Reviewer's report

Title: Antimicrobial activity of selected South African medicinal plants

Version: 1 Date: 5 March 2012

Reviewer: Eduardo Ruiz-Bustos

Reviewer's report:

• Major Compulsory Revisions

Some inconsistencies or confusions were found in the manuscript:

1) The methods described are micromethods. When the radiometric assay is described, on lines 150 and 151 mention the use of bottles for cultures, but no description is evident, if this is the case, on how the culture was passed from vials, to bottles.

2) The authors compare the effect of eight extracts with activity against M. smegmatis, in relation to their activity against M. tuberculosis. They state that interestingly the plants had effect against both species of micobacteria. A further explanation is required, comparing with other publications.

3) In the same respect, the authors mention that the “tested samples were less active than the reference antibiotics” but no further mention is done about this, especially since it is expected that a crude extract show less activity than a purified compound.

4) The phrase between lines 198 and 200 is not clear.

5) Discussion is limited with regard with the comparison of the results in the manuscript, to those previously reported with plants of Africa, or related species.

• Minor Essential Revisions

The English-language of the manuscript needs to be reviewed, as several ideas are not fully clear. Next, some of the recommendations to improve the manuscript:

Line 25: Change “…with nearly 3,000 of species…” to “…with nearly 3,000 species…”

Line 31: Change “…against Mycobacterium tuberculosis meanwhile the…” to “…against Mycobacterium tuberculosis, and the…”

Line 34: Change “…Erythrophleum lasianthum, Salvia africana…” to “…Erythrophleum lasianthum and Salvia africana…”

Line 75: Change “…were then identification…” to “…were then identificated”

Line 80: Eliminate “to give residues which constituted the crude extracts”, and change “…kept on 4oC…” to “…kept at 4oC…”

Line 86: Change to lowercase “tuberculosis”

Line 87: Missing finishing point
Line 99: Change “…LMP709U), Microsporum…” to “…LMP709U) and Microsporum…”

Line 103: Eliminate “determinations”

Line 105: Change “identify” to “identity”

Line 108: Change “4 oC” to “4oC” (eliminate space between value and degrees)

Line 115: Change “…using microplate dilution…” to “…using the microplate dilution…”


Line 121: Change “100 µl” to “One hundred µl”

Line 123: Change “…inhibitory effects on the growth of the M…” to “…inhibitory effect on the growth of M…”

Line 124: Change “37 oC” to “37oC” (eliminate space between value and degrees)

Line 125: Eliminate “of samples”

Line 126: Change “37 oC” to “37oC” (eliminate space between value and degrees)

Line 131: Change “37 oC” to “37oC” (eliminate space between value and degrees)

Line 140: Change “…of DMSO (1%) in…” to “…of DMSO at 1% in…”

Line 142: Add space between values and units, “0.1ml”

Line 143: Eliminate comma after parenthesis.

Line 144: Change “…as well as in the control vials…” to “…as well as controls…”

Line 148: Superscript in both bacterial population values.

Line 149: Superscripts and subscripts.

Line 151: Change “37 oC” to “37oC” (eliminate space between value and degrees)

Line 121: Change “100 µl” to “One hundred µl”, and “…concentration was added in a well…” to “…concentration were added to each well…”

Line 170: Change “…DMSO do not the growth…” to “…DMSO showed no effect on the growth…”

Line 171: Add space between value and units, “195µl” to “195 µl”

Line 173: Change “The MIC of samples…” to “The effect…”

Line 180: Change “…stem, S. africana…” to “…stem and S. africana…”

Line 186: Use abbreviated name in Klebsiella pneumonia (K. pneumoniae)

Line 191: Change “studied microorganisms” to “microorganisms studied”

Line 194: There is a double space in “156.25 µg/ml”
Line 202: Change “…important in regards of the…” to “…important with regard to the…”

Line 215: Eliminate “the studied” at the beginning of the line.

Line 222: Eliminate duplicated “;”

Table 1: Not clear why some uses are underlined, some spaces missing, usage of have instead of has and vice versa, spelling (haemorrhoids).

Table 2: Column heads, not in italics (Fungi and Mycobacteria), plant parts and antibiotics not in italics, and neither strain characteristics at the footnote (Ampicillin-resistant).

Table 3: Column heads, not in italics (Fungi and Mycobacteria), plant parts and antibiotics not in italics, and neither strain characteristics at the footnote (beta-lactamase positive, Ampicillin-resistant).

**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.