Author’s response to reviews

Title: Antibacterial, Antioxidant and Immuno-modulatory Properties in extracts of Barleria Lupulina Lindl.

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Author’s response to reviews:

Reviewers Comments

Authors response

Reviewer 1

1. It has been corrected as per suggestion

2. Corrected as per suggestion

3. Full form “Sheep red blood cells”’ before using the word SRBCs has been incorporated the in Manuscript

4. Duplications have been removed from the manuscript

5. Gallic acid equivalent has been incorporated in the manuscript

6. Yes, Blank reading = 0.763 nm of total phenolic contents and DPPH is similar because same solvent (methanol) was used for both experiment as a control or blank

7. Pure saline means only saline water, which was given to the rats during experimental work

8. Antibacterial activity of Barleria lupulina Lindl. Was compared in vitro with streptomycin and ciprofloxacin. The data have been already published in another journal
(Kumari R, Dubey RC. HPTLC and GC-MS profile of Barleria lupulina Lindl. extracts and their effect on enteric bacterial pathogens. J of Applied Pharmacy. 2016a;8:62-68)

Reviewer 2

1. The manuscript has been revised and errors have been rectified.

Reviewer 3

1. Barleria lupulina contains antibacterial, antioxidants and immunomodulating phytochemical compounds that were effective for antibacterial, antioxidant and immunomodulatory properties due to presence of bioactive compounds. Therefore, it may be recommended to use as synthetic drug

1. Chemical analysis methods and spectra, of GC-MS or HPTLC been published in another research paper (Kumari R, Dubey RC. HPTLC and GC-MS profile of Barleria lupulina Lindl. extracts and their effect on enteric bacterial pathogens. J of Applied Pharmacy. 2016a;8:62-68)

2. Antibacterial properties of the compounds have been also evaluated using agar well diffusion method with different concentration and effective results were obtained against five pathogens such as E. coli, S. aureus, S. typhi, K. pneumoniae, P. aureginosa. The experimental data been already published (Kumari R, Dubey RC. HPTLC and GC-MS profile of Barleria lupulina Lindl. extracts and their effect on enteric bacterial pathogens. J of Applied Pharmacy. 2016a;8:62-68)

3. It has been inserted as per suggestion

Reviewer 4

1. Methanol with chloroform, petroleum ether, ethanol and acetone was used as solvents for extraction of leaves and stem. But the best results were found with methanol.

2. The authors have used whole stem in this experiment.

3. Both antioxidant and immunomolatary activities improved the immunity of human body. Antioxidant was done in vitro and immunomodulation in vivo test. For more reliable results both in vivo and in vitro test were performed.

4. Methanolic leaf and stem extracts exhibited the effective results of antibacterial, antioxidant and immunomodulatory properties of the extracts due to presence of phytochemicals. The responsible phytochemicals compounds and their evidences have been published earlier in the Journal of Applied pharmacy. Rf values of ML-extract were 0.08, 0.12, 0.36, 0.48, 0.69 and that of methanolic stem (MS) extract were 0.11, 0.44, 0.71 showed different group of compounds
such as alkaloid, tannins, saponins, etc. through HPTLC analysis. While, benzoic acid 4-methoxy-methyl ester, cyclopenta pyran-4-carboxylic acid, propenoic acid, phytol, 2(4)-benzofuranone in methanolic leaf (ML) extract extract were identified as 2(4H)-benzofuranone, benzyl benzoate, hexadecanoic acid, 9,12-octadecadienoic acid, phytol in MS-extract (Kumari R, Dubey RC. HPTLC and GC-MS profile of Barleria lupulina Lindl. extracts and their effect on enteric bacterial pathogens. J of Applied Pharmacy. 2016a;8:62-68).

5. Language has been improved and errors corrected in the manuscript