Reviewer’s report

Title: A preliminary report on oral glucose tolerance and antinociceptive activity tests conducted with methanol extract of Xanthosoma violaceum aerial parts

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Reviewer: Giuseppina Negri

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Evaluation of the article
'A preliminary report on oral glucose tolerance and antinociceptive activity tests conducted with methanol extract of Xanthosoma violaceum aerial parts'
Mohammad Faisal, Ahamed I Hossain, Shahnaz Rahman, Rownak Jahan and Mohammed Rahmatullah
BMC Complementary and Alternative Medicine
Research article

This study evaluated a glucose tolerance and antinociceptive activity of methanol extract of aerial parts from Xanthosoma violaceum. The obtained results are good in both evaluated activities and these finds are important for other researches and other studies using medicinal plants.

Is the question posed by the authors well defined?
yes

2. Are the methods appropriate and well described?
yes

3. Are the data sound?
yes

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?
no

6. Are limitations of the work clearly stated?
no

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
8. Do the title and abstract accurately convey what has been found?
   yes

9. Is the writing acceptable?
   No. The article needs some language corrections before being published.

Minor Corrections

Introduction – Delete – Aerial parts of this plant…until reports are non existent on this plant.

References must be added in paragraph

Any phytochemical constituent(s) responsible for the observed antihyperglycemic and antinociceptive effects were not isolated and identified in this preliminary study. However, phytochemical analysis of the crude extract showed presence of tannins, alkaloids and flavonoids, and as discussed earlier, some reported constituents of the plant like apigenin, vitexin and isovitexin have reported antidiabetic and analgesic activities (add references). Antidiabetic and antihyperlipidemic effects of ethanolic extract of whole plant of Tridax procumbens have been shown in STZ-induced diabetic rats. The crude extract was found to contain tannins, alkaloids, and flavonoids [24]. Hypoglycemic and tissue-protective effects have been seen with aqueous extract of Persea americana seeds in alloxan-induced diabetic rats [25]; the extract was also found to contain tannins, alkaloids, and flavonoids. Antinociceptive and antioxidant activities have been observed with ethanolic crude extract of leaves of Ageratum conyzoides from Bangladesh; phytochemical analysis of the crude extract revealed the presence of tannins, alkaloids, and flavonoids [26]. Thus these group of compounds, either singly or in combination may be responsible for the observed antihyperglycemic and antinociceptive effects in the present study.