



SDI Review Form 1.6

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Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	Ms_IJBCRR_39603
Title of the Manuscript:	In vitro Antiplasmodial and Toxicity Activities of Crude Extracts and Compounds from Euclea latideus (Ebenaceae)
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	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)
Compulsory REVISION comments	Conclusion: The authors jump to the conclusion from in vitro and mice experiments that Euclea latideus extracts are safe and effective for "prophylactic cure." A more cautious approach is necessary, and the authors should not recommend human use of E. latideus extracts until more clinical data are available.	Correction made
Minor REVISION comments	Line 49: The current estimates of deaths are much lower. Please cite the latest estimate provided in World Malaria Report 2017. Line 64: Euclea latideus Lines 64-66: The two statements seem to be contradictory. Euclea latideus is stated to be found in tropical and subtropical regions of the world in the first statement, but the genus Euclea is restricted to Africa in the second statement. Please clarify. Lines 79-80: The statement "studies...of crude extracts sequentially extracted from solvents of different polarities are nonexistent in the literature" does not seem to be the case. Lines 84, 179, 212, 471, 484, 516, 559, 561, 582 and elsewhere: Dd2 strain Fig 1: "(EL2)" is not correctly placed. Line 190: ...to generate 10 dilutions (these are not "IC50 concentrations") Lines 208 and 261, Table 5: The more accurate way to express dispersion would be mean $\pm$ standard deviation (SD). The use of SD would probably avoid the results expressed as 37.72 ± 0.0 and 38.39 ± 0.0 (lines 472-473, also 538-539), which seem awkward. Line 216: Please check if 230 mice were used for toxicity experiments: 9 mice in the first phase, 9 (+ 1 control) additional mice in the second phase, and 16 (4 x 4 mice) = 35 mice? Line 233: Please write a complete sentence: "after which the LD50 was determined." Line 266: "and P > 0.05 not significant" can be deleted. Lines 501-503: Please cite the authors' name instead of citing the reference number: "In Nigeria Melariri et al. determined antiparasmodial activity of WHAT? using solvents of different polarities [35]." Please provide the name(s) of the plant(s) from which extracts were obtained in this study (Ref 35). Lines 506-510: Discussion on Tephrosia subtriflora (ref 36) does not seem to be relevant here. It can be deleted. Please restrict data interpretation in this paragraph to extracts from Euclea spp. Lines 512-513: Please complete the sentence, "The hexane and methanol crude extracts displayed...against WHAT??" Lines 520-531: The discussion here is based on the in vitro antimalarial activity of ethylacetate and methanol extracts of different plants. They cannot be compared to ethylacetate extracts of E. latideus studied in the present paper. This paragraph can be	- Latest estimates corrected - Name written in full. - Correction made - Statement corrected as indicated in the text - Correction made for the strain DD2. - Structure corrected. - Correction made - SD corrected in the text 73 were used ie 3 x 6 for 6 dose levels, then 18 x 4 = 72 for four crude extracts, plus one for the control = 72 + 1 = 73 - Sentence corrected - Deleted - Name of plant provided and sentence restructured - Deleted - Sentence corrected - Paragraph deleted



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	deleted. Lines 543-544: Please clarify the statement “similar findings in which the crude extract had high activity compared to the crude extract from which it was isolated...” Line 550: P. falciparum K1 strain (not “PfKI”) Lines 551, 562, 571, 573, 577: Please cite the authors of these references in the sentence or cite the reference at the end of the sentence. For example, for line 571 “Betulin isolated from several plant families...respectively) [47]” and for line 573 “Another investigation was conducted on botulin...amazonicus [41].” Table 5: Please express dispersion as the mean $\pm$ standard deviation (SD). The table legend is not correct. “a” superscript refers to “values are expressed as mean $\pm$ SEM” and “b” superscript refers to resistance index ratio. These superscripts are not necessary for each value in the third and fourth columns. The superscripts can be deleted; the legend suffices. The row “IC50 $\pm$ SEM” can be deleted. Lines 592-594: Please check the syntax of the incomplete sentence “according to the LD50 values of acute toxicity...” Lines 610-625: Discussion on acute toxicity of other extracts is not pertinent. These lines can be deleted. Table 6: This table is not helpful. The text is clear. Table 6 should be deleted. Line 639: “...explains why it CAN be taken...” Ref 4: The address of WHO is not needed. If the document is downloadable, please provide the web link. Ref 5, 6, and 7: These are old references. Please cite more recent references, including the latest available World Malaria Report 2017 (for Ref 6). For Ref 5, please cite a peer-reviewed paper. Ref 17: The journal title should not be abbreviated: Science	• Statement clarified • Correction made • Correction made • SD used, however a and b were used to indicate significance • Correction made • Lines deleted • Table deleted • This is not seen in the text • Address deleted • References corrected • Journal written in full
<u>Optional/General</u> comments	Purified extracts of Euclea latideus were assessed for in vitro antimalarial activity and animal toxicity. Three compounds were isolated and purified (lupeol, betulin, and compound EL3), but antimalarial activity was assessed for lupeol and betulin. The third compound was insoluble in DMSO. The methods are clearly presented in detail. Likewise, the characterization of the purified compounds is described in detail. Discussion on studies on lupeol and botulin extracted and purified from other plants is adequate. The paper is too long. Parts of the discussion do not seem to be relevant. The paper is well written.	