Reviewer's report

Title: Antimicrobial and toxicological activities of five medicinal plant species from Cameroon Traditional Medicine

Version: 1 Date: 14 June 2011

Reviewer: Noemi Waksman

Reviewer's report:

Major Compulsory Revisions

1) The most important issue to be checked by the authors is the activities reported. I am surprised to see that almost all the plants were active against Gram negative bacteria, considering that it is well documented in the literature, that few plant extracts result active against these mo. The MICs reported are extremely low for plant extract, resembling those generally obtained for purified compounds. Besides, the authors compare the results for P. muellinarius with those reported in the literature, and although it is true that different specimens (not species) can display different activities, it is noticeable that the factor is in the order of almost 5000 times (625 #g /mL in the previous report and 0.15##g /mL in this article) which sounds very improbable.

2) Which part of the plant was used?

3) As the mo used in susceptibility tests are not ATTC, how were they characterized?

4) The photochemical aspect is not well documented, and some trivial and known phrases should be avoided. For example that reducing sugars (polar metabolites) are not extracted with hexane (no polar solvent), page 9

5) Discussion: line 7, how can be said that the compounds found are “identical” if they were not identified?

6) In general, language is very poor and needs revision.

7) All the discussion about hepatoprotection of P. muellerianus is not well documented and besides is out of the scope of this article, it must be eliminated.

- Minor Essential Revisions

1) Concentrations for diffusion tests must be added in the text and in tables 2 and 3.

2) Some phrases must be corrected throughout the article

For example: in the abstract, under results; “The chemical of each plant varied according to the solvent used”; the chemical of the plant do not depend of the solvent used for the extraction, perhaps they intended to say the chemical of the extracts.

In discussion: line 1, the chemical compounds are not “predicted”, perhaps,
extracted.
8) Table 1 do not give important information, it should be eliminated
- Discretionary Revisions
If the practitioners used water, why were water extracts not tested?

**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’