



**SDI Review Form 1.6**

Journal Name:	<a href="#">International Journal of Plant &amp; Soil Science</a>
Manuscript Number:	Ms_IJPSS_43255
Title of the Manuscript:	Evaluation of anaerobic digestate potential as organic fertilizer in improving wheat production and soil properties
Type of the Article	Original Research 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:

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



SDI Review Form 1.6

**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><b>"Calculated amount of farm manure was well mixed in the soil at seed bed preparation whereas digestate was applied through fertigation with first irrigation".</b></p> <p>The authors do not clearly state how the farmyard manure was calculated, taking into account which element (N, P or K)? What methodology is used or used?</p> <p><b>"Soil organic carbon (SOC) content was estimated following the method as described by Ryan et al. (2001),"</b></p> <p>It would be interesting to use elemental carbon analyzer (dry route), because it is an article that comments on the physical and chemical properties of the soil, carbon being the element of greatest appeal in the environmental issue, especially when it is desired to propose a model of cultivation aiming at economic return and possible substitution of inorganic fertilization. Concerning the emission of CO<sub>2</sub> into the atmosphere. The atmospheric CO<sub>2</sub> emission also comes from the cultivation of the soil and the management used. Therefore, C content analyzes that originate from equipment that has greater acceptability, confidence in results, accuracy and accuracy is of paramount importance.</p> <p><b>2.4. Statistical and economic analysis</b></p> <p>Was LSD used, does it tell whether it is 5 or 10% probability? What is the error associated with each analyzed variable? Important data or information such as: coefficient of variation and standard deviation were not inserted in Tables 3 and 4. It would be interesting, if possible, to insert this statistical information.</p> <p><b>"Figure 2. Three year pool grain and straw yield of wheat in response to digestate 366 and chemical fertilizers application".</b></p> <p>Uniformize the unit (t ha<sup>-1</sup>). Or (Mg ha<sup>-1</sup>) ??</p>	
<b>Minor</b> REVISION comments	<p><b>4. Conclusions</b></p> <p>On a large scale is it possible to use manure and anaerobic digesting? In terms of quantity.</p>	
<b>Optional/General</b> comments	<p>The goal was met.</p>	

**Reviewer Details:**

Name:	<b>Eduardo Henrique Lima De Lucena</b>
Department, University & Country	<b>Departamento De Energia Nuclear, Universidade Federal De Pernambuco, Brasil</b>