



SDI Review Form 1.6

Journal Name:	Asian Journal of Chemical Sciences
Manuscript Number:	Ms_AJOCS_48643
Title of the Manuscript:	Phaeophytin a and Triterpenoids from Brachystelma Togoense Schltr, a Nigerian Medicinal Herb
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	<p>Line 3. Title: Phaeophytin a and Triterpenoids from <i>Brachystelma Togoense</i> Schltr, a Nigerian Medicinal Herb Change to: Phaeophytin and Triterpenoids from <i>Brachystelma togoense</i> Schltr, a Nigerian Medicinal Herb</p> <p>Line 6. Abstract Line 7: The medicinal herb, <i>Brachystelma togoense</i> schltr (Apocynaceae) was used... Change to: The medicinal herb <i>Brachystelma togoense</i> schltr (Apocynaceae) is used...</p> <p>Line 8 – 10: From the MeOH and CH₂Cl₂ extracts of <i>Brachystelma togoense</i>, phaeophytin a (1), α-amyrin (2) and lupeol (3) respectively were isolated and identified as the secondary metabolites from this plant. Change to: From the MeOH and CH₂Cl₂ extracts of the aerial parts of <i>Brachystelma togoense</i> were isolated and identified the secondary metabolites phaeophytin (1), α-amyrin (2) and lupeol (3).</p> <p>Lines 10 – 11: The structures were elucidated using ¹H, ¹³C and 2D NMR. Change to: The structures were elucidated using ¹H, ¹³C and 2D NMR techniques.</p> <p>Lines 12 – 14: Therefore, the uses of <i>Brachystelma togoense</i> for medicinal purpose in Nigeria were due to the presence of these compounds. Change to: The presence of these compounds in <i>Brachystelma togoense</i> justified the use of this plant for medicinal purposes.</p> <p>Line 19. Introduction Lines 21 – 22: ...is represented by about 100-120 species (1). The genus <i>Brachystelma</i> is chiefly distributed... Change to: ...is represented by about 100-120 species (1) and is chiefly distributed...</p> <p>Line 40. Extraction and isolation Line 42: ... and 100 % CH₃OH for 72 h with each solvent. Change to: ... and 100 % CH₃OH for 72 h.</p> <p>Line 40. Extraction and Isolation Lines 43 – 48: The CH₂Cl₂ extract (32 g) was separated by flash chromatography (Biotage) over silica gel using three solvents, first with a hexane/ CH₂Cl₂ step gradient starting with 100 % hexane and gradually increasing the polarity to 100 % CH₂Cl₂. Secondly, CH₂Cl₂/EtOAc from the last concentration (100 % CH₂Cl₂) to 50 % EtOAc and to 100 % EtOAc to yield compounds 1 (51.0 mg), 2 (32.0 mg) and 3 (28.0 mg). Change to: The CH₂Cl₂ extract (32.0 g) was chromatographed over Si gel and elution was carried out with solvent gradients of increasing polarity consisting of hexane, hexane / CH₂Cl₂ and CH₂Cl₂. The CH₂Cl₂ eluate was then chromatographed on Si gel with CH₂Cl₂/EtOAc 1 : 1 and EtOAc yield compounds 1 (51.0 mg; 0.16%), 2 (32.0 mg; 0.10%) and 3 (28.0 mg; 0.09%).</p> <p>Line 49. Results and Discussion Lines 50 - 60: The air dried aerial parts <i>B. togoense</i> (1000 g) collected at Ugbokolo forest, Okpokwu local government area of Benue State-Nigeria, were extracted with dichloromethane and methanol. A combination of flash chromatography (biotage system), column chromatography and thin-layer chromatography of these extracts yielded 1 (51.0 mg; 0.16 %), 2 (32.0 mg; 0.10 %) and 3 (28.0 mg; 0.09 %). I suggest removing all this part in yellow. Like this, the paragraph would start in the line 54, as below: Change to: The known compounds 1-3 (Figure 2) were identified based on comparison with previous data (5–9) of ¹H and ¹³C NMR. In the past, pheophytin a has been reported to possess strong antimicrobial activity against <i>C. albicans</i> (ATCC 90028) and <i>C. albicans</i> (ATCC 76615) (10) as well as antioxidant activity (11). α-amyrin has been reported to exhibit antimicrobial activity against <i>Escherichia coli</i>, <i>Pseudomonas aeruginosa</i>, <i>Candida albicans</i>, <i>Staphylococcus aureus</i> and <i>Trichophyton mentagrophytes</i> (12). Antiprotozoal, anti-</p>	<p>I have affected the corrections and suggestions in combination with those of the other reviewers.</p>



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	inflammatory, antitumor and antimicrobial activity had been reported for lupeol (13).	
Minor REVISION comments	The work is simple and brief, but it includes a substance (1) that although known, is interesting and complex; the identification of the substances was done by comparison with spectral data of the literature; personally, I think some of these data should be added, for example, the molecular weights obtained by spectra in high resolution! So the discussion could be a bit more informative.	
Optional/General comments	Structure 1 appears to be incomplete: -CO ₂ H group ?	

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<u><i>(If yes, Kindly please write down the ethical issues here in details)</i></u>	Conflicts of Interest: The authors declare no conflict of interest.