Author's response to reviews

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

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Editorial Board, BMC Pharmacology

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.

Finally, all authors revised the manuscript and we are agreed to submit the manuscript to the BMC Pharmacology. Also, The authors declare that they have no competing interests.

Best regards,

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