

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_117103
Title of the Manuscript:	Effect of elevated CO2 and temperature on chlorophyll content and growth attributes of rice-wheat cropping system in vertisol of central India
Type of the Article	

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 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u>	<p>The climate change is progressing in the last few decades and surely it greatly affects agriculture practices and production. This manuscript is written very well based on research partially related to two most important factors affecting agriculture i.e. the global increase in CO₂ pressure and temperature. The results are expressed very well in its Abstract and Conclusion, supported by 42 publications. Therefore, this manuscript is worth for the scientific community.</p> <p>There are several notes from me:</p> <ol style="list-style-type: none">1. Discussion only mentions the direct effect of CO₂ and temperature on rice and wheat vegetative attributes but no discussion related to the indirect effect of CO₂ and temperature on the soil nutrient status and movement. For example, the increase in CO₂ pressure may lower the soil pH that directly control some nutrients in soils or soil temperature which may indirectly affect the absorption of plant nutrient through the effect of the increase in air and soil temperature that may indirectly speed the nutrient transports in soils and therefore nutrient availability to rice and wheat plants,2. Why Vertisol is exposed in title? I see no importance to put it in title. No discussion about it also in the Discussion part.3. The flow of logic in introduction is clear but Introduction is better to be broken into 3-4 effective paragraphs to enhance its readability.4. There is one figure cited in the Discussion by it is not clear which table is.5. This manuscript is supported by 42 publications but more that 50% are old publications. Please enrich with several current publications6. There are several problems in SP agreement, word spaces, word spelling and punctuation.7. The title of Table 1 is too long. Please shorten. Put words of explanation as footnote.8. Please arrange keyword alphabetically, do not use words already used in title.	<p>Thank you and we appreciate reviewer for positive remarks.</p> <p>We thank reviewer for this comment that elevated CO₂ may have acidic effect on soil. But we are sorry to disagree slightly with remark that direct effect can be minimal and may not have that significant effect as indicated. It is because the gas phase of soil contains more than 10000 ppm CO₂ and the role of +200 ppm can be negligible. Therefore, the direct effect on soil pH influencing nutrient cycling and plant acquisition can be insignificant. However, there are indirect effect where root exudates help in nutrient acquisition. Considering the reviewers remark, we have added information in the discussion section. Why Vertisol is exposed Thank you. We have removed vertisol from title as per suggestion of reviewer</p> <p>Corrected</p> <p>Removed Fig citation in discussion</p> <p>References revised. Corrected</p> <p>Corrected Corrected</p>
Minor REVISION comments 1. Is language/English quality of the article suitable for scholarly communications?	Excellent	
Optional/General comments	-	

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PART 2:

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