Reviewer’s report

Title: Potent alpha-glucosidase and alpha-amylase inhibitory activities of standardized 50% ethanolic extracts and sinensetin from Orthosiphon stamineus Benth as anti-diabetic mechanism

Version: 1 Date: 15 June 2012

Reviewer: Murad Faris

Reviewer’s report:

This paper described an interesting biological study (glucosidase and amylase inhibitory activity) of an ethanolic extract of Orthosiphon stamineus and one isolated compound, sinensetin with the aim to explain the mechanism of action of the antidiabetic activity.

This paper is acceptable for publication in BMC Alternative and complementary medicine after the following points have been taken into consideration.

1. What is the rationale that ethanolic extract, but not aqueous extract was examined in the current study?
2. What about the effects of other fractions?
3. Does ethanolic extract of Orthosiphon stamineus reveal more potent anti-hyperglycemic effects than its aqueous extract in in vivo experiments?
4. What is the rationale that ethanolic extract, but not aqueous extract was examined in the current study?
5. What about the effects of other fractions?
6. Does ethanolic extract of Orthosiphon stamineus reveal more potent anti-hyperglycemic effects than its aqueous extract in in vivo experiments?

In summary, it is an interesting finding that ethanolic extracts and sinensetin from Orthosiphon stamineus Benth exerts #-glucosidase and #-amylase inhibitory activities in vitro.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests