Reviewer's report

**Title:** Antioxidant activities and phenolic contents of the methanol extracts of the stems of Acokanthera oppositifolia and Adenia gumifera.

**Version:** 1  **Date:** 27 June 2008

**Reviewer:** Fehmi Odabasoglu

**Reviewer's report:**

My specific comments to authors are:

**Abstract:**
- In lines 2-4, the sentence should be revised as “The antioxidant …………………..were evaluated using in vitro standard procedures”
- In lines 4-8, “The antioxidant activities of ………………….. as determined by the ABTS (full name?), DPPH (full name?) and FRAP (full name?) methods, were higher than that of……………….. On the other hand, the stem …………….possessed the higher level of total flavonoids …………………………………..”
- In keywords, “Antibacterial properties” should be deleted for in the present study, their antibacterial activities of the extracts were not determined. So this keyword is not necessary.

**Introduction**

Page 2
- In lines 4-6, the sentence “The latex, ………………… of snake” is not clear. Therefore it should be rewritten as clear or it should be revised as “The latex, fruit, …….. of arrow poisoning in combination with Euphorbia latex, the of Acacia mellifera and the venom from poison glands of snake in Southern Africa”
- In lines 8, “Poisoning of animals from this plant (???) is surprisingly…………”
- In lines 12-13, “……………root decoctions are used against anthrax and tapeworm………The leaves of this plant when boiled in water (?) for ten minutes……….. ”
- In line 16, is acovenoside cardiac glycosides? If so, it should be stated.
- In line 21, “…………… fro treating of leprosy and malaria………..”
- In line 21, the genus name “Adenia” should be italic.

Page 3
- In line 8, “…………..radicals are the main agents in lipid peroxidation……..”
- In line 9, “containing phenolic compounds, in particular flavonoids have been reported ………..”
- In line 11, “…………….. Properties using in vitro standard procedures.”
Material and Methods

- In line 15, “…..the altitudes ……..”

Page 4
- In line 1, which temperature was used thorough extraction procedures? At room temperature?
- In line 14, “Total phenolic contents in the extracts …………………..”
- In line 15, “………… extracts was mixed with ………..”
- In line 18, UV-VIS, not UV-VS
- In line 20, “Total phenolic content was expressed as ……………..”

Page 5
- In lines 2-3, “ Total flavonoid contents were determined using the ……….. of sample solution. A volume of 0.5 ml of 2% AlCl3-ethanol solution was added to 0.5 ml of sample solution”
- In line 7, “…………………. and y was the ……………”

Page 6
- In line 2, “ABTS.+ solution was freshly prepared …………………………….”
- In line 10, “…………DPPH radical was determined using ………………….”
- In line 21, CH3COONa instead of C2H3NaO2 and CH3COOH instead of C2H4O2 should be used.

Page 7
- In statistical analyses, the results should be given as mean ± standard error mean (SEM).

Page 8
- In line 7, “…………….mm Fe (II)/g…………”

Page 9
- In lines 4-5, “The scavenging activity of methanol extract of A. oppositifolia reached 70%, while that of A. gummifera methanolic extract was only 60%”

Table 1
- In title, “……….. extracts of A. oppositifolia and A. gummifera”
- BHT, catechin and quercetin, these compounds are already phenolic compounds. Why the authors assayed the total phenolic contents of these pure compounds? According to my opinion, these data can be transferred to FRAP part of the table.
- The results should be given as mean ± standard error mean (SEM) instead of mean ± standard deviation (SD).

In Figure 2
- It would be helpful for the readers if you could move the chart to the top of the graph and also increase the font sizes.