Reviewer's report

Title: Mechanism underlying antidiarrhoeal, antispasmodic and bronchodilator activities of Ipomoea turpethum Linn.

Version: 1
Date: 20 June 2014

Reviewer: S Z Moghadamtousi

Reviewer's report:

The study has provided useful information regarding the biological activity of Ipomoea turpethum. However, the manuscript is not in good shape for publication. It should only be considered for publication after corrections considered as a major, due to the following points:

Major Compulsory Revisions:

1: Background
#1 The background did not fully address the importance of the study and it is only described the plant. It should mention some information about hyperactive gut disorders and the need for new antidiarrhoeal, antispasmodic and bronchodilator agents.

2: Results
1# Why were not the results explained in the same order of sections in methods? They should follow the same order of methods.
2# The results did not provide enough explanation by which title can be named as Mechanism underlying antidiarrhoeal, antispasmodic and bronchodilator activities of Ipomoea turpethum Linn. The study more likely shows the effect of Ipomoea turpethum on diarrhoeal, spasmodic and bronchodilator activities and how it is mediated. Therefore, title should be changed according to the findings of the study.

Minor Essential Revisions:

1: Abstract
1# In the method part of abstract, there is no need to mention the statistical analysis and it should be deleted from the method.
2# after the first time mentioning the name of species in the abstract (Ipomea turpethum), it should be write in abbreviated form (I. turpethum)

2: Background
1# Since the plant has the synonym name of Operculina turpethum, the authors should be sure that which name is the latest name based on the taxonomical nomenclature, so in the manuscript, the newest botanical name should be
mentioned. In addition, the other name should be mentioned in the background as the synonym. For example in the beginning of Background should be: Ipomea turpethum Linn or Operculina turpethum (Fam. Convolvulaceae) is commonly known as Indian Jalap or Turpeth.

3: Methods

#1 In secion Animals, Authors should not mention: “the study was part of the PhD project of Ms Huma Shareef” and ethic number for this study should be mentioned (if any).

3: Results

1# In the methods of acute toxicity test, it is mentioned: “The mice were allowed food ad libitum during a 24 hrs test”, however in the results mentioned “The acute toxicity testing (6 days) in mice”. Can you clarify it please or if there is any mistake, correct it in the manuscript.

2# In section Antidiarrhoeal effect of Ipomea turpethum black variety (ITB), sentence “its aqueous methanol crude extract, hexane and ethyl acetyl friction was tested for the possible antidiarrhoeal effect in mice”. You mentioned the ethyl acetyl fraction, while in the next sentence and extraction part of the manuscript you named it as ethyl acetate fraction. Please try to write them in one consistent form.

3# In section Antidiarrhoeal effect of Ipomea turpethum black variety (ITB), sentence “The crude extract, hexane and ethyl acetate fractions and loperamide reduced the faecal droppings and provided the 66%, 57% and 50% protection by the crude extract, hexane friction and ethyl acetate friction respectively”. These percentage of inhibition were obtained from which dose of administration? Please specify that in the manuscript.

Discretionary Revisions

1: Background

1# In the background first sentence, it is better to write the (Fam) in the complete form or delete it completely. For example:

Ipomea turpethum Linn as the member of the Convolvulaceae family

or

Ipomea turpethum Linn (Convolvulaceae)

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

Quality of written English: Not suitable for publication unless extensively edited.

The manuscript has been written carelessly. The quality of writing is relatively low and there are several grammatical errors in the manuscript. In addition, No constancy can be seen in the manuscript. Like:

Hour is mentioned in two ways: “hrs” and “hours”

Minutes also: “mintues” and “min”

ºC also: some places with space “37 ºC” and some places without “23-25ºC”.

ml also: “10 ml/kg” and “10 mL/kg”
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.

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

**Quality of written English:** Not suitable for publication unless extensively edited

**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' below