Reviewer’s report

Title: Antiinflammatory evaluation of leaves of Plumeria acuminata

Version: Date: 10 July 2006

Reviewer: Olumayokun Adebodun Olajide

Reviewer’s report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Abstract:
Authors need to highlight any traditional use of this plant in inflammatory conditions. This will be the main justification for the study.

Methods:
Delete “..for the present study™ in Line 3 of abstract.
The authors need to test at least three doses of the extract to establish a dose-related activity of the plant extract.

Background:
There is no clear-cut report of the traditional use of the plant to justify this study. The authors need to outline the traditional use of this plant in inflammatory disorders, in order to justify the study being reported.

Methodology:
The extract was administered 30 minutes prior to carrageenan. The authors need to state if any preliminary study was carried out to show that the extract would have been adequately absorbed from the GIT before inflammation was induced. It would have been more appropriate to administer the extract 1 hour before injection of carrageenan.

Results:
MEPA at the doses 250 and 500 mg/kg showed an inhibition 22.03 and 30.51 % respectively. The extract appeared to produce weak anti-inflammatory effects in the carrageenan-induced rat paw experiment. (This observation did not reflect the period that was taken in calculating the percentage inhibition of oedema, which according to the data in Table 1, should be the third hour). If at the third hour the highest dose of the extract inhibited oedema by just 30.5% in the carrageenan oedema, it cannot be said that the anti-inflammatory activity were comparable to that of indomethacin. This statement should be deleted by authors.

In the cotton pellet granuloma experiment, it is wrong for the authors to state that the extract produced a dose-dependent effect when in actual fact; two doses of the extract were studied.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.