

Review Form 3

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| Journal Name: | International Journal of Plant & Soil Science |
| Manuscript Number: | Ms_IJPSS_130687 |
| Title of the Manuscript: | Effect of Natural Farming, Organic Farming, Integrated Crop Management and Conventional Management Practices on Yield Attributes and Productivity of Wheat + Mustard Intercropping System. |
| Type of the Article | Original Research Article |

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Comments

| | Reviewer's comment | Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i> |
|---|--|---|
| Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part. | The topic is important given the natural farming (NF) mission govt. of India launched in 2022 end. There are concerns regarding food safety, farm viability and environmental sustainability that NF aims to address. If NF/ organic farming yield is enough for food security of the nation/ globe is a puzzle and hence the manuscript is welcome to show possible pitfalls. | |
| Is the title of the article suitable? (If not please suggest an alternative title) | The term "Effect" may be replaced by "Challenge" in the title as its stark. | |
| 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. | Abstract is comprehensive but focus on describing treatment details may be reduced and yield loss in NF, organic farming system may be highlighted- 67% i.e. 894 kg/ ha vs 2,762 in natural farming vs conventional vide table 6. Organic farming yield is also 50% less (1,194 kg/ ha) than the conventional, you may say. | |
| Is the manuscript scientifically, correct? Please write here. | Yes, its sound. Only point to add is it is only 2 years data set while for organic/ natural farming, 3 set data set are minimum for sound results and it's the conversion period for certification also. So "Limitations" section may be added before conclusion and this may be stressed asking for the need for more, time series, long term research. | |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. | I added 5-6 references to add issues like policy, pollution, consumer health & cancer, micro-nutrition etc. <ol style="list-style-type: none"> Ghate U. & Kulkarni H. 2024. Doubling Indian Agri Export through Natural Farming Management, Horticulture & African Markets. <i>Asia Jr Agri Horti Res</i> 11 (4): 37-48. Ghate, U. 2023. FPOs for the success of Natural faming. <i>LEISA India.</i>; 25:19-22. Bhujel R R,. Joshi H G (2023). Organic Agriculture in India: A Review of Current Status, Challenges, and Future Prospects. <i>Universal Journal of Agricultural Research</i>, 11(2), 306 - 313. Sahu R S, Tiwari M, Deka N, 2024. The role of organic farming in creating food security and sustainable livelihoods for India's smallholder farmers: a systematic review using PRISMA Organic Agriculture 14(4):1-27. 4. Narayanan, S. 2005. ORGANIC FARMING IN INDIA : RELEVANCE, PROBLEMS AND CONSTRAINTS, NABARD Occasional paper no. 38. Mumbai. | |

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| | <p>https://www.nabard.org/demo/auth/writereaddata/File/OC%2038.pdf 6. NITI Aayog, 2023. Gearing up to Solve Food Security Challenges- Building agritech ecosystem for the global south. UNCDF, Atal Innovation Mission, NITI Aayog. https://www.niti.gov.in/sites/default/files/2023-04/Report-UNCDF.pdf</p> | |
| Is the language/English quality of the article suitable for scholarly communications? | Yes, English is fine. | |
| Optional/General comments | <p>The article is good & worth publishing. However, few points may be added- 1) Subhas Palekar Natural Farming System (SPNF) is more popular as zero budget natural farming & Govt. dropped zero budget in its policy. 2) NF movement/ mission is aimed not only at "yield" but also "profitability"/ benefit cost ratio that is not evaluated here, plz. Do so from literature/ re-analyzing your own data. 3) Rising cancer rates in the society- both consumers and farmers- due to pesticide excess is worrying, NF started to reduce it, please note. And thus, NF certification can help in export as ref. 1 below suggests. 4) Rising surplus, glut, crop price drop is causing farm unviability, loss, farmers suicides so its needed to rationalize crop production by quality improvement, yield optimization, climate resilience where nF may help, please note vide ref. 2. Also, please compare/ add 1 lines of NF & Organic farming difference. 5) Yield reduction under organic regime 7 food security in India & the world is a challenge, soil micronutrient depletion and hidden hunger as late Prof. M S Swaminathan said is another worry, and NF tries to balance it through 'circular economy'- residue rotation, as said in ref. 2-6. You may plz. Ad these points. 6) policy support such as subsidy for NF practicing widows through women-child dept. Govt. of Andhra is mooted, you may note.</p> | |

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

Reviewer Details:

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| Department, University & Country | India |