

## Review Form 1.7

Journal Name:	<a href="#">Asian Journal of Research in Biochemistry</a>
Manuscript Number:	Ms_AJRB_102385
Title of the Manuscript:	Evaluation Of The Antidiabetic Effect Of Aqueous Crude Extract Of Seed, Leaf And Stem Of L. Usitatissimum On Streptozotocin-Induced Diabetic Rats
Type of the 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:

(<https://journalajrb.com/index.php/AJRB/editorial-policy> )

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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)
<p><b>Compulsory</b> REVISION comments</p> <p>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</p> <p>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</p> <p>3. <b>Is the abstract of the article comprehensive?</b></p> <p>4. <b>Are subsections and structure of the manuscript appropriate?</b></p> <p>5. <b>Do you think the manuscript is scientifically correct?</b></p> <p>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></p> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<p>yes</p> <p>yes but the sample name is incomplete (<i>L. Usititissimum</i>)</p> <p><b>Abstract needs stringent revision as it has so much flaws with sentence formations, spell errors, incomplete sample name,....</b> (Diabetes is a metabolic disorder characterized by persistent high glucose level. <i>L. usititissimum</i> (flaxseed) which is rich in fibre and essential fatty acid is one of the functional foods used in management of diabetes mellitus. The aim of this study is to evaluate the antidiabetic effect of <i>L. usititissimum</i> seed leaf and stem on streptozotocin induced diabetic rats to see which part is more potent in the management of diabetes. Thirty (30) albino rats weighing 170-200g were used for this study and diabetes was induced by intraperitoneal injection of 55mg/kg body weight of streptozotocin. The albino rats were randomly divided into six (6) groups which are as follows: Group A; normal control, B; diabetic control group, C; standard drug (Glibenclamide), D-F were administered different parts of crude plants extract. The phytochemistry analysis showed that the seed possessed more bioactive component followed by the leaf and lastly the stem. The phytochemical found present include: alkaloid, flavonoids, tannins, saponins, terpene, steroid, balsam, carbohydrate and phenol. Across the groups that received crude aqueous extract of <i>L. usititissimum</i> was a significant reduction of blood glucose level, however, the seed (<math>6.60 \pm 2.450^{bc}</math>) showed more significant difference when compared to the leaf (<math>7.65 \pm 1.100^{bc}</math>) and stem (<math>7.95 \pm 2.650^{bc}</math>) respectively. On the other hand, the protein and albumin biomarkers were significantly (<math>P \leq 0.005</math>) increased across groups. Crude aqueous extract of <i>L. usititissimum</i> also showed hypolipidemic properties, improved serum enzymes and electrolytes levels. There was also significant positive impact on hematological parameters. In accordance with the results of this investigation, <i>L. Usititissimum</i> seed part is a more potent hypoglycemic and hypolipidemic agent on streptozotocin-induced diabetic rats although, the leaf and stem also demonstrated significant positive parameters on biochemical and haematological parameters. This positive result might be as result of various phytochemical component present in the plant.</p> <p>ok</p> <p>ok</p> <p><b>More related references need to be added rather than partially related.</b></p>	
<p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	<p>Need language edition (Eg. The phytochemical found present include....)</p>	
<p><b>Optional/General</b> comments</p>	<p>Section 3 heading doesn't carry RESULTS</p> <p>In conclusion section, the authors stated (On the basis of the current research carried out, it can conclude that the plant <i>L. usititissimum</i> possesses hypoglycaemic, hypolipidemic activity, hypocholesterolaemia and hepatoprotective effect in diabetic rats.) Is it antihyperglycemic, antihyperlipidemic or hypoglycaemic, hypolipidaemic?</p>	

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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <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>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>U. S. Mahadeva Rao</b>
Department, University & Country	<b>Universiti Sultan Zainal Abidin, Malaysia</b>