



INTISARI

Masin adalah sambal fermentasi udang tradisional khas Pulau Sumbawa yang dibuat dari udang rebon, garam (15%), gula (8%), cabai rawit merah (50%), dan asam jawa (5%) melalui fermentasi anaerob selama 7 – 14 hari. Penelitian ini menganalisis perubahan karakteristik sensoris, mikrobiologis, kimia, dan fisik selama 18 hari fermentasi untuk menentukan durasi optimal. Pengamatan dilakukan setiap 2 hari meliputi evaluasi sifat sensoris, sifat mikrobiologi meliputi total bakteri, bakteri asam laktat, sifat kimia meliputi pH, total asam, TVBN, nitrogen terlarut, aktivitas protease, dan sifat fisik meliputi kadar air, warna, serta viskositas. Hasil menunjukkan karakteristik khas *masin* mulai terbentuk pada hari ke-8 dan optimal pada hari ke-12, dengan profil aroma asam-udang fermentasi, rasa asam dominan dengan aftertaste pedas, dan tekstur pasta semi padat. Selama fermentasi, bakteri asam laktat aktif mulai hari ke-4, pH menurun dari 7,13 menjadi 5,02, total asam meningkat dari 3,29 menjadi 23,14 mg/g, dan TVBN naik dari 26 menjadi 155 mg N/100g. Kadar air stabil ($\pm 67\%$), warna berubah dari jingga kecoklatan ke merah gelap, dan viskositas turun dari 3.220,09 menjadi 1.792,00 dyne·s/cm². Fermentasi optimal *masin* tercapai pada hari ke-12 dengan indikator: pH 5,16, keasaman 17,52 mg/g, TVB 150 mgN/100g, kecerahan (L*) 46,25, °Hue 45°, dan viskositas 2.111,66 dyne·s/cm².

Kata kunci: Fermentasi tradisional, *masin*, sifat fisik, sifat mikrobiologi, sifat kimia, sifat sensoris.



ABSTRAK

Masin is a traditional fermented shrimp paste from Sumbawa Island made from rebon shrimp, salt (15%), sugar (8%), red cayenne pepper (50%), and tamarind (5%) through anaerobic fermentation for 7-14 days. This study analyzed changes in sensory, microbiological, chemical, and physical characteristics over 18 days of fermentation to determine the optimal duration. Observations were made every 2 days, including evaluation of sensory properties, microbiological properties covering total bacteria, lactic acid bacteria, chemical properties covering pH, total acidity, TVBN, soluble nitrogen, protease activity, and physical properties covering moisture content, color, and viscosity. The results showed that the typical characteristics of masin began to form on the 8th day and were optimal on the 12th day, with a fermented shrimp-sour aroma profile, a dominant sour taste with a spicy aftertaste, and a semi-solid paste texture. During fermentation, lactic acid bacteria became active on the 4th day, pH decreased from 7.13 to 5.02, total acid increased from 3.29 to 23.14 mg/g, and TVBN increased from 26 to 155 mg N/100g. The water content was stable ($\pm 67\%$), the color changed from brownish orange to dark red, and the viscosity decreased from 3,220.09 to 1,792.00 dyne•s/cm². Optimal fermentation was achieved on day 12 with the following indicators: pH 5.16, acidity 17.52 mg/g, TVB 150 mgN/100g, brightness (L^) 46.25, °Hue 45°, and viscosity 2,111.66 dyne•s/cm².*

Keywords: *Traditional fermentation, masin, physical properties, microbiological properties, chemical properties, sensory properties.*