Reviewer’s report

Title: In vivo activity of Sapindus saponaria against azole-susceptible and -resistant human vaginal Candida species.

Version: 1 Date: 8 October 2010

Reviewer: thierry hennebelle

Reviewer’s report:

This paper is interesting and can accepted for publication, but I suggest some modifications.

Major revisions:
Table 1 gives figures that are not presented clearly and call for explanations from the authors: Is the MFC for HE equal to its MIC90 for C. albicans? Can its MFC on C. glabrata be determined more precisely between 620 and 5000 µg/ml? Personnally, I cannot make much of the "MIC variation" figures which require in my opinion either more explanation or statistical analysis in order to make them useful.

Minor essential revisions:
1. Differences observed in the activity of the two extracts are hopefully linked to their composition. As compounds have been isolated, their quantification in the extracts should enable to determine if these compounds are really involved in the activity. Quantities that were isolated for each compound should at least be given, in order to make clear for the reader if there is a good reason for not testing the pure compounds (insufficient amount, etc.).

2. I do not understand well why compounds were re-isolated as it has already been described in a previous paper. No new data was added. I suggest that, unless you add further information on the activity of these compounds or their amount in the extracts, this part should be suppressed in the paper, to keep it clear that the isolation and identification are considered as fully described previously.

3. In Table 1 (chiffres)

4. p 16: Reference 24 (Duarte et al.). Authors should consider that according to Ríos and Recio(Medicinal plants and antimicrobial activity. J. Ethnopharmacol. 2005, 100, 80-84), the antimicrobial activity is considered very interesting in the case of MICs < 100 µg/mL for extracts and 10 µg/mL for isolated compounds. This is more discriminative that the figures from Duarte cited in the paper and should be taken in consideration from the evaluation of your results. Moreover, as the in vitro activities are not so high, it may be interesting to evaluate the importance of the plain tensioactive activity of saponins to explain the elimination of fungi (comparison with soap may help, just a suggestion).
Discretionary revisions:
1. English may be improved
2. Saponins that were re-isolated are interchanged in the figure in comparison with the text
3. The compound described as an oligoglycoside should be further defined as a sesquiterpenoid glycoside

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

**Quality of written English:** Acceptable

**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