Reviewer’s report

**Title:** In vitro cytocidal effects of the essential oil from Croton cajucara (red sacaca) and its major constituent 7- hydroxycalamenene against Leishmania chagasi

**Version:** 2  **Date:** 18 June 2013

**Reviewer:** Tania Ueda-Nakamura

**Reviewer’s report:**

**Major Compulsory Revisions**

1. Micrographs resolution (Fig 2) is poor, so improvement will be necessary.

2. On Figure 3, why lines were cut and put side by side? Is it possible to show the entire gel? Authors state that the cysteine peptidase in the supernatant is 54 kDa, but on lines 5-8, it seems to be larger than 54 kDa. Is the magnification of the pictures (5-8) the same to lines 1-4?

**Minor Essential Revisions**

3. Please, the meaning of the abbreviations in the y axis of Figure 4 should be indicated in the end of legend).

4. On Table 1 the word “antimicrobial” seems to be redundant: In vitro antimicrobial activity of C. cajucara (red sacaca) essential oil and its purified 7-hydroxycalamenene-rich fraction against L. chagasi promastigotes and toxicity profile in mouse peritoneal macrophages.

**Discretionary Revisions**

5. Please, clarify: “Association indices 30.6 and 9.6% lower were observed upon pretreatment of macrophages with 250 and 125 µg/mL of the essential oil”

6. In the methodology authors mention that protein enzymatic digestion was done in the absence or in the presence of protease inhibitors (1 mM E-64 and 1 mM phenanthroline). Were they able to inhibit the proteolytic activity? If so, which one was inhibited?

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**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' below