Reviewer's report

Title: Protective effect of aqueous extract from Spirulina (Arthospira) platensis against oxidant-induced cell death

Version: 1 Date: 6 August 2010

Reviewer: Nejdet Simsek

Reviewer's report:

• In general this manuscript is good written, the material and method section, all techniques are summarized to a bibliographic reference. The conclusions are supported by the data.
• The subject addressed in this article is worthy of investigation.

This manuscript is acceptable for publication with very minor revisions

Minor points:

Abstract methods section:
* Although in this study is used vitamin C and E as positive control, In this section is written use of only vitamin C. What is the reason for this? This sentence should be revised.
*Abstract Conclusion and Conclusion section:
Authors, in these sections are explained that the aqueous extract of Spirulina could protect or reduce oxidant-induced cell death due to apoptosis. On the other hands, in result and discussion sections, authors are suggested that the extract did not cause any significant (p > 0.05) effect on cell death due to apoptosis compared to the untreated cells, the extract had protective effect against cell death due to apoptosis induced by reactive oxygen species (ROS).
*The author should be revised these sentences in conclusion sections according to results

Discussions:

In sixty paragraph: Thus, the antioxidant effect of Spirulina extract could be useful in ameliorating such pathological conditions.

Here, these references should be added
1-The effects of Panax ginseng and Spirulina platensis on hepatotoxicity induced by cadmium in rats. A. Karadeniz et al. / Ecotoxicology and Environmental Safety 72 (2009) 231-235,
(S. platensis might play a role in reducing the toxic effect of cadmium and its antioxidant properties seem to mediate such a protective effect.)
2- Spirulina platensis feeding inhibited the anemia- and leucopenia-induced lead and cadmium in rats, N. Simsek et al. / Journal of Hazardous Materials 164
(S. platensis supplementation may be useful in adjuvant treatment of leukemia and anemia caused by lead and cadmium toxication).