

## ReviewForm1.7

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| JournalName:          | <a href="#">AsianFoodScienceJournal</a>  |
| Manuscript Number:    | Ms_AFSJ_99649  |
| TitleoftheManuscript: | Techno-functional,nutritionaland sensorialqualitiesofraw,brinedanddriedmushrooms(Pleurotusostreatus)producedonOil PalmBy-ProductsinBenin |
| Typeofthe Article     | OriginalResearchArticle  |

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Thisjournal'speerreviewpolicystates that**NO**manuscriptshouldberejectedonlyonthebasisof'**lackof Novelty**',providedthemanuscriptisscientificalllyrobustandtechnically sound.To knowthe complete guidelineforPeerReviewprocess,reviewersare requested tovisitthislink:

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**PART 1: Review Comments**

|   | <b>Reviewer's comment</b>  | <b>Author's comment</b> (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) |
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| <p><b>Compulsory</b> REVISION comments</p> <p>1. <b>Is the manuscript important for scientific community?</b><br/>(Please write a few sentences on this manuscript)</p> <p>2. <b>Is the title of the article suitable?</b><br/>(If not please suggest an alternative title)</p> <p>3. <b>Is the abstract of the article comprehensive?</b></p> <p>4. <b>Are subsections and structure of the manuscript appropriate?</b></p> <p>5. <b>Do you think the manuscript is scientifically correct?</b></p> <p>6. <b>Are the references sufficient and recent? If you have a suggestion of additional references, please mention it here in the review form.</b></p> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p> | <p>This study shows that <i>Pleurotus ostreatus</i> mushrooms represent an excellent source of protein, thus they have a crucial role in covering the protein needs of the Beninese population. The research consists in evaluating the techno-functional, nutritional and sensory properties, due to their bioactive components, in order to optimize their exploitation in food technology and gastronomy. Mushrooms are widely exploited by rural African populations mainly as food, and/or as a source of income and also more than 200 species of mushrooms have long been used as functional foods worldwide. The study was jointly carried out within the Tropical Mycology and Soil-Plant-Fungi Interactions Research Unit (UR-MyTIPS) and the Agricultural Product Quality and Safety Unit/LaRAEQ of the Faculty of Agronomy, Parakou University of Benin. The title of this research is appropriate to disseminate the obtained results.</p> <p>The research paper has an appropriate structure for research, namely: introduction - different data are presented about mushrooms and their health benefits due to a multitude of compounds with antifungal activity, antigen toxicity, antioxidant, anticancer, antihyperlipidemic, but also for their immunostimulating properties;</p> <p>Following the materials and methods chapter where the location of the study is specified, the preparation of mushroom samples, the methods of analysis (determination of the water retention capacity (WRE), the pH and color of fresh mushrooms, the evaluation of the nutritional quality of the mushrooms, the levels of dry matter, ash, fats and proteins, evaluation of sensory attributes of raw, salted and dried mushrooms);</p> <p>in the results and discussions chapter, the obtained data are presented in a table (Technological quality of raw <i>Pleurotus ostreatus</i>) and 2 figures (Sensory quality of raw, brined and dried mushrooms, Effect of brine concentration on sensory quality of brined mushrooms). Luminance (L*), red index (a*) and yellow index (b*) values for fresh mushrooms were 74.6, 2.78 and 26.35, respectively. The hue value and chromatic value of raw mushrooms were 5.98 and 26.49, respectively. The pH of fresh mushrooms was 6.35. The water holding capacity was 11.85% and the technological yield was 88.15%. Nutritionally, the dry matter, fat, ash, and protein contents of <i>Pleurotus ostreatus</i> were 9.8%, 2.6%, 6.7%, and 14.78%, respectively.</p> <p>In the conclusion chapter, it can be concluded that sensory quality, fresh mushrooms and brine were better appreciated than dried mushrooms, and <i>Pleurotus ostreatus</i> mushrooms produced in palm residues have more techno-functional and nutritional advantages and can be promoted for food security and nutritional.</p> <p>By following the research steps, the article is scientifically correct. For this study, 43 bibliographic titles were studied, of which 1 is from the last 5 years.</p> |  |
| <p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>  | Yes, is language/English quality of the article suitable for scholarly communications  |  |
| <p><b>Optional/General</b> comments</p>   | In the specialized literature, there are many studies about mushrooms, which have been studied due to the benefits they have, I consider the use of several bibliographic titles in carrying out this research study from the last 5 years, will create an added scientific value of this research. After completing this process, the paper can be published, there are minor changes   |  |

**PART 2:**

|  | <b>Reviewer's comment</b>  | <b>Author's comment</b> (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) |
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| <p><b>Are there ethical issues in this manuscript?</b></p> | <i>(If yes, kindly please write down the ethical issues here in details)</i> |  |

**Reviewer Details:**

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