

Dear Editor

I have reviewed the assigned manuscript and suggested some changes which must be incorporated for enhancing the quality of the manuscript. The authors are advised to carefully consider all these suggestions in their revised version. I would love to see the revised version before making any recommendation.

My suggestions for authors are mentioned below:

Abstract

Biochemical analyses further revealed that Si treatments inhibited several enzyme activities, while simultaneously inducing others, thus suggesting a toxic effect on the Fall Armyworm.

Its better to mention the names of enzymes or the activities involved rather than giving a generic statement. Please revise the above statement for more clarity.

In conclusion of abstract, author stated Si applications

Does one application is enough or Si have to be applied at regular intervals. The authors are advised to give a sound recommendation depending on the feeding nature of the pest.

Introduction

Line 44: The Fall Armyworm, *Spodoptera frugiperda*

Also mention its family and order along with authority

Line 45: Replace threat in with threat to

In the text citations are not placed properly (Haq et al., 2022b; Guo et al., 2018) (Akhtar et al., 2022; He et al., 2023). Follow one sequence as per Journal guidelines i.e. from latest to old or old to latest.

Line 52: rapid lifecycle: shorter lifecycle will be more suitable

Line 64: Replace environmentally friendly with eco-friendly

The authors are advised to use more suitable and specific terms throughout the manuscript.

Line 65-66: to biotic and abiotic stress: Better to write against both biotic and abiotic stresses. Add more recent citations here separately for biotic and abiotic stresses.

Line 66: Silicon is non-toxic

Ambiguous statement as Si is toxic for insects and it can be also toxic for plants at specific higher concentrations. Be careful with your statements.

Line 66-67 and 70-71 are almost similar. Avoid these kinds of repetitions.

Line 76: Add more citations.

Line 77-85: Very well written.

Line 86: Before stating the objectives, the authors are advised to add a study gap statement. This will further enhance the significance of current study.

Materials & Methods

Why authors use foliar sprays and avoided drenching treatments. Any particular reason for selecting Si dose (800 ppm)?

Line 95: laboratory conditions: Be more specific and mention temperature, humidity and photoperiod ranges here at the start of experimental procedure

Line 98: Also mention application method and dose rates.

Line 102: standardized pro mix potting soil. Its better to mention the ingredients with ratio. Also mention Pot size.

103: Replace degree Celsius with °C throughout the manuscript.

106: parts per million (ppm)

Avoid using terms like we isolated, we assessed

What about Statistical analysis section?

Results

The results section seems ok with author can also add exact values depending on his choice.

Discussion

Is better to add an introductory paragraph stating the importance of Si against target pest.

The few last lines of discussion section can be incorporated in conclusion section. The authors are advised to give a sound recommendation regarding Si applications in maize. What would be ideal either a single application or split applications at regular intervals? Also mention what is missing in current study which needs to be addressed in further studies.