



**SDI Review Form 1.6**

Journal Name:	<a href="#">International Journal of Plant &amp; Soil Science</a>
Manuscript Number:	Ms_IJPSS_46983
Title of the Manuscript:	<b>Effects of Nitrogen and Phosphorus Application Rates on Growth and Yield of Two Sorghum Cultivars in Semi-Arid Eastern Kenya Case study of Machakos County</b>
Type of the Article	<b>Original Research Article</b>

**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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Compulsory</b> REVISION comments	<p>The paper is important as it provides information to improve the productivity of sorghum farming in Kenya.</p> <p>The objective of work is clear and precise. The materials and methods are clearly described. There is an error not considered the fertilizer diamonic phosphate has an 11% N, increasing the dose of this fertilizer increases the applied N dose. The results call the attention, in all the evaluated variables the effect, N, P, cultivar and its interactions are analyzed which for almost all the variables are not significant and the effect of the experiment is not analyzed (date of sowing and year) and their interactions, where the observation of the values for the same fertilization would perish indicate differences by date of sowing, year (variation of values within a row) and possible by interaction with the variety and dose of N and / or P.</p> <p>The conclusions begin by stating that an effect of the application rate of nitrogen and phosphorus on the phenological, growth and yield parameters was observed and it is indicated below that these differences are not significant, which is extremely confusing</p> <p>The results indicate that there are no significant effects on the performance of the application of N and P and then mse concludes that the government should subsidize the producers buying chemical fertilizers to improve productivity. This conclusion has no validity with the results of the work.</p>	<p>Individual effects of N, P and cultivar on the sorghum parameters were analysed. Its true that majority of the treatments depicted insignificant effects, however there were some significant difference in some experiments( highlighted in yellow within the manuscript). The manuscript did not consider the effect of dates of sowing because during the field experiments a similar sowing date was applied for each treatment per season. In order to capture the effects of sowing as suggested by the reviewers it would mean going back to the field implying the change of the objective of the current study.</p> <p>The effects observed could either be significant or insignificant</p> <p>The effect of N and P could have been absent in some experiments because of application of higher dosage of the fertilizers. That's why I recommend micro dosing and precision agriculture. The farmers can only practice this if the government tries to subsidize the prices of the fertilizers so that all small holder farmers can afford the fertilizers</p>
<b>Minor</b> REVISION comments	<p>The research is well planned and carried out, it provides a great amount of information in which there are a lot of variables to evaluate, which are not correctly analyzed, so the conclusions that are drawn are erroneous. The results should be re-analyzed taking into account all the variables (Experiment, N, P, cultivate), from whose analysis the results will surely be of greater scientific rigor and the conclusions of greater weight.</p>	<p>From the authors point of view the analysis was correctly done and results presented as obtained. May be in future studies the authors can try varying sowing dates and may be plant population and see if there are any significant differences among the two sorghum cultivars</p>
<b>Optional/General</b> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Are there ethical issues in this manuscript?</b>	(If yes, Kindly please write down the ethical issues here in details)	NO