

## Review of: "Evaluation of Antioxidant Activity and $\alpha$ -Amylase Inhibitory Potential of Melilotus indicus Ethanolic Extract: An In Vitro and In Silico Study"

## Mehmet Emre Erez<sup>1</sup>

1 Molecular Biology and Genetics, Yüzüncü Yil (Centennial) University, Turkey

Potential competing interests: No potential competing interests to declare.

First of all, there is no problem in terms of the scientific methodology of the study. However, irterms of writing,

- \* The author should be added at the first place where the name of the plant is mentioned (Melilotus indicus (L.) All.).
- Also, italic characters should be used everywhere the name of the plant is mentioned.
- This is not a vegetation study, so I think there is no need for both the distribution of the plant on the map and the plant pictures.

## · In terms of material and method;

First of all, the study data was designed by attributing it to another study (Ragab et al. 2021).

- The referenced article and the current study methods are different from each other.
- In addition, the plant species were collected from the garden environment in the current study. The growth environment of the plants changes their metabolite content and varieties. Therefore, this situation will also affect the antioxidant activity values. Also, the authors can detect the flavonoid content by chromatography methods.
- If the researchers could determine the plant contents, there would be no problem.
- The extraction method used is the boiling method, and in this method, there may be degradation, and the active substance contents will also vary.
- The IC50 value in antioxidant activity is actually very high for antioxidant capacity, and evaluation and discussion have not been sufficient. The authors could improve and support their results, maybe, by different antioxidant assays such as FRAP, ABTS, CUPRAC.
- Finally, the ferulic acid and chlorogenic acid used in the docking study are not specific to the Melilotus plant, so it may not be correct to directly attribute the potential to the substances used.

As a result, if researchers can make the necessary corrections and additions, and evaluate the results they reach more effectively and in more detail, the study can be published. I think it should be evaluated as a major revision.

With best regards,

