

Review Form 3

Journal Name:	European Journal of Medicinal Plants
Manuscript Number:	Ms_EJMP_123927
Title of the Manuscript:	Evaluation of Antioxidant, Anticancer, Anthelmintic and Neuropharmacological Activity of Boerhaavia diffusa Linn. (Family: Nyctaginaceae)
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The biological activity of <i>Boerhaavia diffusa</i> is being evaluated in order to generate a scientific database for medicinal plants that can be used in the production of medications or functional meals. I appreciate the efforts of this study article.	
Is the title of the article suitable? (If not please suggest an alternative title)	Add a comma after Anthelmintic Evaluation of Antioxidant, Anticancer, Anthelmintic, and Neuropharmacological Activity of <i>Boerhaavia diffusa</i> Linn. (Family: Nyctaginaceae)	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is a crucial section of a scientific article since it summarizes the report's aims, methodology, and results while being brief and simple. I believe this abstract is too long and should be shortened to roughly 230 - 250 words.	
Are subsections and structure of the manuscript appropriate?	Subsections correspond to the structure of a scientific paper.	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	I have doubts about the Anthelmintic Test with Adult Earthworms (<i>Pheretima posthuma</i>) research subject. Anthelmintics, or antihelminthics, are a class of antiparasitic medications that eliminate parasitic worms (helminths) and other internal parasites from the body by stunning or killing them without inflicting considerable harm to the host. That is, the investigation should focus on parasitic worms rather than earthworms.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The total number of references is 36, which is too much for a scientific paper with a page limit. It is crucial to choose important references, such as original sources; each research approach should only quote one reference. I recommend a maximum of 10-12 references for a scientific article.	

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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The quality of the language in the article ensures scientific academic quality; however, many spelling and text errors need to be corrected, and the entire report needs to use a common font according to the journal's requirements.</p> <p>I discovered a large number of spelling problems; for example, in the summary, there were 47 errors in spelling, prepositions, tenses, and characters. I recommend that the author improve the spelling of the summary based on the author's summary before shortening this part.</p> <p><i>Boerhaavia diffusa</i> Linn belongs to the family Nyctaginaceae and has been documented for its antioxidant, anticancer, anthelmintic, and neuropharmacological effects. A literature review of the plant revealed that some research works are performed during this plant. That's why this study was performed to gauge the antioxidant, anticancer, anthelmintic, and neuropharmacological activities of the methanolic extract from the leaves of <i>Boerhaavia diffusa</i> (MEBD). Antioxidant activity was evaluated using a DPPH free radical scavenging assay using serial dilution concentration, and the IC₅₀ was 1.51. The anticancer test was done using a cell viability assay. During the anticancer test at a concentration of 1000 µg/mL, the percent inhibition was 29.16%. Anthelmintic activity was investigated using earthworms (<i>Pheretima posthuma</i>) and fresh leaf juice of the plant. In anthelmintic activity, the time of paralysis for fresh leaf juice began at 64 min 55 sec and ended at 23 min 19 sec, while the time for the tested drug Albendazole was started at 76 min 09 sec and ended at 30 min 43 sec. Besides, the time of death starts at 71 min 09 sec and ends at 29 min 54 sec for leaf juice, and for albendazole, the time of death starts at 82 min 19 sec and ends at 38 min 18 sec, respectively, at several doses that suggest considerable anthelmintic activity of the plant. Neuropharmacological activity was performed by hole cross and light/dark box tests at the doses of 200 mg/kg and 400 mg/kg in Swiss albino mice in contrast to the test drug Diazepam (2 mg/kg). The extract significantly decreases the locomotor activity, as shown by the results of the hole-cross test, which indicate significant antidepressant properties. The results also match the activity in the light/dark box test. Thus, the obtained results in the research work provide support for the utilization of this plant for medicinal purposes and encourage further investigations for more fruitful results.</p>	
<p>Optional/General comments</p>	<p>The author may object to the doubts about the accuracy of the anthelmintic test on the research experimental animals on earthworms that I mentioned earlier. The spelling should be evaluated more carefully to ensure that the scientific article is linguistically accurate.</p>	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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<p>Department, University & Country</p>	<p>Vietnam</p>