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Evaluation of the fish processing waste and its comparison with the standards for compost production (Case study: *Thunnus tonggol* and *Euthynnus affinis* fish in Industrial town of Miroud Babolsar)

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Abstract

The canning industry has also improved due to the growing population and the use of food industries. Following industrial processes, there is always a large amount of waste that poses a significant risk to the environment and human health. Due to the richness of organic compounds, fish processing wastes also have a high potential for the compost production. The purpose of this study is to evaluate the quality of these wastes, compare them with the standards and make it possible to re-use them for the production of health compost. In this research, ash, moisture, pH, electrical conductivity, nitrogen and phosphorus of *Thunnus tonggol* and *Euthynnus affinis* electrical conductivity were measured and evaluated in laboratory conditions during a seven-day period. Data analysis was done using SPSS software version 22. The average values of the parameters measured in the waste in two species of *Thunnus tonggol* and *Euthynnus affinis* were respectively: moisture: 67.76, 69.03, Ashes: 3.6, 2.99, pH: 6.68, 6.41, Carbon: 22.46, 32.45, total nitrogen: 17.10, 10.01 and able to the Iranian Institute of Standards. Nitrogen amount were not evaluate in any of the staphosphorus: 1.54, 1.87. Ash amount, pH, electrical conductivity and organic carbon were acceptndards. The amount of waste moisture was also higher than the limit stated by the evaluated standards. The overall results showed that the waste from the processing of fish was at an acceptable level for the production of compost.

Keywords: Compost organic, Environmental standard, Fish waste, Healthy compost

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