



**SDI Review Form 1.6**

Journal Name:	<b><u>International Journal of Plant &amp; Soil Science</u></b>
Manuscript Number:	<b>2015_IJPSS_17295</b>
Title of the Manuscript:	<b>Wheat and Grain Sorghum Yields as Influenced by Long-Term Tillage and Nitrogen Fertilizer Application</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>)



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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)
<b>Compulsory</b> REVISION comments	<p>Paper very interesting, but needs some corrections.</p> <ul style="list-style-type: none"> <li>- In the introduction to talk about the importance of wheat and sorghum. Why are these crops for research were chosen?</li> <li>- Figure 01. The ordinate axis (X axis) should be inserted year.</li> <li>- Table 01 and the discussion should come after the figure 05 and discussion.</li> <li>- The quality of Figures 2 and 3 is very bad. Nitrogen rates are not specified.</li> <li>- What are the varieties of wheat and sorghum?</li> <li>- Throughout the study were the same varieties?</li> <li>- At some point there was fallow land?</li> <li>- There fertilization with macronutrients or micronutrients?</li> </ul>	<p>Information on the importance of wheat and sorghum in terms of the acreage in dryland production has been included.</p> <p>Figure 1 has Year as the X-axis.</p> <p>Table 1 and associated discussions comes before that of Figure 5 and it discussion. Specifically, lines 262-272 have discussion on Table 1, while discussion on Figure 5 starts from line 285-292 in the manuscript.</p> <p>Changes have been made to Figure 2 &amp; 3. N rates used are clearly specified in the manuscript (see material and methods; all figures have N rates specified).</p> <p>Sorghum hybrids and wheat varieties varied over the study period. This has been clarified in the revised manuscript.</p> <p>The cropping system was wheat-sorghum-fallow rotation. The fallow period was</p>



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		<p>when tillage operations were conducted.</p> <p>Nitrogen was the only fertilizer applied during the study period. Soil test P and K concentrations were adequate over the study period. Therefore, there was no need to apply these nutrients.</p>
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<p><b><u>Minor</u></b> REVISION comments</p>	<p>Line 18: The keywords should be in alphabetical order. Do not use words that are already present in the title.</p> <p>Line 36 and 37: the phrase can be excluded "Precipitation storage efficiency in the wheat-fallow system NT was 35% Compared to 20% in the wheat-fallow cropping CT system". Should come in the discussion.</p> <p>Line 59: What is PUE?</p> <p>Line 72: Write what three cultivation practices. Do not just write abbreviations.</p> <p>What are the sources of nitrogen? Ammonia? Nitrate? What abubos? mineral or organic? was performed incoprporação? What is W-S-F rotation?</p> <p>Line 79: The details of farming operations should be described. Not to mention only Thompson and Whitney.</p> <p>Line 84: What were the herbicides? Uncertainties should be avoided.</p> <p>Lines 160. What are the low and high doses?</p> <p>Lines 164-167. This explanation is just speculation. Speculation should be avoided. It should be mentioned references.</p>	<p>Key words have been revised</p> <p>PUE is precipitation use efficiency (see abstract)</p> <p>The three tillage practices; conventional tillage (CT), Reduced tillage (RT) and no-till (NT) have been have been spelt out fully in the introduction section (lines 74-77). Therefore, it is acceptable to use the abbreviations in the material and methods section. There is no need to write them out again.</p> <p>W-S-F is abbreviation for wheat-sorghum-fallow, fully spelt out and abbreviated in line 51 in the introduction. Therefore, the abbreviation can be used in subsequent sections of the manuscript.</p> <p>The source of N fertilizer used over the study period was ammonium nitrate. This information is stated in line 184-151.</p> <p>Detail information on tillage operations, crop management and herbicide application has been included.</p> <p>The low and high N doses rates have been</p>
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		included in the revised manuscript.  References have been added to support the explanation that N immobilization can affect N availability to dryland crops.
<b><u>Optional/General</u></b> comments		