Reviewer's report

Title: Impact of In utero Exposure to EtOH on Corpus Callosum Development and Paw Preference in Rats: Protective Effects of Silymarin

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Reviewer: Dr Carlos Fernando Valenzuela

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Unable to decide on acceptance or rejection until the authors have responded to the compulsory revisions

The paper of Moreland et al reports that the bioflavinoid, silymarin, ameliorates effects of fetal ethanol exposure on corpus callosum development and also that it alters paw preference in rats. The findings reported in this paper are potentially interesting. However, the following issues must be addressed:

1. Does silymarin affect blood alcohol levels? If data were collected for these animals, it should be provided. Alternatively, if it has already been established that silymarin does not affect BAL, a reference should be provided.
2. The Results Section is extremely brief. It should describe in significantly more detail the data shown in each of the tables. The tables should include a descriptive title, standard errors or deviations and n values.
3. The Discussion needs to be more focused. Too much emphasis is placed on gender-specific differences in corpus callosum development. However, only females were used in this study and results should be interpreted in light of this fact. Moreover, the results presented in all tables should be discussed in detail. The fact that silymarin seems to have strong effects on its own (on brain, birth and wean weights, for instance) should be discussed.

Minor Points:

1. Background; first sentence: "as do normal children".
2. Background; second paragraph, last tence: "Given that.."
3. Discussion; last paragraph: "Baker et al".
4. References are numbered in the text but not in the reference list. Please correct.

Competing interests:

None declared.