

**Review Form 3**

Journal Name:	<b>International Journal of Environment and Climate Change</b>
Manuscript Number:	<b>Ms_IJECC_122529</b>
Title of the Manuscript:	<b>The effect of the use of a novel urease inhibitor coated urea on the greenhouse gas emissions and ammonia volatilization losses from a maize field</b>
Type of the Article	<b>Original Research Article</b>

## Review Form 3

### PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>The authors investigated the effect of urea coated with cashew nut shell liquid, a urease inhibitor on gaseous emissions from soil under maize cultivation. They found that cumulative greenhouse gas emissions varied among the treatments but CCU treated plots. They concluded that cashew nut shell liquid coated urea had a significant impact on the reduction of ammonia volatilization losses. The focus of the study is topical and the methodology applied is appropriate to objectively achieve their goal. The flow of the manuscript is adequate with a good readability and composition.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title is appropriate</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The abstract is appropriate and self-explanatory</p> <p>Key words are appropriate. However, the authors should add the word emissions to greenhouse so the key word should read "<b>greenhouse gas emissions</b>".</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The sections and subsections are appropriate but authors should check the numbering. For example 3.3 appears twice. One should be 3.4</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The introduction is well written and referenced. However, in the first paragraph, sentences 2, 3 and 4 need to be referenced. I have suggested "<b>Manono, 2016</b>" to appear after the sentence beginning with However --- and ends with natural systems. Objectives are well stated.</p> <p>The methodology is well written, study site is well described. However, the manuscript would benefit if authors add a map of the study area. Experimental procedures are well described including details of experimental activities such as dates of planting, treatments and replications. Gas collection and analysis procedures are well described and supported by literature. Soil analysis, estimation of maize yields and data analysis procedures are sound.</p> <p>Results and discussion section is well done. Tables and figures are well presented and captioned. However, the font of Figure one should be enhanced for readability. In section 3.2, where the authors report of soil moisture influencing CO<sub>2</sub> emissions can be referenced by the same reference I suggested to augment reference [18]. Section 3.3 Temporal trend in ammonia emissions and 3.4 cumulative ammonia emissions can be enhanced by adding more references.</p> <p>The conclusion is brief, to the point and supported by data.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>=</p>	<p>The references are appropriate. However, many of them are a bit old. I have suggested one reference that can cover for critical statements that are not supported by literature and also bring a more recent citation. The suggestion is below.</p> <p>Manono BO. Carbon dioxide, nitrous oxide and methane emissions from the Waimate District (New Zealand) pasture soils as influenced by irrigation, effluent dispersal and earthworms. Cogent Environmental Science. 2016 Dec 31;2(1):1256564.</p>	

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Minor REVISION comments <b>Is the language/English quality of the article suitable for scholarly communications?</b>	The authors should reread the manuscript to correct typos and minor grammatical errors.	
<b>Optional/General</b> comments	The manuscript is sound, original, and relevant. It deals with a critical issue of global warming and food security.	

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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