

Area (Times New Roman, 10p)

**Title of the work (Times New Roman, 12p, Bold)**

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Abstract of the work should be written in a single paragraph using 100-350 words. Write a brief introduction, methodology, results, and conclusion of the work, highlighting the beginning of each part by using bold case letter (Times New Roman, 12p).

Key words: Please give 3-5 key words (Times New Roman, 12p).

**Note:** Next page shows an example of abstract

**Comparison between proteolytic profiles of fungal extracts obtained by solid and submerged fermentations using fish flour as substrate**

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**Introduction.** Fish flour has been used as substrate in solid fermentation (SF) systems either for the recovery of high quality proteins or for proteases production. The aim of this work was to compare proteolytic profiles of extracts obtained by SF and submerged fermentation (SmF) by *Aspergillus oryzae* 2095, previously reported as a proteolytic strain. **Methodology.** *Aspergillus oryzae* was cultured in SF and SmF using fish flour as a substrate; enzyme extracts were obtained by standard methodology previously reported. Neutral and alkaline activities were assayed and zymograms were performed. **Results.** Highest levels of neutral activity (2740 U/L for SmF and 4190 U/L for SF) and alkaline activity (3080 U/L for SmF and 5210 U/L for SF) were both obtained after 44 h of fermentation. Crude extracts obtained at this time were used as samples in zymograms, revealing proteolytic activity both at pH 7 and 10. Finally, isoenzymes observed from both types of culture have a molecular weight between 50.8 kDa and 106 kDa. However, in extracts from SF a prominent band showing a molecular weight of 28.1 kDa was also detected. **Conclusion.** These findings support SF as a suitable process for the production of proteolytic from a low cost substrate.

**Keywords:** Fish flour, proteases, solid-state fermentation, submerged fermentation, zymogram