Reviewer's report

Title: Effect of melilotus extract on lung injury by upregulating the expression of cannabinoid CB2 receptors in septic rats

Version: 4 Date: 30 October 2013

Reviewer: Niranjan Kanaki

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Major compulsory revisions:
Under the heading “Sample preparation”, it is mentioned that the authors collected 1.5 ml of blood from rat and then they used 2 ml blood to separate PBMC. How is this possible?

In the Results and Discussion section:
The first subheading mentions petroleum ether extract, but the content discusses about ethyl acetate extract and table includes data for all the fractions of ethanol extract.
The HPLC chromatograms have very poor resolution.

In Fig. 1, two tracks are labeled as 1.
The HPLC chromatogram raises many questions, such as:
• It is not possible that rutin would not show peak at 220 nm and 254 nm.
• Why the authors have quantified only coumarins in all the fractions and not rutin and hyperoside?
• Why the HPLC chromatogram of all the fractions have not been shown in the figure?
• When rutin has already been injected separately (track 3), why is it injected again in combination with hyperoside?

Level of interest: An article whose findings are important to those with closely related research interests

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'