



## **CENTRE FOR DRYLAND AGRICULTURE, BAYERO UNIVERSITY, KANO.**



# **1<sup>st</sup> International Conference on Drylands**

---

### **THEME:**

**Climate Change and Food Security in the African Drylands**

---

**Date:** 8-12 December, 2014

**Venue:** Faculty of Agriculture Theatre, Bayero University, kano.

---

Programme of Events &  
Book of **ABSTRACTS**

---

*... an Africa centre of excellence*

the infested pots and replicated four times. Data was collected on number of *Striga haustorium* per pot, day to striga emergence, number of striga emerged per pot while on the cowpea plant, data were collected on flowering traits, yield and yield related characters. Data was analyzed using Genstat program version 16<sup>th</sup> edition. Significant differences ( $P \leq 0.05$ ) among entries were recorded for most of the traits under study; day to striga emergence, number of striga haustorium per pot, indicating host susceptibility, was recorded on Sixteen among these genotypes with a mean value of 0.59 per pot. Mean number of days to striga emergence among susceptible varieties ranged between 0.33 and 2.0. Eleven varieties had no striga seedlings they included a number of the IITA accessions Tvu 16514, Tvu 14676, Tvu 12848, Tvu 7778, Tvu 12431 which may indicate some level of resistances to *Striga gesnerioides*. Thirty six cowpea varieties were evaluated for their reaction to *Striga gesnerioides* at the International Institute of Tropical Agriculture, Kano substation using the pot technique method. The experiment assessed thirty five genotypes in the first in 2012 and thirty in the second trial Data were collected on plant height number of leaf area, number of pods seed /pod day to first flowering day to 50% flowering and seed yield /plant.

### RESPONSE OF SOME GROUNDNUT VARIETIES TO *ALECTRA VOGELII* INFESTATION IN NORTHERN NIGERIA

Motagi B.N<sup>1</sup>, Ajeigbe H<sup>1</sup>, Mohammed S.G<sup>2</sup>, Ibrahim H<sup>1</sup> and Muaz W.A<sup>3</sup>

<sup>1</sup>International Crops Research Institute for the Semi-Arid Tropics. <sup>2</sup>Department of Agronomy Bayero University, P.M.B 3011, Kano. <sup>3</sup>International Institute of Tropical Agriculture (IITA), Kano, Nigeria

Corresponding Author; Email: aswaj@yahoo.com

*Alectra voegelii* is one of the parasitic weeds that threaten groundnut and cowpea production in northern and southern Guinea Savanna of Nigeria. A field trial was conducted in 2014 rainy season at Bayero University, Kano Teaching and Research Farm to evaluate the response of local and improved 11 groundnut (*Arachis hypogaea* L.) genotypes to naturally infestation of *Alectra vogelii* (Benth.). The experiment was laid out in randomized complete block design (RCBD) with three replicates. Our data recorded that Samnut 25 had the lowest chlorophyll content and canopy temperature while a local variety "Sabiya" had the highest chlorophyll content and canopy temperature. However, both varieties recorded the highest and lowest *Alectra* infestation respectively. Correlation analysis revealed a negative interaction between leaf area index (LAI) and canopy temperature at 70 days after sowing and *Alectra* infestation at 70 days after emergence among the groundnut genotypes. Further screening should be conducted to identify a resistant and susceptible genotypes.

### CONTROL OF SOME RICE AND MAIZE SEEDLINGS DISEASE, CAUSING AGENTS (*USTILAGO MAYDIS* AND *ALTERNARIA ALTERNATA*) IN THE LABORATORY AND FIELD USING LEAF EXTRACTS AND POWDER OF SOME SAVANNAH PLANTS

Sarki, A-M\*, Modibbo, U-D\*\* and Abdullahi G

\*Department of pure and industrial chemistry, Bayero University, Kano

\*\* Department of Agricultural Education, Federal College of Education (tech) Gombe  
dangiwafaruk@gmail.com

Study on the control of some Rice and Maize Seedlings disease causing Agents (*Ustilago maydis* and *Alternaria alternata*) was carried out at the School of Vocational education laboratory of F.C.E (T), Gombe. Disease rice and maize seedlings were collected from Dadin kowa irrigation Scheme. Complete Randomised design (CRD) was used for Laboratory work while complete randomized block design (CRBD) was used for field work; each treatment was replicated four times. The data collected were analyzed using analysis of variance (ANOVA) and the means that were significant were separated using least significant difference (LSD). Two fungal species, one each for Maize and Rice were isolated. Pathogenicity test carried out showed that the isolated organisms were pathogenic to Rice and Maize. 100% stock solution was obtained