Reviewer's report

Title: In vitro antioxidant, cytotoxic and antibacterial activity of extracts from nine under investigated Fabaceae tree species leads to potentially useful extracts in animal health and productivity

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Reviewer: Jude Chukwujekwu

Reviewer's report:

The evaluation of medicinal plants for efficacy and safety remains an important aspect of scientific research. In the current study, the evaluation of nine medicinal plants for antioxidant, antibacterial and importantly cytotoxicity properties is reported. The manuscript is well written. However, the following issues need to be addressed.

1. What is the percentage of CO2 in the incubator used? Was the incubator humidified?

2. Page 10, lines 216 – 218, the sentence, “Phenolic compounds ……” should be corrected as it does not read well.

3. Page 11, line 239: “An SI value greater than 1 for a crude extract increases the likelihood that its toxic and antibacterial compounds are different”. I think the authors need to provide reference(s) for this statement? My understanding is that the biological efficacy of any crude extract is not due to in vitro cytotoxicity when the SI value is #10 (Weniger et al., 2001; Soh et al., 2007).


Taking the above into consideration, I would say that only P. calyptrate is close to the threshold (SI #10). So what the authors described as interesting results with regards to the SI values might not really be so.

4. Please crosscheck the MIC values in Table 2 and correct accordingly. I would assume that these values (0.16 under E. faecalis; 0.62 under B. cereus; and 0.31 under P. aeruginosa) are not correct, otherwise they should have been highlighted as very active.

Level of interest: An article of importance in its field

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.