## Review Form 1.6

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| Journal Name: | **International Journal of Environment and Climate Change** |
| Manuscript Number: | **Ms_IJECC_84306** |
| Title of the Manuscript: | **STUDY OF BIOLOGICAL PROPERTIES UNDER IMPORTANT CROPPING SYSTEMS IN INCEPTISOLS AND VERTISOLS OF NORTHERN TELANGANA ZONE** |
| 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 )

## 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)* |
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| **Compulsory** REVISION comments | **Congratulations to author. This may be student work, prior to submission document may be shared with your coauthors for clarity. I request author go through few articles which you referred in your literature cited which will improve your interpretation to next level.**<br><br>1.Modify the title and suggested title : **Microbial biomass and enzymatic activity of major cropping systems in soils of Inceptisols and Vertisols at Northern Telangana**<br><br>**2.** Delete and Rewrite Abstract must be written with all components of manuscript.<br><br>Use this abstract:<br><br>Under cropping systems, microbial biomass plays a major role in nutrient and energy flow of soil. Similarly, urease and dehydrogenase activities are essential for nitrogen cycle and determining biological index of soils, respectively. However, their information is minimal at major cropping systems of this region. Therefore, surface soil (00-15 cm) samples were collected after 8 years from rice-rice, rice-maize, cotton and turmeric-sesame cropping systems at soils of Inceptisols and Vertisols of Northern Telangana zone during kharif 2019. A five replicated soil samples were collected, assessed and statistically analyzed with factorial randomized block design. The results revealed that the forms of microbial biomass carbon (14%) and nitrogen (22%), urease (29%) and dehydrogenase (20%) activity were found to be higher in cropping systems under Vertisols compared to Inceptisols. Among the cropping systems, rice-rice showed significantly higher biological properties than others. The interactions are significant for urease activity. Urease and dehydrogenase activity is positively correlated with soil available nitrogen and organic carbon content of soils, respectively of cropping systems.<br><br>**3.Introduction**<br>In 1st paragraph, brief about the four cropping systems.<br><br>Why to study only MBC, MBN, Urease and Dehydrogenase only?<br><br>How this study benefits or improves knowledge ?<br>**4. M& M**<br>Add- Study area and treatment details<br><br>An experiment was conducted during *kharif*, 2019 at Agricultural College, Polasa, Jagtial, Professor Jayashankar Telangnana State Agricultural University. The experiment was laid out in randomized block design with factorial concept (FRBD) with five replications. Soil samples were collected from four cropping systems *viz*., rice-rice ($CS_1$), rice-maize ($CS_2$), cotton-fallow ($CS_3$) and turmeric-sesame ($CS_4$) under two soil types *viz*., inceptisols ($S_1$) and vertisols ($S_2$) from surface soil (0-15cm). Selection of sites was based on continuous cultivation of the same cropping system (at least for 8 year), in Northern Telangana Zone of Telangana State<br><br>**Result and discussion**<br><br>Follow the pattern always same for MBC, MBN, U & D (Don't confuse by altering parameters) | |

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| | **Use this**<br>**Figure. 1 Correlation studies a) Soil available nitrogen *Vs* Urease b) Organic carbon *Vs* Dehydrogenase.**<br>**Table 1. Influence of soil types and cropping systems on soil microbial biomass carbon (µg C $g^{-1}$ soil), microbial biomass nitrogen (µg $NH_4^+$ $g^{-1}$ soil), urease (µg $NH_4$-N $g^{-1}$ $hr^{-1}$) and dehydrogenase (µg TPF $g^{-1}$ $hr^{-1}$)**<br>**Conclusion**<br><br>Rewrite as per your result<br>Is there any results provided this information. If not delete<br><br>**Literature cited**<br>Follow as per journal guidelines<br>Include the reference missing in both places of manuscript and references section | |
| **Minor** REVISION comments | - | |
| **Optional/General** comments | - | |

**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)* |
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| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in details)* | |

**Reviewer Details:**

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