Reviewer’s report

Title: Effects of Carissa opaca fruits extracts on oxidative pulmonary damages and fibrosis in rats

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Reviewer: Ganapasam Sudhandiran

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In this manuscript Sahreen et al have analysed the effect of Carissa opaca fruit extract on pulmonary damage. They have supported their findings with biochemical parameters and histology. The data presented are preliminary, however the role of this fruit extract against pulmonary damage has not been addressed. While this this is an interesting work, there are several major concerns that need to be justified. The following are my major concern.

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Did the authors evaluate fibrosis. There are standard models of induce pulmonary fibrosis such as instillation of bleomycin, silica, amiodarone etc. The authors should tone down their statement.

Background: The authors have not given much more description about Carissa opaca.

Methodology: Why do the authors selectively collect the plant during March-April season. What would be the effect of the plant during winter.

Plant extract may contain both hydrophobic and hydrophilic compounds..By doing liquid liquid partition only,how the authors could tell about the purity of the extract? HPLC is preferable.

The authors did not mention about dosage fixation study.. ow did the authors fix the dosage of extract as 200 mg/kg BW? What parameters were chosen?

Results:

In experimental protocol the authors have given as 7 groups..But in result tables they have given the results of 10 groups.

In microphotographs of rat lungs the background is not same. For the panel E, it is clear that the histology were not processed in a similar manner at a time. Only six groups were mentioned in the same.

Based upon the level of lipid peroxidation and histopathological analysis how it is possible to say that Carissa opaca has protective activity against pulmonary fibrosis? The authors could have check the level of inflammatory markers and pulmonary fibrosis marker like hydroxyproline or could have used some collagen
specific assays.

In brief, it is a good work. However, to strengthen the manuscript, additional data are needed.