Reviewer's report

**Title:** Mondia whitei (Periplocaceae) suppresses and Guibourtia tessmannii (Caesalpiniaceae) facilitates fictive ejaculation in spinal male rats

**Version:** 3 **Date:** 5 July 2012

**Reviewer:** Gabriela Rodriguez-Manzo

**Reviewer's report:**

Major compulsory revisions

The data provided are interesting, however the authors have to extend the information provided in all sections. For instance:

1) The background section should include general information on the two plants tested in this work as well as some information on their anecdotal “aphrodisiac properties”. Also, authors refer to previous results from their research group demonstrating “inhibitory activities” of two other medicinal plant extracts, without describing those activities and the sexual responses evaluated.

2) The hypothesis should be clearly stated, since the one appearing in the background section does not correspond to the one mentioned in the discussion section.

3) The methods section does not include a description of the plant’s elements used to obtain the powders, the time of the year and place of collection, the authentication of the specimens, the preparation of the extracts for i.v. administration (i.e. vehicles used to dissolve them, the volume administered, infusion duration...).

4) A brief description of the phytochemical screening method is needed; the statement that it was conducted using “standard techniques” is insufficient. A definition of sexually experienced rats is needed (what criterion did the authors use to consider a male sexually experienced?).

5) Essential information on drug administration is lacking (vehicles, volumes, latencies, etc).

6) The rationale for dopamine and haloperidol administration, alone and in combination with the extracts, as well as the basis for the selection of the doses used, is missing. These experimental series cannot be anticipated from the hypothesis posed in this work, thus a justification should be included.

7) The results of the phytochemical screening are not described. There is no graph, figure, table or any type of data supporting the statement that “sugars, triterpenes, steroids and phenolic acids were found in the plant extracts”. Some type of data must be provided.

8) A description of the effects of dopamine and haloperidol per se on the fictive ejaculation motor response parameters should be provided in addition to describing those obtained when combined with the plant extracts.
9) The Fisher LSD test is no longer used as post hoc test, since it does not correct for multiple comparisons very well. Bonferroni or Tukey tests are the best options.

10) The discussion is superficial; the concept “aphrodisiac” changes from one section to the other. Authors do not confront the obtained results with other published data and give no theoretical mechanistic explanation for the results obtained with the dopaminergic drugs.

11) The conclusion of the abstract “The present findings further justify the ethno-medicinal claims of Mondia whitei and Guibourtia tessmannii” is not sustained in the manuscript, since those claims are never described.

Minor essential Revisions

1) The manuscript needs some language corrections

2) In the background section, include references supporting the use of the mentioned pharmaceutical drugs to control the ejaculatory response (fluoxetine, paroxetine, haloperidol and serotonin) as well as references documenting the induction of side effects by these drugs.

3) Specify the “ethnomedicinal claim” for Guibourtia tessmannii mentioned at the end of the background section

4) Add at the end of the last sentence of the background section the word “extracts”, i.e. medicinal plants’ extracts

5) Under the heading “Activation and recording of the rhythmic genital motor pattern of ejaculation”, in the 4th line specify that the injection of saline solution was directed to increase the intraurethral pressure to simulate the urethral distention produced by the emptying of accessory glands’ contents into the posterior urethra. In this same section explain what is meant by “additive” urethral stimulations, do you mean “consecutive”?

6) Check the concept “an inverse non inducer aphrodisiac” in the last line of the discussion section; it is not clear what is meant.

Level of interest: An article whose findings are important to those with closely related research interests

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests in relation to this paper