Reviewer's report

Title: Evaluation of antihyperglycemic and antinociceptive activity of Xanthium indicum stem extract in Swiss albino mice

Version: 2 Date: 2 October 2013

Reviewer: Nima D Namsa

Reviewer's report:

I have thoroughly gone through the revised manuscript and the authors have come up with interesting information but their experimental findings are preliminary. Hence, in my opinion the present format of manuscript may be treated for short communication instead of full-length article after compulsory minor revision of the following queries. This is because some of the queries raised in my earlier comments have not been included during revision.

Abstract results section

Q1. The methanol extract of stems showed dose-dependent and statistically significant antihyperglycemic activity at doses of 50, 100, 200 and 400 mg per kg body weight. Please indicate p-value for statistical comparison.

Results and discussion section

Q2. At doses of 50, 100, 200 and 400 mg extract per kg body weight, the percent reductions in blood glucose levels were, respectively, 25.9, 26.5, 28.2, and 31.2. This should be re-write as At doses……………. glucose levels were 25.9, 26.5, 28.2, and 31.2, respectively.

Q3. In antinociceptive activity tests, the extract at the afore-mentioned four doses. The authors should mention four doses instead of the afore-mentioned four doses for clear understanding of the scientific readers.

Q4. Thus, the stem extract proved to be more potent than the leaf extract, and should be the plant part of choice in folk medicines of Bangladesh. The authors should discuss/compare the differential profiling of bioactive components that might explain the potent antinociceptive activity of X. indicum stem.

Conclusion section

Q5. A cheap, efficacious and readily available medicine for alleviation of pain would be highly beneficial to the poor…………....millions of people suffer from some sort of pain on a daily basis. The conclusions drawn from this preliminary report is too lengthy and they (authors) should restrict conclusions based their experimental observation and speculations be omitted in the next revision.

Tables

In order to represent tables in a simplified way, the authors can use attractive
code words for indicating X. indicum stem extract treated animals instead of group 3-----6. This question was raised in my previous comments also but the authors fail to revise so. Q5. A suitable code should be used for indicating Group 3-6 animals instead of repeated used of X. indicum (Tabel 1 and 2). The manuscript requires grammatical corrections also.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.