



SDI Review Form 1.6

Journal Name:	Journal of Advances in Medical and Pharmaceutical Sciences
Manuscript Number:	Ms_JAMPS_25655
Title of the Manuscript:	Antioxidants and Antimicrobial- activities of methanol leaf extract of <i>Senna occidentalis</i>
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:

(<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 (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)
<u>Compulsory</u> REVISION comments	Authors do not use any mathematical statistical analysis methods to evaluate research results. Due to this reason there are doubts whether the comparison of the results is correct. Authors must justify the differences of investigated extracts using mathematical statistical analysis.	
<u>Minor</u> REVISION comments	Plant material. Other environmental conditions must be stated in this section, such as weather parameters (temperature, precipitation), and soil analysis, which greatly contribute to the content of biological active compounds – natural antioxidants - in plants. Also, location of the experimental site should be fully described with coordinates (latitude, longitude, altitude). All these parameters greatly affect the profile of biological active substances of plants.	
	The authors use only DPPH spectrophotometric method for evaluation of antiradical activity of <i>Senna occidentalis</i> extracts. Herbal extracts are multicomponent matrices with antioxidant activity determined by the set of different reaction mechanisms, so antioxidant effect cannot be adequately tested using only one method. For these reasons, it is strongly recommended to use at least two different methods for determination of antioxidant activity in herbal extracts. The question is, why authors did not use methods that evaluate reductive activity of studied extracts (e.g. FRAP or CuPRAC)?	



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	Furthermore, UV-VIS spectrophotometric methods show only cumulative antiradical or reductive activity in extracts. In future studies authors should use HPLC - post column reaction method, which is more selective than spectrophotometric methods and it shows the antiradical or reductive activity of individual substances <i>in vitro</i> .	
	Calibration graphs in Figure 2 and their equations are redundant information. It should be provided as an annex or not provided at all.	
<u>Optional/General</u> comments	Research object was chosen properly. There is little research on <i>Senna occidentalis</i> grown in Africa. In future studies authors can evaluate phytochemical composition of biologically active compounds in this plant using contemporary analytical methods (HPLC or capillary electrophoresis).	

Reviewer Details:

Name:	Mindaugas Liaudanskas
Department, University & Country	Lithuanian University of Health Sciences, Lithuania