Author's response to reviews

Title: Effect of Flabellaria paniculata Cav. extracts on gastric ulcer in rats

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Author's response to reviews: see over
The Editor
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Dear Sir,

RE: MANUSCRIPT ID: 6983180836787564; RESPONSE TO REVIEWERS’ COMMENTS

Kindly find below response to the reviewers’ comments on our manuscript titled, “Effect of Flabellaria paniculata Cav. extracts on gastric ulcer in rats”. I have addressed the reviewers’ comments and appropriate corrections effected. The manuscript has also been formatted according to the journal style.

Thank you.

Yours truly,

Dr. Margaret O. Sofidiya
RESPONSE TO REVIEWERS’ COMMENTS

Reviewer 2

- The review asked if I could suggest the component(s) of the active fraction FPL with anti-gastric ulcer effect
  
  **Response:** Isolation and characterization of the component(s) of the active FPL is of interest and it is ongoing. Although, we are presently limited by lack of instrumentation to achieve the characterization of the compounds.

- Language corrections
  
  **Response:** Two academic colleagues have read the manuscript.

Reviewer 1

1. Why were the methods of extractions differed for the leaves and roots?

The method of extraction of the leaves and root of Flabellaria was not different (Kindly see preparation of extract, Line 3 and 4)

2. What is the ratio of samples to ethanol used in extraction?

The ratio of samples to ethanol used in extraction was 1:3; 500 g in 1.5 L of ethanol. This has been included in the manuscript.

3. Why dried the roots at 45°C but evaporate it below 40°C?

The root of the Flabellaria paniculata was dried at 45 °C considering the physical nature of the plant part. Generally bark and root may be dried between 30 and 65 °C (Trease and Evans’ Pharmacognosy, Fourteenth Edition; WB Saundders Company Ltd, London). Moreover, evaporation using rotary evaporator is more efficient at reduced temperature and pressure.

4. What is the exact temperature or temperature range for evaporation under vacuum? Below 40°C is too general.
The temperature used for the evaporation of the filtrate under vacuum was 38°C. This has been included in the manuscript.

5. Why used different elution system to the two extracts? Different elution yield different compounds. Then what is the purpose of comparing the two extracts?

Detection of the compounds present in the two samples through spraying with different chromogenic reagents on thin layer chromatography (TLC) could only be achieved after proper resolution of the extracts with appropriate solvent systems. In this study, the solvent system (hexane:ethyl acetate (17:3)) that gave good resolution/elution for the leaf could not resolve the root, hence the different solvent system. Though different solvent systems are used to achieve good resolution of the leaf and the root, the significance of the TLC analysis at this preliminary stage is to be able to state what classes of compounds are present in the two extracts.

6. Why used cimetidine instead of misoprostol in pylorus ligation model?

The mechanism of protection of misoprostol, a synthetic prostaglandin analog has been termed cytoprotective while cimetidine, an Histamine H₂ receptor antagonists, is a potent acid inhibitors and it has been hypothesized that it promotes gastrin release through the elevation of intragastric pH due to anti-secretory action. Moreover, antisecretory effect is a key observation in the pylorus model and a standard anti-secretory agent such as cimetidine could be used as an appropriate positive control for this model.

7. Why was there no histological findings reported in this manuscript, this data are important to further confirm what have been reported in those tables and to significantly support the reported data.

It is noted that histological findings could further confirm the data presented in this study, however, as at the time of the study, the authors could not assess the facility to carry out the procedure.

8. Page 11; Paragraph 1; Why the activity reduced as the dose increased? No explanation given. Such a phenomenon of less response at higher dose is not uncommon with indigenous plants and this observation could be due to ‘therapeutic windows’ effect as suggested by Tripathi
and Zakaria et al. 2011. In other words, it could be that, the effect of the extract has reached its maximum level at a dose of 100 mg/kg, the lowest dose, used in this study.


This information and the references have been included in the manuscript.

9. Page 11; Paragraph 2; 400 mg/kg FPL did not significantly affect the pH of gastric content. The claimed that 400 mg/kg FPL increase the pH should be removed. Removed also all claimed made for other insignificant data.

The statement has been removed and other information related to the data on pylorus ligation has been rephrased. Page 11; Paragraph 3