

'Quality and shelf-life assessment of...' by Olatunde et al.

The MS cannot be published in the present state. A major revision is needed. Language must be corrected several places (not addressed here). The following points should be addressed:

- L21-25: This is not related to the topic of the study (the function of metals in fish metabolism and how deficiency may affect fish health). Instead, state why you decided to study metals here, related to water pollution and human health? If so, write about why you choose to study Fe, Zn, Cd and Pb. What are the concerns of eating polluted fish...?
- L33 – etc: After defining species (latin) in the M&M section, use common names (carp and tilapia)
- Sample = 50 g of fish piece? Do you mean a piece of fillet (white muscle only?)
- The number used of each fish species must be stated! The number of fish and fish samples are probably not identical? Explain!
- State capture method
- Move sentence 'All chemicals and reagents..' to the end of section 2.3.3

2.2 Fish processing

- Moisture content 15 +/- 5 %. Describe how it was measured (method).
- Give number of samples (n) for the various treatments
- Last sentence in section 2.2: you used fresh fish as baseline data for comparison. Where are these data shown?

2.3.2 TVC

- How did you excise the sample from the fish? With or without skin?

2.3.2 TVN

- Sulphuric and selenium tablets? Describe!
- Last sentence in section: 'Both reagents were prepared...' State why this is important.

2.3.4 Trace metals

- AAS: state (Model, Manufacturer, Address)

Add section (2.3.5) Statistics. You did 3 trials with n = ? fish or n = ? samples...?

Significant: $p < 0.05$; Not significant: $p > 0.05$ (throughout)

RESULTS AND DISCUSSION

- In the table you only show INITIAL values. Consider either give all data in table or use figures with SD's, i.e. give 'Mean, +/- SD, n=?) in figure legends.
- Align figure scale (x-axis)! Difficult to follow discussion related to sensory scale as shown in M&M. According to this unclear rejection point (rejected as fresh???)
- Several places in text: what is actually different (defined as $p < 0.05$) and what is not different. Some contradictory statements are given. From the figs. it may generally look like $BOVD > SMKD = OVD$).
- You state some sensory properties, like texture and colour, were different among treatments. Show data and p-values!
- Trace metals: I suggest to show initial or final values only, i.e. along with a sentence that their levels did not change during processing (if this is correct).
- Table 1- Consider how many decimals are appropriate. TVN values for catfish, are they really different ($p < 0.05$)? Where $p < 0.05$, do the MINOR differences in mean values have a meaning in practice? Can you really recommend something based on such minor differences?