

**Pengaruh Penambahan *Sourdough starter* Fermentasi Air Tomat  
Terhadap Karakteristik Fisik dan Sensoris Roti *Sourdough***

*(The Effect of Adding Tomato Water Fermentation Sourdough starter on the  
Physical and Sensory Characteristics of Sourdough Bread)*

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***ABSTRACT***

*Sourdough bread is a bread fermented with naturally occurring yeast and has a dense and fibrous texture, has a sour taste, and is rich in probiotics. Natural yeast used as a substitute for regular bread yeast is called sourdough starter. This study aims to determine the effect of sourdough starter concentration of tomato fermented water on the physical and sensory characteristics of sourdough bread. The study used a Completely Randomized Design (CRD) with 5 levels of sourdough starter concentration (0%, 5%, 10%, 15%, and 20%) with 4 replications. The data obtained were analyzed using ANOVA and continued with Duncan's Multiple Range Test (DMRT). The results showed that the addition of sourdough starter significantly affected the specific volume, bread development, texture, color, and staling rate. Based on the visual appearance, the addition of sourdough starter affected the shelf life as indicated by mold visualization. The addition of sourdough starter with a percentage of 20% gave the best results with a specific volume of 3.47 cm<sup>3</sup>/g, bread development of 116.41%, texture of 3.19 N, color (L = 64.51, a = 5.39, b = 20.27), staling rate of 0.03 N/hour, and no mold growth occurred up to 7 days of storage.*

**Keywords:** *sourdough starter, sourdough bread, physical and sensory properties*