Respected Editor(s),

We are thankful to reviewing our manuscript and suggested modifications for making this manuscript more improved. Now hope this revised manuscript will meet the journal’s requirements. The queries and their responses are described as under:

1. Inconsistent and poorly structured writing: The writing style in sections such as the introduction lacks coherence, failing to effectively introduce the research topic, describe the background, establish the research problem, specify objectives, and provide an overall sentence.

**Response: As suggested by learned reviewer we have revised it.**

2. Insufficient detail on experimental design: The methodology lacks essential details on soil sample handling, testing protocols, and chemical analysis. Absence of clear descriptions of experimental design, particularly concerning replication, randomization, or controls.

**Response: As suggested by learned reviewer we have revised it.**

3. Outdated and Limited Literature Review: The references cited are either outdated or limited in scope, lacking recent studies on soil fertility and paddy yield correlations.

**Response: As suggested by learned reviewer we have revised it.**

4. Inadequate results and discussion section: While data from 2022 is mentioned, it is not presented. There is a lack of visual data presentation. No statistical analyses were used to validate the differences in crop yield and soil parameters over the years. Moreover, there is insufficient information on how soil parameters (e.g., pH, EC) affect the rate of NPK fertilizer and rice yield.

**Response: The data was taken in 2021 and 2022.**

5. The discussion lacks in-depth analysis and comparison with recent studies, relying on outdated literature, which may reduce the scientific value of the findings. There is no discussion of variability in soil properties, environmental factors, or possible biases in soil sampling and testing methods.

**Response: As suggested by learned reviewer we have revised it.**

6. Unsubstantiated Conclusions: The conclusions drawn are overly broad. Practical recommendations on soil management strategies that could improve soil fertility and paddy yields are unclear.

**Response: As suggested by learned reviewer we have revised it.**