

ESTIMATING THE SHELF LIFE OF A MAYONNAISE MADE FROM SACHA INCHI (*PLUKENETIA VOLUBILIS* L.) OIL AND DUCK (*ANAS PLATYRHYNCHOS* L.) EGG YOLK

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ABSTRACT

Mayonnaise is one of the most industrially produced and consumed food emulsions. Consistent mostly of oil, it is susceptible to deterioration by peroxidation of lipids that is manifested in sensory unpleasant characteristics associated with the chemical species that are produced in this process, which reduce their shelf life. This work studied the shelf life of a mayonnaise made from sachá inchi (*Plukenetia volubilis* L.) oil and duck (*Anas platyrhynchos* L.) egg yolks, using the peroxide value as an indicator. Three storage temperatures (12, 22 and 32 °C) were used to obtain the specific reaction constants (0.112, 0.142 and 0.359 mEq-peroxide·day⁻¹, respectively) to determine the activation energy (41752 J·mol⁻¹) and shelf life for each temperature. The evolution of peroxide value was similar to other mayonnaise formulations.