Evaluation of Performance of introduced Yam Bean (*Pachyrhizus spp.*) in Rwanda

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Abstract

Root and tubers crops are key staple crops for both rural and urban populations in Rwanda and supporting more than nine million people living in densely populated areas and sustained on agriculture with diverse range of cultivated species. Yam bean (*Pachyrizhus spp*) was introduced for both its immediate utilization as a high-yielding root crop with high sugar, considerable micro-nutrient concentrations and protein content for subtropical regions compared to common grown tropical root and tuber crops (cassava, potato, sweetpotato and yam).The yields of these species are up to 100 tons fresh weight per hectare, with dry matter contents of up to 25%. Recent introduction of different yam bean accessions in different agro-ecological zones of Rwanda produced high yield storage roots. Higher storage roots yield with strict pruning was produced by *Erosus* genotype 209018 (111.33 t/ha) and genotype 209019 (108.00 t/ha) followed by *Ahipa* genotype 209029 with 76.33 t/ha respectively. Dry matter was relatively low with a range of 20.84-19.14 % for all introduced genotypes. As a root crop with capacity of fixing atmospheric nitrogen and which does not require good-quality soil and resists pests and diseases which can fix yields abundantly and produces well even in area with scanty rain, it might be well indicated for Rwanda.

Key words: Yam bean, pruning, high Storage yield roots, dry matter, Rwanda