



SDI Review Form 1.6

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2013_AJEA_7868
Title of the Manuscript:	Potassium Nutrition and Translocation in Cassava (<i>Manihot esculenta</i> Crantz) intercropped with Soybean
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	-	
Minor REVISION comments	Discussion: Why application N ₄₅ K ₅₀ gave lower tuber yield than N ₀ K ₅₀ , discussion more on this result.	Our result clearly showed that source potentials and sink capacities of the system at N₀K₅₀ and N₄₅ K₅₀ have notable effect on the tuber yield capacities of cassava irrespective of the variety. The availability of biological nitrogen fixation and applied nitrogen at the intercrop system weakened the potential of N₄₅ K₅₀ system for higher root yield, rather there was observed higher vegetative cassava growth. There is likely hood that the larger root sink from N₀K₅₀ due to potassium resulted in a higher rate of assimilation. The consistency with which intercropped cassava at N₀K₅₀ out yielded sole cassava, suggests some compensation of nutrient from biological nitrogen fixation (BNF). The level of nitrogen acquired through BNF seems to be sufficient for the growth and yield of cassava at N₀K₅₀. Additional applied nitrogen at N₄₅K₅₀ resulted to luxury nitrogen



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		consumption, hence, higher vegetative growth. This observation explains why higher nitrogen fertilizer ($N_{45}K_{50}$) or biological nitrogen fixation (BNF) alone did not achieve the highest growth and yield of cassava. Also, it has been reported that the imbalance between exchangeable K and other soil minerals, notably calcium and magnesium, may result in total crop failure (Howeler and Candavid 1983). There was significant ($P < 0.05$) interaction between potassium rate and cropping system.
<u>Optional/General</u> comments		