Reviewer's report

Title: Liquid and vapour-phase antifungal activities of selected essential oils against Candida albicans: Microscopic observations and chemical characterization

Version: 1 Date: 8 October 2010

Reviewer: LR Salquerio

Reviewer's report:

This contribution is appropriate for this journal.

The question posed by the authors is well defined. Nevertheless some important points must be considered.

The plant's names must be written according to the international nomenclature rules:

the authors must include the binominal name of mentha, eucalyptus and lemon grass studied (ex: Cymbopogon citratus (DC.) Stapf.). Which species of Mentha and Eucalyptus were studied? Why the authors can compare their results if they don’t mention the species studied?

There are some aspects that must be improved and clarified, such as:

- in Material and Methods the reference of the Candida albicans strain must be included;
- in “Chemical and Strains” the sentence “mostly chemicals were purchased from Himedis,…Merck (not Merk), etc. The authors must include the complete references and not “etc”.
- reference antifungal compound must be used as standard antifungal drug;
- the determination of the MFC is not according the NCCLS M27-A (reference 21), including the broth medium( pag. 6. );
- the identification of compounds of the essential oil is not very clear. The authors must identify the constituents on the basis of their GC retention indices and by matching their mass spectra with their home-made library mass and MS reference libraries. The authors don’t have their own data bank? A correct identification is not possible using only literature and databases values!
- Citral is a mixture of two isomers: neral (citral B) and geranial (citral A). In my opinion the author must use these denominations.
- The authors must replace neryl alcohol by nerol

GC, and GC-MS is the correct abbreviation of Gas Chromatography and Gas Chromatography-Mass Spectroscopy (see abstract).

The compounds (ex thymol, menthol,…) should not be written in capital letters.

The title of the manuscript must include the name of the plant oil (Cymbopogon
citratus).

In my opinion the manuscript need revision.