Author's response to reviews

Title: Bioprotective properties of Dragon's blood resin: In vitro evaluation of antioxidant activity and antimicrobial activity

Authors:

Deepika Gupta (deep_dr5@yahoo.co.in)
Rajinder K Gupta (rkg67ap@yahoo.com)

Version: 3 Date: 27 January 2011

Author's response to reviews: see over
27th January 2011

Dear Ms. Sonia Aguera,

Thanks for sending reviewers’ comments in response to our manuscript “MS:792836994301807- Bioprotective properties of Dragon's blood resin: In vitro evaluation of antioxidant activity and antimicrobial activity”. We could not address original concerns of reviewer 1, as we did not get them in detail likewise this time. We have tried to answer the questions raised by reviewer 1, which are listed here pointwise:

1. In Nat. Prod. Rad, Vol 8(5), 2009, 494-497, we had reported the antimicrobial activity of a homoisoflavan isolated from D. cinnabari resin, against Micrococcus luteus using a cost effective bioassay guided fractionation method. Since resin had shown antimicrobial activity against wide range of microorganisms, the isolated homoisoflavan was not the only compound responsible for its antimicrobial activity. Present work provide detailed study of resin’s antimicrobial activity (such as zone of inhibition and MIC), while the earlier report dealt with only bioassay guided fractionation based on antimicrobial activity.

2. Resin was extracted with three different solvents which differ in their polarity (low, medium and high polar) so that they can extract the active principles and can be easily identified, which is the norm world over.

3. Since we are dealing with the whole resin, which has been used traditionally for its bioactivities, total phenolic content and flavonoid content need to be studied activity correlation.

4. Earlier, MIC of resin had not been reported in any of the reports and the phytochemical analysis and antioxidant activity evaluation is being done for the first time using different in vitro methods. Toxicity of resin to kidney cells has also been discussed.

5. Future studies are under planning to explore its use as food preservative (we had proposed resin as candidate for food preservation only).

6. As suggested, results on statistical analysis have been incorporated in the figures.

7. Petroleum ether had not shown any activity, therefore we did not include that in the figures. This has already been mentioned in text at page # 11.
8. Plant source of resin is *Dracaena cinnabari* Balf f. which have been included in the manuscript during first revision.

9. Yield of extracts were there in table 1 already.

As well as, suggestions/corrections given by reviewer 1 during first revision have also been incorporated in the manuscript and highlighted in yellow.

Hope to hear final acceptance from your office very soon.

With my kind regards.

Sincerely yours,

**Prof. Rajinder K. Gupta,**

PhD (Org. Chem.) & PhD (Microbiology USA)

Dean, School of Biotechnology

G.G.S. Indraprastha University

Sector 16C, Dwarka, New Delhi 110075

INDIA

Email: rkg67ap@yahoo.com

Mob. Tel. #: 9871263252