Author's response to reviews

Title: Effect of three different cultivars of Lepidium meyenii (Maca) on learning and depression in ovariectomized mice

Authors:

Julio Rubio (09008@upch.edu.pe)
Maria Caldas (00928@upch.edu.pe)
Sonia Davila (07947@upch.edu.pe)
Manuel Gasco (05931@upch.edu.pe)
Gustavo F Gonzales (iiad@upch.edu.pe)

Version: 5 Date: 23 June 2006

Author's response to reviews: see over
Lima, June 23th 2006

Editorial Board, BMC Complementary and Alternative Medicine

I declare in this letter that the study titled: “Effect of three different cultivars of Lepidium meyenii (Maca) on learning and depression in ovariectomized mice” was conducted in compliance with “Guide of the care and use of laboratory animals” (National Research Council, 1996). Also, the Institutional Review Board of the Scientific Research Office from the Universidad Peruana Cayetano Heredia approved the study.

In this study we demonstrated that different ecotypes of Maca present different biological effects with respect to learning and depression. People in the Central Andes of Peru use Maca to treat the menopause symptoms, including cognitive function and depression and this study pretend to be the first that confirm this effect. We consider that this finding has a great importance for ethnopharmacology because the most frequent ecotype of Maca found in Carhuamayo, Junin, Peru is the Yellow Maca and also it is the most commercially preferred and the fact, for example, that Yellow Maca does not present effects on learning may cause a decline in the consumption of all existing ecotypes (13 ecotypes of Maca ranging from White to Black have been described). Here we found that Black Maca was the ecotype that presented beneficial effects on latent learning; meanwhile, all varieties of Maca presented antidepressant activity. These effects will enhance the commercial possibilities of these products and for their producers.

All formatting changes requested by the Editorial Team had been made in the new version of the manuscript. The follow changes were suggested and answered:

✓ The editors request that the abstract that is in the manuscript is used. The abstract in the submission system was replaced by the version in the manuscript.
✓ Please explain the acronym OVX on first use. The first use of the acronym OVX (ovariectomized) was in the abstract, so we decided to explain this acronym in this part. Also, it was explain when it was mentioned at first in the manuscript (last paragraph of introduction – page 4)
✓ Section headings - Please use sentence case for all headings and sub-headings in the manuscript (i.e. remove all unnecessary capitals). For example Abstract not ABSTRACT. Changes was made as suggested by the editorial team.
✓ Section headings? Please use sentence case for all headings and sub-headings in the manuscript (i.e. remove all unnecessary capitals). Changes was made as suggested by the editorial team.

✓ Author’s contributions - Please change to Authors’ contributions. Changes was made as suggested by the editorial team.

Finally, all authors revised the manuscript and we are agreed to submit the manuscript to the BMC Complementary and Alternative Medicine. The manuscript follows the format required to submit to your journal. Also, The authors declare that they have no competing interests.

Best regards,

Julio Rubio

Corresponding Author

Instituto de Investigaciones de la Altura.

Department of Biological and Physiological Sciences, Faculty of Sciences and Philosophy, Universidad Peruana Cayetano Heredia.