



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Journal of Advances in Medical and Pharmaceutical Sciences
Manuscript Number:	2015_JAMPS_18361
Title of the Manuscript:	Acute and Subacute Toxicological Assessment of the Aqueous Extract of the Aerial Parts of <i>Eremomastax speciosa</i> (Acanthaceae) in Wistar Rats
Type of the Article	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
The authors have made commendable effort in response to the queries earlier raised. However, there are some important developments: 1. The term "aerial parts" of a plant denotes parts of the plant above the earth's surface i.e. stem, leaves and flowers. It is not synonymous with "leaves and petioles" as stipulated by the authors. Apparently, the samples used in the present study are the leaves of this plant since the term "leaves" normally includes the petioles. The correct terminology "leaves" should have been used by these authors rather than equating "aerial parts" with "leaves and petioles". 2. The authors [8] cited in the DISCUSSION section of revised manuscript had earlier reported the leaves of this plant to be non- toxic (LD50 = 5000 mg/kg). The authors of the present paper have also confirmed the leaves to be non-toxic (LD50 > 2000mg/kg). The pertinent question is "WHY EMBARK ON TOXICOLOGICAL STUDIES FOR A SUBSTANCE THAT HAS ALREADY BEEN REPORTED AND CONFIRMED TO BE NON-TOXIC"? The authors of the present paper have rightly observed that 'there are no previous reports on the toxicology of this plant'. The reason for this is quite obvious. This plant is non-toxic otherwise studies on its toxicology should have been widely available in the literature before now.	1. In line with the concerns of the reviewer, we have accepted to re-edit the Title and the entire manuscript (where applicable) to read that the leaves of the plant were used. 2. The reviewer should note; - a- That authors (8) carried out acute toxicity study ONLY. - b- They administered the extract by intra-peritoneal route in Swiss albino mice using the method of Lorke (1983). When we read that article, we were surprised that an aqueous extract which is habitually administered by oral route should be tested by intraperitoneal route. This goes against the grain of the WHO recommendations which require that the test route should closely resemble the usual route of administration in ethno medicine as possible. Their results show that "<i>Administration of Eremomastax speciosa leaf extract (1000 g-5000 mg kg⁻¹) did not produce any mortality ALTHOUGH SIGNS OF WRITHING AND BODY WEAKNESS WERE OBSERVED</i>". The writhing reaction was most probably due to the septic shock resulting from the chosen route of administration. We have now reviewed the Discussion to include that "<i>No signs of writhing and body weakness were observed following acute intake as reported by authors [8] who administered the extract of E. speciosa by intraperitoneal route</i>" (See Lines 4 and 5 of Discussion, Page 8). - c- The work carried out by authors (8) based its conclusion on simple visual observations for signs of toxicity and death after acute intake. On the contrary, we sacrificed all the animals after 14 days and performed gross anatomical study of liver, kidneys, stomach, spleen, lungs, heart and ovaries. - d- The work by authors (8) did not provide any guarantee that the extract would not be toxic after sub acute or chronic intake. In our work, sub acute studies have shown the effect of the extract on hematological and biochemical parameters as well as histological readings of liver, kidney and lung tissue. This is why we concluded that "<i>However, since the extract had effects on selected organ histology and on some hematological and biochemical parameters, caution should be exercised in its use especially at high doses. Further investigations (chronic, reproductive, developmental and genetic toxicity studies) need to be done for the complete elucidation of the safety profile of E. speciosa</i>". For this reason, we are presently rounding up a PhD thesis on the Reproductive and Developmental toxicity of <i>E. speciosa</i> extract.



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	For these reasons, our work is original and provides new and more comprehensive information on the toxicity of the extract compared with the limited work on acute toxicity by intraperitoneal carried out by (authors (8) (Okokon et al., 2007)). <i>-----</i> <i>We are closely following up the scope and depth of work being done by others on E. speciosa. The work (Tan et al., 1996; Tan et al., 1999) cited by authors (8) refers to initial research carried out by our team on this plant. We are grateful for the critical level of review carried out by the editors of JAMPS.</i>
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