

Review Form 1.6

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_79861
Title of the Manuscript:	EFFECT OF TILLAGE AND WEED MANAGEMENT PRACTICES ON YIELD AND ECONOMICS OF MAIZE
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:

(<https://www.journalijecc.com/index.php/IJECC/editorial-policy>)

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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)
Compulsory REVISION comments	<ol style="list-style-type: none"> 1. Add the levels of the factors (treatments) and a conclusion statement in the abstract. 2. The objective(s) of the study was not stated. State the objective(s) of the study in the introduction section. 3. Briefly describe how the parameters in the results were measured in the materials and methods section. 4. Statistical data analysis was not captured in the manuscript. Author(s) should state the statistical software used to analyse the data and the type of mean separation used to compare the treatment means. 5. The author(s) should present results (Table 2 and 3) for each year (2018 and 2019) instead of a pooled data (results). 6. The study is a 2 x 7 factorial experiment; however, the interaction effect was not captured in the result and discussion section. 7. Some of the figures under the B:C ratio (Table 3) were wrongly calculated. [B:C = gross returns/ production cost]. 8. Additional data on yield parameters (number of kennels per cob, number of cobs per plant or weight of kennels per cob) and weed density are needed to support the discussion especially on grain yield. 	
Minor REVISION comments	<ol style="list-style-type: none"> 1. Keywords need to be modified. They should not be selected from the title 2. The herbicides were applied at different times (pre emergence, 15 and 25 DAS). Why did author(s) apply the herbicides at different times? Is time of application part of the factors? 3. Conventional tillage increased grain yield due to deeper root spread and more root activity, but these parameters were not measured in the study. How did the author(s) justify those parameters stimulated the grain yield? Moreover, there was no literature to support that assertion. 4. The author(s) reported a reduction in the cowpea yield; however, there was no result on cowpea in the manuscript. How many treatment plots were having cowpea and which treatments were compared to deduce that assertion? 5. "Although the cost of cultivation of maize in RT was lowest but the advantage of reduced cost of cultivation was marked by higher weed density and weed dry matter under this treatment, restricting poor resource use by the crop, owing to tough crop weed competition." <p>Author(s) cannot use the main effect of weed management to discuss (explain) the main effect of tillage practice.</p> <ol style="list-style-type: none"> 6. Some references were cited in the in-text but they were not listed in the reference section and vice versa. 	

Comment [D1]: Did you determine these parameters in the study? On what basis are you attributing the increased in grain yield to deeper root spread and higher root activity? Justify this statement

Comment [D2]: 1. did you measure weed density and weed dry matter in the study?
 2. This statement refers to the main effect of tillage practice and not weed management practice, so why are you attributing the effect to weed competition?
 3. Compared the two tillage methods effect on net returns and discuss it. Give reason(s) for the effect and support it with literatures.

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Optional/General comments	Corrections and comments have been made with track changes in the manuscript. Stover yield and harvest index were shown in Table 2, yet they were not captured in the results and discussion section.	
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PART 2:

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

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