Reviewer's report

Title: Ethnopharmacological studies of Viola betonicifolia in animal models of pyrexia, pain and inflammation

Version: 1 Date: 13 February 2012

Reviewer: Shahnur Begum

Reviewer's report:

The scientific paper on “Ethnopharmacological studies of Viola betonicifolia in animal models of pyrexia, pain and inflammation” has been submitted for publication is a good work and rationale for evaluation of traditional medicine. It will be proven to be useful for researchers, especially in the field of pharmacology and traditional medicine. The findings of the systematic appraisal of the manuscript are:

1. Title
   The title is confusing, and I think rephrasing is needed.

2. Abstract
   Though the abstract is well formed but instead of background it has found that aims and objects of this paper have mentioned. Reader expects that the author will write concise form of abstract covering background of this paper, methods of research, findings and use of the research outputs.

3. Research Questions
   The statement of research problem is absent. For assessing the value of this work, problem statement is essential.

4. Background:
   The historical background of the experimental medicinal plants was described but it appears insufficient. It needs detail description about why author has taken this research project. The definition of key words and terminologies have been used in the paper were not well defined.

5. Research Methods and Setup of Experiment
   1. Designing methodology for conducting research looks appropriate including experimental protocols and ethical points. However, the methodologies and materials have described inadequately, Author may follow guide line describe below :

   a. The script does not contain definition on phytochemical screening test for plant extracts to identify the presence of chemical constituents. Therefore, it needs to write about the testing procedure.
b. At animal subsection the spelling of “Balb-C” appears as wrong; the right is “BALB/c”.

c. A brief description on experimental animal is also desirable;

d. There is no explanation on „normal temperature“ and „pyrexia“, under sub heading of Antipyretic test. Therefore, it is difficult to a reader to understand what did authors want to state by using “Normal temperature was recorded using digital thermometer and then pyrexia was induced in all mice by injecting 20% aqueous suspension of Brewer#s yeast (10 ml/kg s.c.). After 24 h, rectal temperature was recorded and corresponding groups was injected with above doses”. It demands explanation on following points:

i. Mode of injection,

ii. The answer of this question looks missing. When did material (VBME) induce to the mice (at the peak of temperature or there is any reference value of temperature)?

iii. How did authors confirm that pyrexia has been developed to testing animals?

e. The formula for calculation of percent reduction and percentage analgesic activity is well formatted. Reader expect the following format = (Ta – Tb)/Tb× 100,

f. Spelling “Hot plate test” it appears wrong , the right form is “ Hot plat test”, and

g. In statistical analysis, the abbreviation of SEM was not mentioned.

6. Results
The presentation of results in the form of tables and graphs looks appropriate.

7. Discussion
The discussion part of this paper look acceptable; however research limitations are missing. Reader expects to see research limitation for assessing the real value of this paper.

8. Conclusion
The conclusion looks inadequate.

9. Acknowledgement
The acknowledgement looks appropriate.

10. References
References are correctly quoted.

11. Coherence
Lack of coherence is found almost in every paragraph. Needs revision.

**Statistical review:** Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare that I have no competing interests