Reviewer's report

Title: Chemical Composition and antibacterial activity of Brazilian propolis type 6 and its fractions

Version: 2 Date: 4 June 2009

Reviewer: Zubaidah Rahim

Reviewer's report:

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MS: 2728134926291943

Reviewer's comment:

I have read again the authors' amendment. I have few more comment to make as follows:

1. Title

Original title: Chemical Composition and antibacterial activity of Brazilian propolis type 6 and its fractions

New title: Bio-assay guided purification of antimicrobial activity of a fraction of Brazilian propolis from Bahia state.

I disagree with the new title. I think the authors would like to purify the fraction with antibacterial activity and not purify the antibacterial activity

Suggestion: Bioassay guided purification of the antimicrobial fraction of Brazilian propolis from Bahia state.

2. Abstract

Page 2, under Results and discussion, 1st sentence

EEP and H-Fr inhibited microorganisms……..

Can the authors be more specific as to the inhibition? Is it the growth of the microorganisms? The sentence needs a clearer wording to indicate that the EEP and H-Fr inhibit the growth of the microorganisms while major fatty acids do not.

3. Methods

Page 5, under (HRGC-FID), the 1st sentence

Suggestion:

The sentence should be: “Fatty acid methyl esters (FAMEs) were prepared from
EEP, its fractions and sub-fractions according to a modification of the method by Hartman and Lago (1973)"…

4. Results

Figure 2,

What are the values on the X-axis? There are no units to explain the values.

Page 8, last paragraph

1st sentence

TLC and HPLC …………….(Figure 2). In this sentence it was stated that no fatty acids characteristics were found. But if you look at Figure 2, there are small peaks at 6.5, 12.5 16, 16.5 minutes which can be magnified by increasing the amount of sample used in the HRGC-FID.

2nd sentence, Furthermore ….. showed two maximum absorbance values at 240 nm and 300 nm………These two values refer to absorbance and the unit for absorbance is mAu and not nm. The unit nm is for wavelength which in this case is 254 nm.

From the chromatograms A and B as shown in Figure 1, the maximum absorbance value for peak 1 in chromatogram A is 300 mAu and not 240 nm and chromatogram B is 700 mAu and not 300 nm. Please check on this.

Last sentence,

How do you confirm the polyprenylated benzophenone? Do you use the library for compound for reference of you just referred to what is being reported in article under reference #21.

Table 3, pg 17

Why were the MBCs for subfraction 2 and 3 for both microorganisms not determined?

**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:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests'