in 2019 at the screen house of the Department of Soil Science and Land Management, School of Agriculture and Agricultural Technology, Federal university of Technology, Gidan-Kwano campus, Minna, Niger State to investigate the response of some selected cowpea cultivars to three sources of Nitrogen. Three cowpea cultivars (Sampea 15, Sampea 16 and Kananado white) were tested against three Nitrogen sources in sole and combined form (Control, 30 kg urea N, 30 kg N + Micronutrient: Agrolyzer, Bio-fertilizer: Gw5 inoculant, 30 kg urea N + Micronutrient + Bio-fertilizer). The experiment was laid out in a Completely Randomized Design (CRD) replicated three times. The outcome of the experiment showed that Sampea 16 significantly increased the plant height, lowered weed density, lowered weed dry weight, increased branches, leaves, leaf area, as well as shoots and roots biomass compared to Sampea 15. On the other hand, 30kg urea N + Micronutrient + Bio-fertilizer significantly produced tallest plants, lowest weed density, lowest weed dry weight, more branches, leaves, leaf area, more shoots and roots biomass, though statistically similar to the use of urea or Bio-fertilizer alone. Bio-fertilizer alone also improved the nodule number and nodule dry weights. Sampea 16 can therefore be used along with Bio-fertilizer to supplement the nitrogen supplied in cowpea production and curb the menace of the abuse of inorganic fertilizer in the advent of global warming.