Author's response to reviews

Title: Assessment of the medicinal potentials of the methanol extracts of the leaves and stems of Buddleja saligna.

Authors:

Adeolu A Adedapo (adedapo3a@yahoo.co.uk)
Florence O Jimoh (asj02@yahoo.com)
Srinivas Vedic (sreenivasvedicum@gmail.com)
Patrick J Masika (pmasika@ufh.ac.za)
Anthony J Afolayan (aafolayan@ufh.ac.za)

Version: 4 Date: 26 April 2009

Author's response to reviews:

Title: Assessment of the medicinal potentials of the methanol extracts of the leaves and stems of Buddleja saligna.

Response to Dr. Kuete’s comments on the methodologies used in assessing the anti-oxidant and antibacterial status of Buddleja saligna

Dr. Kuete’s comments
For Bioassay: The Agar dilution method used by authors is not appropriate for such studies. I propose that authors should repeat the antimicrobial assay using broth dilution that is more adequate to investigate the activities on microorganisms implicated in systemic diseases. Also the use of two reference drugs is not justified. I propose that they should use only one and determined the real MICs instead of giving approximated values.
For antioxidant: The antioxidant assays should be determined as dose-effect for both ABTS, DPPH, and FRAP methods. All these assays should be re-done at different extract concentration in order to illustrate clearly their dose-activity potency.

Minor observations:
[23.] check journal abbreviation
[30.] Check the right spelling for author “Ordoñez” not “Ordon Ez”

My response
Bioassay
The reason agar dilution method was used in this assay is because 3 other papers have alluded to the use of this method and this was well acceptable to these journals hence we felt reproducing the same method will help to assess the
antibacterial potential of this plant. The 3 references are:

ABTS
For ABTS assay, the method of Re et al. [1999] was adopted i.e. Re R, Pellegrini N, Proteggente A, Pannala A, Yang M, Rice-Evans C: Antioxidant activity applying an improved ABTS radical cation decolorization assay. Free Radical Bio Med 1999, 26: 1231–1237. ABTS, a protonated radical, has characteristic absorbance maxima at 734 nm which decreases with the scavenging of the proton radicals. Not less than 4 papers from our lab using this method have been published.

DPPH
The effect of extracts on DPPH radical was estimated using the method of Liyana-Pathirana & Shahidi, 2005 i.e. Liyana-Pathiran CM, Shahidi F: Antioxidant activity of commercial soft and hard wheat (Triticum aestivum L) as affected by gastric pH conditions. J Agric Food Chem 2005, 53: 2433-2440. This method has also been employed in other studies carried out in our lab and papers have also been published from these.

FRAP
A modified method of Benzie & Strain, 1996 was adopted for the FRAP assay. We have also used this method in other studies with papers to show for this.

It is based on all these precedence that I stated in the earlier covering letter that the methods used in this study were in order. Besides this is the fact that the other
reviewer did not raise any query with respect to these methods. I have published 2 articles with
BMC Complementary and Alternative Medicine, and I have used these methods in these
2 publications.

It is possible that Dr. Kuete is familiar with other methodologies but this does not make
the methodologies used in the present study irrelevant.

Thank you.