



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	Ms_AJEA_28153
Title of the Manuscript:	EFFECTS OF LIME AND NITROGEN RATES ON SOIL PROPERTIES AND NUTRIENT CONTENT OF SUGARCANE – SOYBEAN INTERCROPPED ON ACIDIFIED SOILS OF KIBOS, KISUMU COUNTY IN KENYA
New title:	EFFECTS OF LIME AND NITROGEN RATES ON PROPERTIES OF AN ACIDIC SOIL AND NUTRIENT CONTENT OF SUGARCANE – SOYBEAN INTERCROPPED IN KENYA
Type of Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
The paper is well improved and some questions and review comments made were addressed. The language use in the manuscript has improved. The role played by intercropping is not clearly explained or discussed in this paper. On L 34-36: The benefits of sugarcane soybean intercropping are diverse crops yield, increased income, nutrition and also biological nitrogen fixation (BNF) which cut costs on the use of N fertilizers and therefore reduce soil N mining [42]. Specifically in this study? What was the benefit of intercropping? Why intercropping? L115: Lime per rate was applied prior planting. How long prior planting was lime applied? L191-193: Did CEC in this also study increase with decrease with Zn? L 196: Nitrogen rate affected only available P for 15-30 cm depth. Explain how did that happen? L228-229: The more sugarcane leaf nutrients content noted in sugarcane plots shallow banded with lime was perhaps due to enhanced uptake of the nutrients at 0 – 15 cm depth. What could have influenced nutrients content in sugarcane leaf? The paper was improved even though there are outstanding issues especially regarding the concept of soybean intercropping? Still the question was not answered. The discussion of this paper is based on Lime and Nitrogen rates. It will have been better if the title was "Effect of lime and Nitrogen rate on properties of an acidic soil and nutrient content of sugarcane in Kenya".	Author acknowledge the remarks from reviewer The proposed role of intercrop for this study was to determine the biologically fixed N by soybean upon improved soil pH. Plot under soybean alone was established however determination of the biologically fixed N proved a challenge. This has therefore made it impossible to explicitly state the role of intercrop in this paper. I will appreciate your feedback on this so that I can apply in future studies where BNF will be investigated. I have addressed the comment as shown in line 224 – 226 as follows: "The lime as per treatment was applied 48 days (on 29th June 2016) prior to planting of sugarcane setts which was carried out on 15th August 2012". Yes CEC increased but not statistically ($2 > 1 > 0$ t/ha lime) showed increase of CEC at $16.6 > 16.5 > 15.7$ cmol(+)/kg. Zn decreased at from 1.7 cmol(+)/kg (at 1t/ha lime) to 1.4 cmol(+)/kg (at 2t/ha lime). Please see table 4 and 5 (line 405 and line 420). This pattern was also noted for 15 – 30 cm soil depth (table 8 and 9). I have addressed the comment "L196" and inserted a sentence as shown in line 389 – 391 in the revised paper. I have addressed the comment "L228-229" and inserted a sentence as shown in line 502 – 506 in the revised paper. Author acknowledges the comment. However, deleting intercrop may not be right since the sugarcane was under intercrop system unlike the common sugarcane monoculture system