Review Report Form

Open Review

( ) I would not like to sign my review report
(x) I would like to sign my review report

Quality of English Language

( ) English very difficult to understand/incomprehensible
(x) Extensive editing of English language and style required
( ) Moderate English changes required
( ) English language and style are fine/minor spell check required
( ) I am not qualified to assess the quality of English in this paper

	Yes	Can be improved	Must be improved	Not applicable
Does the introduction provide sufficient background and include all relevant references?	( )	( )	(x)	( )
Are all the cited references relevant to the research?	( )	( )	(x)	( )
Is the research design appropriate?	( )	( )	(x)	( )
Are the methods adequately described?	( )	( )	(x)	( )
Are the results clearly presented?	( )	( )	(x)	( )
Are the conclusions supported by the results?	( )	( )	(x)	( )

Comments and Suggestions for Authors

The manuscript by ma et al. reports investigations on how exogenous selenium and biochar application could modulate the growth and selenium uptake 2 of medicinal Legume Astragalus species.

Even though the manuscript's content is interesting and the results should be published. The manuscript could not be accepted in the present form. To my opinion, the authors submitted an advanced draft but not the final paper (at line 5.15 of the pdf file, a green highlighter is present).

Answer:The manuscript has been reformatted and extensively carefully modified in accordance with the MDPI's guidelines for authors.

Other critical comments are:

1. At specific points, the text is tough to read (such as lines 462- 466). Thus I suggest a careful English revision. Answer:Revised and polished a lot of English.

2. Please use and carefully follow the Plants template: the Abstract should be only 200 words (the present Abstract is more than 500 words). The headers of the sub-chapters should start with numbers or at least be separated from the

other text. This could increase the readability of the manuscript.
Answer:Condesed and revised.

3. All the names of species should be in italics. They are in italics only in the captions of the figures. Answer:Checked and italicized.

4. In the introduction. The authors should justify why they decided to study flavonoids, sugars and calycosin-7-glucoside and why studying this compound in the legume Astragalus species is essential. Answer: Added and explained in the introduction. Calycoflavone-7-glucoside is a flavonoid compound, which is also the main active component and secondary metabolite of *Astragalus*.

5. Methods. All the methods used should be reported in total. It is not advisable to cite the reference as the authors did in the " Determination of active components and Se content" section. On the other hand, the information about the methods should be complete to help the transparency. Moreover, Figure 1 should be moved in the results. Furthermore, considering that the authors used different treatments and species, it could be essential to report a chromatogram x treatment per species as supplementary figures. Finally, in line 160, it is unclear where "the enrichment coefficient" and "transport coefficient" come out, probably from a method not wholly stated. Answer: Moved and explained.

6. Results and Discussion. Table 4 should be moved from the Discussion to the results after the first citation. Answer:Moved.

Submission Date

10 February 2023

Date of this review

29 Mar 2023 17:27:02