Reviewer's report

Title: Modern extraction techniques and their impact on the pharmacological profile of Serenoa repens extracts for the treatment of lower urinary tract symptoms

Version: 2 Date: 20 March 2014

Reviewer: Razvan Multescu

Reviewer's report:

The paper presents a very interesting subject: extraction techniques and their impact on the pharmacological profile of Serenoa repens extracts. This product is one of the most used phytotherapeutic agent in the treatment of BPH. However, one of the reasons data regarding its efficacy are still under debate is the great heterogeneity of chemical products contained in the extract, one of the causes being the mechanism of extraction. This is a very important issue, as generating meta-analysis is impossible unless the compared data are similar.

The authors did an excellent job in describing those extraction mechanisms and also some effects related to each of them. From this point of view the paper is valuable and has an important scientific and educational value.

There are some problems that should be addressed.

Minor issues not for publication:
1. References to different paragraphs (“see paragraph....”) should be removed from the Discussion section as they are not customary.
2. Text should be revised for inadequate words: e.g. line 300 – “it” should be removed

Major compulsory revisions:
1. The exact nature of National Institute of Health’s Office of Dietary Supplements and the Food and Drug Administration’s Center for Drug Evaluation and Research and the National Institute of Standards and Technology (NIST) should be explained for the readers.
2. How were selected the products described in the section “3 Serenoa repens extracts: therapeutic properties and implication for the treatment of BPH”? Why those are the only products mentioned? The methodology of article search and selection for this paper should be described.

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