

Effect of pectin on the characteristics of edible film from pink ear emperor (*Lethrinus lentjan*) gelatin

ABSTRACT

Edible film is a thin layer used to coat food. One of the biopolymers that can be used as a base for the edible film is fish gelatin. Gelatin can be obtained from the skin of *Lethrinus lentjan*. However, edible film is usually brittle if only gelatin is used, so other materials, such as pectin, are needed to form an elastic film. This study aims to determine the effect of pectin addition on the characteristics of the edible film. The method used in this research was the experimental method with five treatments of pectin concentration (0%, 0.2%, 0.25%, 0.3%, 0.35%). Physical and chemical characteristics (thickness, tensile strength, elongation, water vapor transmission, and moisture content) of edible films were analyzed. The results showed that different concentrations of pectin significantly affected the characteristics of edible film. The best characteristics of edible film (0.12 mm thickness, 15.40 MPa tensile strength, 26.50% elongation, 6.99 gram/m² 24 h water vapor transmission rate, and 8.745% moisture content) were obtained as 0.2% pectin added in making the gelatin-based edible film