Review Form 3

Journal Name:	**International Journal of Environment and Climate Change**
Manuscript Number:	**Ms_IJECC_121997**
Title of the Manuscript:	**Agronomic interventions for alleviating stress and optimizing productivity of field crops: A review**
Type of the Article	**Review Article**

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)*
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.	**The topic is highly relevant to present situation in agriculture. This information is highly helpful to the agricultural scientist to raise the field crops successfully under drought situation. The authors may include some more recent literatures in this review article is highly recommended one.**	
Is the title of the article suitable? (If not please suggest an alternative title)	**The title may be changed to -Agronomic interventions for alleviating stress and optimizing productivity of field crops: a mini review**	
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.	**Corrected Abstract** Water scarcity is the most significant concern facing agriculture today. Agriculture currently utilizes more than 70% of the world's freshwater, with much of it lost through evaporation, leaching and runoff. Drought escape and drought tolerance are the two significant mechanisms for plant growth under water-stressed conditions. Drought, a primary abiotic factor, limits crop productivity. It is a climatic phenomenon characterized by a prolonged lack of rainfall, resulting in moisture loss from the soil and a lack of water potential in plant tissues. It prevents the crop from obtaining its potential yield and substantially reduces crop production.Field crop rely on rainfall and are vulnerable to unpredictable drought stress throughout their vegetative and reproductive growth cycle. Drought stress is typical during the flowering stage in mostly crops, resulting in lower yield when cultivated with scarce rainfall. It can be reduced through agronomic means, such as mulching, tillage, intercropping and nutrient management, as well as chemical measures, such as the use of soil additives herbal hydrogel (*Gond katira*), foliar spray of salicylic acid and potassium nitrate. Herbal hydrgel helps in reducing the effect of drought stress on plants while also promoting increased plant growth and opverall performance. Foliar application of salicylic acid boosted bioactive chemical synthesis in the presence of water deficiency. Potassium nitrate to enhance water uptake, promote longer pod length and improve drought tolerance in plants.	
Are subsections and structure of the manuscript appropriate?	**Yes, They discussed only three factors (salicylic acid, hydrogel and potassium). So, the article may be considered for mini review or change the tile like this Agronomic interventions for alleviating stress and optimizing productivity of field crops: a mini review**	
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.	**Enough**	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	**Include few more recent references (2023 and 2024)**	

Comment [WU1]: This is a soil additive, kindly check

Review Form 3

Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	Acceptable	
Optional/General comments	**The review article is accepted for publication (considered as mini review)** **The contributors must including more recent literature in research on drought stress and its effects on plants is crucial for enhancing the scientific value of the study and providing readers with up-to-date information**	

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?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

Name:	**P. Sivakumar**
Department, University & Country	**Tamil Nadu Agricultural University, India**