

## 4<sup>th</sup> International Conference on **Agriculture & Horticulture** July 13-15, 2015 Beijing, China

## Screening for new sources of angular leaf spot resistance in common bean

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Developing common bean (*Phaseolus vulgaris* L.) varieties resistant to angular leaf spot (ALS), a fungal disease caused by *Pseudocercospora griseola* (Sacc) is still hindered by 1) Existing exotic resistance sources which are not well adapted to environmental conditions in Uganda and 2) High variability of *P. griseola* which complicates ALS control. These two factors necessitate continuous identification of new and broad sources of resistance to quicken the process of developing resistant varieties to reduce on the current yield losses. Seventy four landraces, four commercial varieties, and two controls were screened with four *P. griseola* races (1:6, 17:39, 21:39 and 61:63) to determine their resistance to ALS. The experiment was conducted in pots in a screen house to identity resistant genotypes and the effect of growth habit and seed size on ALS resistance. The experiment was factorially designed in randomised complete block design with three replications. Analysis of variance showed significant (P<0.05) variation in resistance among bean genotypes. Landrace (U01597) showed consistent resistant to the four *P. griseola* races while the rest were susceptible. Seed size and growth habit were observed to influence genotype resistance to only mild *P. griseola* race (1:6) but not to virulent races. The results showed that U01597 was resistant to ALS under screen house conditions. This information generated will guide breeding programs targeting developing bean varieties resistant to ALS.

## **Biography**

Gabriel Ddamulira completed his MSc in Agronomy from Makerere University Kampala Uganda and is now finalising his Doctoral Program in Plant Breeding and Biotechnology from the same University. Gabriel Ddamulira completed his MSc in Agronomy from Makerere University Kampala Uganda and is now finalising his Doctoral Program in Plant Breeding and Biotechnology from the same University.

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