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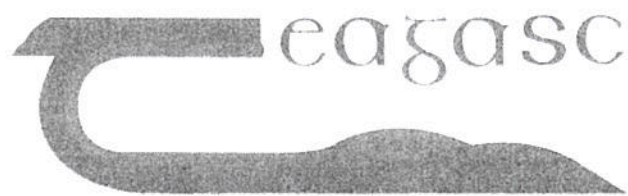
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Shelf-life of tambaqui *Colossoma macropomum* fillets by using Cologne *Alpinia zerumbet* essential oil

A.K.A de Sousa,¹ F.H.S. Fogaça,² A.M.L. Pereira,² K.N.C. Castro,² J.R.S.A. Leite,¹
J.A. Magalhães,²

¹Universidade Federal do Piauí, UFPI, Parnaíba, Piauí, Brazil

²Empresa Brasileira de Pesquisa Agropecuária, Embrapa Meio-Norte, Parnaíba, Piauí, Brazil

The tambaqui *Colossoma macropomum* is an important Brazilian fish, from Amazon, with great flesh quality, but with high lipid content which can reduce its shelf-life. The *Alpinia zerumbet* is an Asia plant, belonging to the Zingiberaceae family. In Northeastern of Brazil it is popularly known as Cologne and used in folk medicine. Recently, natural substances, as essential oils, have become promising for increasing the shelf-life of food. The present study examined the effect of Cologne essential oil on the quality and shelf life of tambaqui fillets stored under refrigerated conditions (5 ± 1 °C) for 14 days. The treatments were control (T1), cologne essential oil solution at 0.75% (T2) and cologne essential oil solution at 1.5% (T3). The fillets were immersed in treatment solutions for 3 minutes, drained and stored under refrigeration. The shelf life of the samples were determined using chemical analysis of pH, thiobarbituric acid reactive substances (TBARS) and total volatile basic nitrogen (TVB-N). Results showed pH reducing ($p < 0.05$) with storage time for treatments with cologne essential oil. The treatments T2 and T3 resulted in lower TBARS values in comparison with the control samples, demonstrating the protective effect on lipids provided by cologne essential oil. However, the cologne essential oil wasn't efficient to reduce TVB-N values. Based mainly on our data, cologne essential oil has a potential to be use as a natural antioxidant in fillets of fish.