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Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2013_AJEA_8309
Title of the Manuscript:	Biomass Production in the Short Rains and Its Influence on Crops in the Long Rains: A Systems Approach in Organic Farming
Type of the Article	Original Research Article

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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)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	In Table 2, it is worth to note that lablab grain yield is quite high, and very rich in the last year 2007 (with higher rain in short rain season). Considering the yield of dry matter biomass (the external part that has been dried and weighted) and the under soil root architecture that has not been considered but anyway contributes for at least $\frac{1}{4}$ to the plant structure, this was a rerally good yield. The production of 2.4 tons/ha of biomass corresponding to 75 kg nitrogen /hectare is quite a good result. The grains alone are an added value as a food the family and sold at local market. On the poorest year, lablab biomass yield produced only 0.042 tons /ha of biomass, however the use of this biomass was mirrored by a crop of 3.30 t/ha of maize grain (in respect to 3.55 obtained using manure) and 8.29 t/ha of potato tubers (in respect to 9.14 using the manure). This result is exceptionnal, considering a decrease in yield of less than 10% for maize, and of 12% for potatoes. While, in respect to the other years, the decrease in yield was around 50% for maize and 66% for potatoes. I would appreciate if the authors stress the important result botaqiend using such small amounts of lablab biomass in 2005. Similar decreases in yield are observed in 2004 and 2005: in 2004, the yield was 4.28 ton maize in respect to 4.71 tons using manure, even if this was added at half the amount than in 2005. Similar trend is observed for	Tables has been numbered to reflect information given in text, All corrections and suggestions have been heighted in yellow with the document, Grammatical corrections have also been inserted in text and heighted yellow



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	potato (12% less than using manure). Minor remarks: Tables need a revision in the numbering. Table 1 seems to be formed by Table 1a (summary of climate..) and table 1b (correlations) Table 7 yield and dry matter biomass, Table 6 NPK concentrations, are followed by Table7 grain yield and above-ground biomass and Table 10 Page 2 line 94 in the long rains (7 months) Page 8 line 254 elements reported in Table 1 (rainfall.... Page 10 line 311 manure treatment (Table 7) Discussion 4.2.5 To enhance viability of lablab for soil fertility management, there is need to evaluate... Conclusion 4. in Kenya as well as to provide....	
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<u>Optional/General</u> comments	The data provided are very interesting. It is a pity that the study ended in October 2007, so that only data on the yield of lablab crop are made available. The fertilisation of the soil and rotation with new crops could have shown that the aerial parts of such rich lablab harvest could have been comparable to manure fertilisers. The authors do not comment on the yield of crops without any treatment (sole maize and potato plots included as controls). In addition, it has to be understood that the effect of addition of straws, haulms, legume residues and weed biomass have to be considered equal in all the plots. The authors could have included an evaluation of the impact of using the goat manure in the field trial. Is it a material freely available in such amounts? Do the producers need to buy/pay to treat one hectare with 5 tons of manure? If so, the introduction of lablab cropping could be more feasible and sustainable. I found of particular interest the discussion part and introduction of specific varieties for the specific intercropping, i.e. potato / wheat with long duration lablab cultivars, and maize with early lablab varieties. Also the evaluation on the extent of complementation of lablab biomass and farmyard manure is well presented and discussed.	
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