Reviewer’s report

Title: Antagonistic effect of alkaloids and saponins on bioactivity in quinine tree (Rauvolfia caffra Sond.): Further evidence to support biotechnology in traditional medicinal plants

Version: 1 Date: 17 August 2013

Reviewer: PRASANNA KUMAR SP

Reviewer’s report:

Major Compulsory Revisions

The Comments are

In Title
Please use the word Antioxidant in the title of the paper.

In Introduction
Mention the current status of Rauvolfia caffra in Red data book.

Gene modification of wild plant species and its release again in to the World is not acceptable even though it is self pollinated plant. It can only grow in controlled condition and the bioactive molecules can be extracted and used for medicinal purpose, hence these lines from the introduction part as it is not relevant for yours study.

In Methodology
Reference should be given for solvent extraction procedures.
Mention the % of active ingredients of commercially used drug Quercetin in this study.

Results and Discussion

Even though the results are informative, the data presented is insufficient, the authors are not quantified the level of Saponins and Alkaloids in the extracts.

The solvent system which contains the activity is not clear.

From the Table 2, stem bark and leaves contain almost equal amounts of Alkaloids and Saponins, but in the results which is stated that stem bark having more antioxidant activity. Specify?

From the Table 3, fraction FN which contains all alkaloids and Saponins showed 58% inhibition and fraction FF which contains only alkaloids and showed 62% inhibition. It is not correlating with your explanation, where Alkaloids and Saponins were found to be suppressing antioxidants activity.
Add statistical values for the mentioned significant fractions.

References

Add serial numbers to all the references according to the reference cited in the content of the paper.

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

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

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