Reviewer's report

Title: Different Pharmacological activity (Antioxidant, Phytochemical Screening, Thrombolytic, Antibacterial & Antifungal Potential and Cytotoxic) of Clausena heptaphylla Ethanolic stem bark extract.

Version: 2 Date: 7 August 2012

Reviewer: Mark Nanyingi

Reviewers report:

MAJOR COMPULSORY REVISIONS

1. The questions studied by the authors are not new, but are interesting. However the authors need to bring them out clearly. As they stand they are not very clear.

2. TITLE
The title is too long and therefore inappropriate, the Authors could eliminate terms like"Different,Phytochemical Screening...and rearange it to read Pharmacological and Phytochemical evaluation of Clausena heptaphylla Ethanolic stem bark extract in bangladesh would suffice
The authors are investigating a myriad of properties clouding their objectives Few properties may have been investigated...say Antifungal,Antibacterial and Cytotoxic, Thrombolytic and Antioxidant may be eliminated

ABSTRACT(Page 2)
Background
The logical construction of ideas is wanting, say There is wide spread interest in drugs deriving from plants?(derived from plants)
other comments are found on my attachment.

Background(Pg3)
The style of writing is unacceptable (Grammar and logical flow of sentences)
The last line the authors should delete "extract" its repeated

Methods(Pg3)
The Ethical statement should be rephrased or deleted, since it doesnt add value to the overall writing.

Collection of Plant Material(Pg4)
standard protocols in botanical collection and identification must be followed
a brief explanation on bark harvesting and conservation efforts must be outlined
Sample labeling and voucher identification or preservation has not been stated

Phytochemical screening (Pg 4)
The phytochemical procedures fail short of standard approaches, the authors need to outline explicitly but in summary of the acceptable methods.

In vitro Thrombolytic activity (Pg 6)
The authors need to be systematic in reporting as this is a well established procedure which seems unclear in this description.

Antibacterial assay (Pg 6-7)
detailed description of standard bacteria used is vital for reference purposes e.g Bacillus cereus ATCC 14579, Bacillus subtilis ATCC 6059, Staphylococcus aureus ATCC 6538, Pseudomonas aeruginosa ATCC 27853 etc

Statistical Analysis (Pg 8)
Standard reporting is mandatory
Suggested statement" All the in vitro experimental results were given as mean ± SEM of three parallel measurements and data were evaluated by using student’s t test. P values<0.001 were regarded as significant"

Results (Pg 8)
All captions for figures and tables should be deleted from this section ans instead parenthesized as table 1 or figure 1 at end of statements.
Pg 9....Redundancy ...eliminate sections of the results rearrange this section and follow instructions of writing .The tables captions should be deleted from the main sections to avoid ambiguity as stated above.

Brine Shrimp Lethality Bioassay (Pg 9)
The tests would be reported appropriately in LC and not LD ..since its "aqueous" solution

The authors report of anticancer and antipesticidal activity why?
the reporting should be consistent with the stated objectives or these findings should not be reported.

The Results section can be merged and some areas entirely deleted since the authors are over reporting and hence failing to adhere to the standards of writing.

Discussion (Pg 11)
The general discussion should be in context and consistent with the authors findings, as it is now there is a tendency to unnecessarily introduce unrelated sentences, The referencing can also be minimized to focus on the objectives,

Brine shrimp lethality (Pg 12)
The graded concentrations are too high for standard bio-assay, i recommend the
authors to use much lower dilutions of viz 10, 20, 40, 80, 160 and 320...this would more reasonable to make any meaningful conclusions on the bio-activity

The LD50 are not convincing as much if lower levels are obtained then their potential can be ascertained.

In the last sentence the Author makes generalized statements that need validation with specificity to the objectives, which they seem to have extreme deviations

Pg 13 The results are overrepresented, The Authors may reduce the content reported.

speculative conclusions are consistently used by the authors [34]. Our research findings revealed that medicinal plant C. heptaphylla can play a vital role in combating fungal resistance.

CONCLUSION(Pg13)

........"it can be assumed that different active secondary metabolites were present in this extract and perhaps some of these compounds may function in a synergistic manner." This is a highly speculative statement.

Authors' contributions
The Authors need declare non competing interests in achieving the outcome.

References
The paranthesis on the numbers of references can be deleted and consistency in bibliography (abbreviations or full titles, italics or normal)

Fig.1: Relative % scavenging.......(The Authors to write Percent or Percentage in full)

Figure 4: Clot lysis by Streptokinase, Clausena heptaphylla, Clausena heptaphylla in combination with Streptokinase and water
The words invitro clot lysis assay should be deleted and transferred to the title in caption and not within the figure

Table 1: Result of phytochemical screening of ethanol stem bark extract of C. heptaphylla
The phytochemical screening results are summarily descriptive and would warrant detail explanations or quantifications

Table 4: Brine Shrimp Cytotoxicity of Ethanol Extract of C. heptaphylla
the dosages represented in the table conflict with previous dilutions prepared of 62.5 to 1000, the findings here must be critically analyzed to merit publication

MINOR REVISIONS
The Authors to refer to attached Manuscript with Comments
Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests