Reviewer's report

Title: Profiling of phenolic compounds and their antioxidant and anticancer activity in (Pandanus amaryllifolius Roxb) extract from different locations of Malaysia

Version: 3 Date: 26 July 2013

Reviewer: Krishnaraj Thirugnanasambantham

Reviewer's report:

The authors have described geographical based variation in TP, TF, antioxidant and anticancer activity of Pandanus amaryllifolius. Reports of the MS revealed that he samples collected from the North (Bachok) exhibited the highest TP, TF antioxidant and anticancer activity while those from the South area (Pontian) presented the lowest content of TP, TF and antioxidant activity. Authors are suggested to answer and rectify some of the major and minor comments.

Major Compulsory Revisions

Comment -1:
Author should check the total flavonoid and quercetin ratio. From the results described it reveals that the author has reported “highest value of TF content in pandan was observed in Bachok (1.87±0.246 mg/kg DW”. On the other hand the authors has described that high quercetin content was recorded from Bachok with a value of 0.082±0.028 mg/g DW (i.e 82mg/kg). The obtained result has logical controversy. The results shows that the purified flavonoid (quercetin) content was higher than the total flavonoid.

Similar controversy was observed for Kaempferol and Naringenin too.

Comment -2:
The authors have accessed the anti-cancer activity only in breast cancer cell line. The authors are suggested to check the toxicity in normal fibroblast or primary cells

Minor Essential Revisions:

Comment – 1:
Author should maintain a uniform format to denote units throughout the MS. For example mg/kg DW or mg/g DW and mg kg-1 DW or mg/kg DW.

Comment -2:
Check the spelling throughout the MS. Example Quorcetin or quercetin.

Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest
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:

Do you have any non-financial competing interests in relation to this paper