

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

Jean Bosco Saha Tchinda<sup>1</sup>

<sup>1</sup> Independent researcher

Potential competing interests: No potential competing interests to declare.

## Abstract

The research evaluated the flavonoids in ethanolic extracts. There is no GC-MS or HPLC to confirm some flavonoid structures in the extract. The abstract should be rewritten.

## Introduction

The flavonoids of the plant were already studied (Ragab et al., 2021). The antioxidant was already studied (Notably, it contains high levels of phenolic acids, particularly ferulic acid and chlorogenic acid, which contribute to its potent antioxidant activity). Present at the end of the introduction the novelty of the work.

## 2. Materials and methods

Give the size of the particles extracted.

Is there no flavonoid that you can use as a reference?

### 2.5.1. Medicinal compound choice

In this study, we aimed to investigate the potential of two phenolic acids (ferulic acid and chlorogenic acid), two flavonoids (quercetin and kaempferol), and coumarin (all found in *Melilotus indicus* aerial parts). Were these compounds also isolated in your extracts?

## 3. Results and Discussion

### 3.1. Extraction

No discussion of the yield.

### 3.2. Determination of total flavonoids content

No comparison of the results obtained with other research in the same family of plants.

### 3.3. Antioxidant Activity

The presence of flavonoids such as quercetin and kaempferol may lead to the antioxidant activity of *Melilotus indicus* because these compounds contain a hydroxyl group. How did you identify this compound in the extract? There is no comparison of the results with others.

## 4. Conclusion

They did not present any novel research.