Reviewer's report

Title: Antibacterial effect of crude extract and metabolites of Phytolacca americana on pathogens responsible for periodontal inflammatory diseases and dental caries

Version: 2 Date: 13 July 2014

Reviewer: Alok Das Mohapatra

Reviewer's report:

- Confidential comments to editors
  None

- Major compulsory revisions
  1- The authors should clearly mention the solvent finally used for dissolving the crude extracts and other extracts/compounds during assays for antibacterial activity were done.
  2- In the antibacterial activity assay the authors have used only medium control but they must also include solvent controls for each extract/compound.
  3- Since it is a research article, structures of the compounds does not merit to be in main figure. Rather, the authors should include graph for OD values of antibacterial activity of control as well as experimental samples in the main figure.
  4- In the discussion section the authors have discussed the mechanism of action of the biologically active extracts against one gram negative bacteria P.gingivalis. They should also discuss why the same mechanism will not be applicable for another gram negative bacteria used in the study – E.coli DH#.

Minor Essential Revision

1- In the Figure-2 the authors should include the actual name of the compounds in each graph(Diagonally below the x-axis), instead of using p1, p2…. to make it more legible.
  2- In the Figure-2 A,B, C are 3 different graphs hence the concentrations should be inserted in each graph.

- Discretionary revision
  The authors may include activity against non pathogenic gram positive bacteria.

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