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Journal Name:	European Journal of Nutrition & Food Safety
Manuscript Number:	Ms_EJNFS_32175
Title of the Manuscript:	Effect of Natural Antioxidants Extracted from Simarouba glauca and Radermachera xylocarpa Deoiled Seed Cakes on the Oxidative Stability of Soyabean Oil during Accelerated Storage
Type of the Article	Original Research Article

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PART 1: 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	Authors present a study of the effect of natural oxidants extracted from Simarouba glauca and Radermachera xylocarpa in the stability of soyabean oil but results are very questionable: 1° The total phenolic content is very low. 2° IC₅₀ of DPPH must be calculated, they are using high concentrations (control at ≥ 85% at the lower dose) to compare results they have to lower concentrations. 3° Peroxide value, again very high doses used, BHT (control) 4 times greater than the maximum allowed in the United States of America and 20 times higher than the limit in Europe. From Graphic 3 it can be said that extracts are as good as the control but this is artificial, at lower doses wat happens? 4° TOTOX value "Radermachera xylocarpa extract was most efficient in delaying oxidation of soyabean oil because it TOTOX value at the day 21 was ranged between 65 -115 while those of oil supplemented with Simarouba glaucawas between 90-125. As previously seen with p-anisidine value, at concentrations 600-1800 ppm, Radermachera xylocarpaextract was most efficient in limiting oxidation of the oil than BHT." This is again artificial. Since the limit of BHT was exceeded try to use the same concentration of as the extract.	1° I agree with the reviewer, but, the activity of the extract as antioxidants is well observed. So, the amount of phenolic antioxidant present is enough for the achievement of its activity. 2° In this study, we just wanted to have an idea of the antioxidant activity in % of the extracts compared to BHT at different concentrations. This in other to see the impact of the amount of phenolic antioxidants present on the reduction of the DPPH, and to have an idea oF the efficiency of the extract to scavenge free radicals. Please to maintain these results as presented. 3° It is clear that the concentration of BHT used was high. According to the Codex Stan 1999, it should not be more than 75 ppm or 75 mg/Kg of oil. In this study, we have used the legal concentration limit of synthetic antioxidants (and not of BHT) to be added in oils and fats, which is 200 ppm or 200 mg/Kg. BHT was just a positive control. The legal limit has been used in order to extrapolated to all synthetic antioxidant to be added or their mixture. See Reference: Codex stan 1999: Codex Standard for Edible Fats and Oils not Covered by Individual Standards (CODEX STAN 19-1981, Rev. 2 - 1999).



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		We cannot directly correlate the results of graphic 3 with that of DPPH test because Many factors such as the matrix used can influence. 4° We could not use the BHT at similar concentrations with the extract. This because, as previously mentioned we could not exceed the legal limit concentration of “synthetic antioxidants or their mixture” to be added in oils and fats as recommended by Codes-Stan 1999.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		