Antioxidant activity of seaweed extracts when applied in tilapia Minced (*Oreochromis niloticus*)

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The extraction of minced tilapia stands out for the possibility of greater recovery of the meat. However, this process increases the surface exposure to oxygen and therefore can lead to rancidity, creating a vulnerable product, making necessary the use of additives to its conservation. The trend is to use natural products as alternatives to chemical additives. Seaweeds have secondary metabolites with antioxidant activity, that it may represent a source of natural bioactive substances. The aim of this study was to evaluate, by using TBARS, the antioxidant activity of Nori and Hijiki extracts (concentrations of 25 and 50 µg GAE/mL) when applied in tilapia Minced, at frozen storage, for 180 days. By TBARS, it was observed that the seaweeds extracts were not as efficient as the synthetic antioxidant BHT. From 60 days of storage, the Minced with seaweeds showed higher TBARS values presented by the Minced without antioxidant, showing the pro-oxidant effect. The oxidation peak was found at 120 days of frozen storage, falling to 180 days. For minced without antioxidant, the value of TBARS was, on average, 0.28 mg of malondialdehyde/kg. The minced with BHT had a value of 0.15. For Nori, 25 and 50 µg GAE/mL, the values were 0.33 and 0.37, respectively. For Hijiki, the result was 0.41 and 0.45 respectively. Although the pro-oxidant effect displayed by seaweeds, the tilapia Minced still remained in a satisfactory state, below 3 mg of malondialdehyde / kg sample during the frozen storage for 180 days.