

Review of: "[Review Article] Excessive Aluminum in Soil"

M. Glorioso B. Allakonon

Potential competing interests: No potential competing interests to declare.

The manuscript "Excessive Aluminum in Soil" focuses on an interesting and relevant topic.

However, the topic seems too broad. The author should focus on the impacts and remediation of excessive aluminum.

In terms of general format, (i) the lines of the manuscript are not numbered to facilitate the review process. This makes the review process very challenging as the reviewer cannot easily refer to the specific line to correct.

(ii) the sections of the manuscript are not numbered; this does not show a sequence in ideas.

(iii) the reference style is not uniform throughout the manuscript. The authors should be consistent in the way they cite the references. Sometimes the expression "et al." is used in case of multiple authors, while at some other places, all the author names are cited.

The comments are presented per section.

1. Title:

As the title shows, it is a review article, but no geography or country information was listed both in the abstract, methodology, and results.

2. Abstract:

2.1. In the abstract session, the first sentence is to be reformulated in two sentences, in such a way to separate the environmental factors of excessive aluminum (EA) from the impacts of excessive aluminum in soil on plant growth and human health.

2.2. The abstract remains simple but too generic. The author should bring out the innovation or informative results that the manuscript has found to enrich the abstract.

3. Effects of aluminum accumulation in soil:

This section should be first reformulated in such a way as to talk about "the effects of aluminum accumulation on soil properties and plant growth. Then it should be subdivided to present different types of effects:

- Chemical effects
- Physical effects
- Biological effects

In each of these categories, the negative and positive effects could be more detailed.

In this section, the author seems to focus only on the tea plant without justification. Why mainly use only the tea plant to demonstrate the effects?

Before this section, the whole document is lacking a section on the methodology used to conduct this review. We invite the author to consider updated formats of manuscripts conducted on review.

Correct:

“At a chemical level...” Into “from the chemical perspective...”

The paragraph on the effect of EA on the soil structure needs to be more detailed, and more focused on the impacts of EA on soil structure, instead of the impacts of EA on plant nutrition, anatomical and morphological changes.

The figures 1 and 2 provided have not been mentioned anywhere in the text, and the place they are inserted in the manuscript does not correspond to the content of the section that just preceded the figure. For instance, the figure 1 should appear after the paragraph related to the biological effects of Al, instead of appearing before that paragraph.

Caption of figure 1, does not look well formulated. I invite the author to consider this

formulation instead: “Symptoms of Aluminum toxicity on field pea (a) Plant roots and (b)

Foliage”. The source of the figure should also be indicated in the caption.