Reviewer’s report

Title: Anti-inflammatory activities of astringent persimmons (Diospyros kaki Thunb.) stalks of various cultivar types based on the stages of maturity in the Gyeongnam province.

Version: 3  Date: 07 Jul 2019

Reviewer: Maria Graça Costa Miguel

Reviewer's report:

In the abstract, when the authors refer the name of the species they do that using the complete name. For example D. kaki, should be Diospyros kaki (as well as in italic).

It is not clear the meaning of the sentence:

Although inflammation can be treated by use of synthetic drugs, some of the anti-inflammatory drugs such as anticytokine some negative effects of blocking the activity of various kinases hence resulting in a significant decrease in host defence toward infections.

In the sentence: The anti-inflammatory potential of plants are attributed to the presence of secondary metabolites such as phenolic compounds, tannins, saponins, carbohydrates, glycosides, and flavonoids. Tannins and flavonoids are phenolic compounds. Therefore the sentence must be reformulated.

The sentence:

"In fact, the taste is due to the dehydration caused by the interaction between the protein of the tannin and the surface of the tongue." This sentence must be reformulated because tannin has not any protein.

In the sentence: "Radical scavenging studies in several plant varieties have demonstrated that carotenoids are present in tannins at a concentration of about double that found in vitamin C."

The sentence must be reformulated, because carotenoids are not present in tannins. Carotenoids are tetraterpenes and tannins are polyphenolic compounds. In addition, this sentence is incomprehensible.

In material and methods, I do not understand what is solvent B and solvent A. Was solvent B dissolved in solvent A? What was the elution programme? Was it isocratic?
In Fig 3, what is the meaning of the colour of bars? White, grey, black?? The same question for Fig 4.

In the Discussion, it is not necessary to report: "It has been reported that various weather factors, such as accumulated temperature, monthly precipitation, duration of sunshine, and diurnal range, have a great influence on fruit weight. A study by Park [19], showed that the duration of sunshine in April and October had the greatest effect on increasing fruit weight", because the authors did not study this effect. Moreover, the decrease of tannins along ripening is a well known occurrence.

In the Discussion:

The changes in the contents of useful components in the astringent D. kaki in this study could also be closely related to changes in climatic conditions. Why did not the authors consider genetic information as being other factor on the levels of tannic acid? Maybe the most important?

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

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