



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Pharmaceutical Research
Manuscript Number:	2013 BJPR 3295
Title of the Manuscript:	Free radical scavenging activities of <i>Nyctanthes arbor-tristis</i> . L on adjuvant induced arthritic rats

General guideline for Peer Review process is available in this link:

<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>In the manuscript, authors concluded that NAT extracts improved oxidative status of arthritic rats due to its potent antioxidant activity. However, there is an inconsistency. Authors describe “<i>The activity of total tissue SOD, GPx and catalase was found significantly ($p < 0.05$) low in arthritis induced rats (group II) than in control rats and a substantial increase in the activity to near normal level was noticed in NAT administered rats (Fig. 2)(Line 173~175).</i> Also it is written in the abstract “<i>It also significantly decreased the levels of lipid peroxides and activities of catalase, glutathione peroxidase and reduced the activity of superoxide dismutase in arthritic rats.</i>(Line 33~34). The actual data show that activities of antioxidant enzymes (Catalase, GPx) are increased in arthritic rats and decreased significantly by NAT treatment (Fig. 2). How authors explain the discrepancy and NAT effect? Also there are many points to be revised as followings.</p> <ol style="list-style-type: none"> 1) Methods <ol style="list-style-type: none"> a) Although authors said that six rats in each group were used, in the results (Figs. & Table), 3 rats were used each. Which is correct? b) Line 112; plethismometer →plethysmometer? In line 139, the paw volume changes were described as mm, not ml. Authors should describe how to calculate the paw edema. c) Line 115; Which joint tissue was removed and 	



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	<p>how to prepare the tissue homogenate ?</p> <p>d) Line 123; What materials did authors use for the in vivo antioxidant assays? Did you use homogenate from joints or the supernatant after centrifugation?</p> <ul style="list-style-type: none">● In whole, method and material for each assay are needed to describe in detail. <p>2) Results and discussion</p> <p>a) In Fig.1, CP1~6 must be Group I ~VI. What is the unit of X-axis? Line 160, it need reference(s) for impaired hepatic biosynthetic activities in AIA condition.</p> <p>b) Line 164, it is “marked increase in the joint tissues”, but the title of Table 3 is “ in the serum”.</p> <p>c) In Table 3, ALT for Group II is 0.012±0.002. Is it correct? (it seems too small).</p> <p>d) Line 173, it is described “SOD and GPx in Group II was higher”, but in the figure SOD was lower and GPX was higher. Describe correctly. If authors mention in vivo antioxidant activity in this section, then it needs to discuss more (meaning of increase in TBARS, decrease in SOD, increase in catalase, GPx). In SOD activity, the activity is indicated as 50% inhibition of epinephrin autooxidation/ml. What is unit? It needs to describe in Method how to calculate it.</p> <p>e) Fig.2; Unit of each assay should be indicated. Did author use the tissue (joint) homogenate?</p>	
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	<p>If so, TBARS and SOD are nmol/<u>mg protein</u>, not per ml.</p> <p>f) Line 187, it is described “marked infiltration of leukocytes and eosinophilic inflammatory exudates in the synovial membrane (<u>Plate 1</u>)?”. Is it correct?</p> <ul style="list-style-type: none"> ● Results are not explained correctly and discussion is not enough. 	
<u>Minor</u> REVISION comments	<ul style="list-style-type: none"> ▪ Abbreviations; It is better to show full name ; NSAID, RBC, WBC, ESR, ALP, LDH. ▪ Line 78, it was written“ electron microscopical studies”, but Results (plate 1~4) seems to be optical microscopy. Indicate the magnification. 	
<u>Optional/General</u> comments		

Note: Anonymous Reviewer