



SDI Review Form 1.6

Journal Name:	<u>Journal of Advances in Medical and Pharmaceutical Sciences</u>
Manuscript Number:	Ms_JAMPS_24114
Title of the Manuscript:	Antihyperglycemic effect of an important phytochemical - Phloretin on Streptozotocin induced diabetic rats
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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	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>
Compulsory REVISION comments	The aim of this study was to examine the effect of phloretin on glycemic control and the activity of selected glycolysis and gluconeogenesis enzymes in the liver of rats with streptozotocin-induced diabetes. It is demonstrated that phloretin reduced plasma glucose and glycated haemoglobin, increased body weight and insulin level, increased glycogen concentration in the liver and the activity of enzymes involved in glycolysis, and reduced the activity of enzymes involved in gluconeogenesis and glycogenolysis. The topic is of interest and the study definitely has merit, however, several concerns should be additionally addressed. 1) Antidiabetic effects of phloretin have been demonstrated in some previous studies (for example: J Nutr Biochem. 2014 Dec;25(12):1296-308;). These studies should be cited and discussed. 2) It would be reasonable to include the additional group receiving phloretin without diabetes. It cannot be excluded that phloretin lowers glucose below physiological level in	Thank you very much for your valuable comments. As per your comments, herewith we have done some modifications in the text. 1) Now we have cited and discussed the recent reference J Nutr Biochem. 2014; 25(12):1296-1308 in the discussion section as per your comments. 2) In the literature, we referred that the administration of flavonoid compounds to normal rats showed no



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	normoglycemic rats. 3) The results obtained with glibenclamide are presented in the tables but are not described in the text. 4) It is unclear when (related to STZ) and how many times phloretin was administered. 5) The manuscript requires extensive language revision.	hyperglycemic activity. Phloretin is also one of the flavonoid compounds. So, we did not consider and include the additional group receiving phloretin without diabetes. 3) Thank you for this comment. Now we discussed the standard drug glibenclamide in appropriate place of text. 4) Phloretin was administered orally for 45 days daily at 10.00 a.m after confirmation of diabetes. 5) Thank you. Now we have done the language corrections including grammar (a few) in the text with the help of English Professor.
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<u>Minor</u> REVISION comments	1) Introduction is much too long. It is not necessary to present extensively the epidemiology of diabetes or beneficial effects of phloretin in diseases not related to diabetes. 2) “Glycosylated haemoglobin” should be corrected to “glycated haemoglobin” throughout the manuscript. Glycosylation refers to enzymatic intracellular process which is essential for activity of many proteins, whereas glycation to spontaneous non-enzymatic reaction.	1) Now we have modified the introduction part as per your comments. 2) Thank you very much for this comment. Now we replaced the word glycated haemoglobin instead of glycosylated haemoglobin.
<u>Optional/General</u> comments		