Dear authors,
The manuscript “Remediation of Cadmium and Lead in Mine Soil by 2 Ameliorants and Its Impact on Maize (Zea mays L.) Cultivation” deals with the soil in a lead-zinc mining area, contaminated with heavy metals (Cd and Pb), poses a risk to the maize. The goals of the research are: 1) to study the effectiveness of biochar and sepiolite in immobilizing Cd and Pb in the soil, in the uptaking of these metals by maize plants and in the leaching loss of Cd and Pb from the soil; 2) to test a method for restoring arable soils contaminated with Cd and Pb. A pot experiment using biochar and sepiolite as soil ameliorants was conducted in the greenhouse of the Research Center at Yunnan Agricultural University.
The topic of the article is quite relevant, especially considering the increasing soil contamination by heavy metals where Cd and Pb may act as major pollutants. The research was done correctly. The pot experiments with maize using biochar and sepiolite as soil ameliorants were conducted. The pot experiments showed these ameliorants can mitigate studied heavy metal contamination.The authors present interesting material. However, statistical processing of the results was not performed, making it impossible to assess the significance of the differences in the experiment's variants. The results are presented as 196.88±3.25. It is unclear whether this represents the mean ± standard deviation or ± mean error.
The authors should revise the presentation of the results and resubmit the manuscript to the journal.
Below are some suggested small corrections.
Lines 56-58
The manuscript gives an incorrect reference (see below). Organic fertilizers and agricultural wastes cannot be called humus.
“Commonly used immobilizing agents include inorganic materials such as clay minerals, lime, phosphorus-containing substances and organic materials such as biochar and humus [13].”
The reference is such
13. Lei, C., Huang, H., Ye, H., Fu, Z., Peng, P., Zhang, S., Long, L. Immobilization of Pb and Zn in Contaminated Soil Using Alumina-422 Silica Nano-Amendments Synthesized from Coal Fly Ash. Int J Environ Res Public Health. 2022, 19, 16204. doi: 423 10.3390/ijerph192316204.
From (Lei et al., 2022)? Introduction:
“In the current in situ immobilization technology for heavy metals in farmland soil, the commonly used amendments mainly include calcareous materials [**8**], phosphorus-containing materials [**9**], carbon materials [**10**], clay minerals [**11**], organic fertilizers [**12**], and agricultural wastes [**13**]. “

Line 170
Figure 1a. pH. Is this pH was measured in water or salt (KCl or CaCl2) solution?
It is better to move the start of the X axis to the 3 or 4 position.

Line 175-177 Decreased, not increased. Please check if there is an error in this sentence.
After the application of biochar to the soil, the aboveground 175 and underground biomass of maize plants increased and decreased from 17.58±1.19 176 g/plant and 4.48±0.60 g/plant to 16.38±0.86 g/plant and 4.1±0.32 g/plant, respectively.

Line 175-181.
The authors should provide a statistical treatment of the results. They should show whether the differences are significant.