

Dewi Asmasari. NPM. 16.03.4.1.1.00072. Pengaruh Komposisi *Brine* dan Air Laut pada Produksi Garam Rendah Natrium. Dr.H.Agus Romadhon,SP., M.Si.

ABSTRAK

Garam *Low sodium* merupakan garam campuran yang mengandung senyawa natrium klorida dengan campuran senyawa lain seperti magnesium dan kalium. Analisis komposisi brine untuk produksi garam *low sodium* bertujuan untuk mengetahui kadar NaCl pada garam *low sodium*. Tahapan penelitian ini meliputi: pengambilan bahan baku air laut dan air tua (*brine*), percobaan proses produksi garam low sodium dengan empat perlakuan yang berbeda P1A1(*Brine* 100%:air laut 0%); P2A2 (*brine* 75%:air laut 25%); P3A3 (*brine* 50%:air laut 50%); P4A4 (*brine* 0%:air laut 100%), ditambah garam kontrol (tanpa dihilangkan bunga garamnya). pengukuran parameter (kepekatan air laut, intensitas cahaya, kelembapan udara, suhu air, dan suhu lingkungan), selanjutnya analisis laboratorium (kadar air, kadar NaCl, dan kadar natrium). Hasil pada penelitian ini didapatkan hasil NaCl yang berbeda secara signifikan pada setiap perlakuan. Pada garam kontrol diperoleh kadar NaCl sebesar 90,08%, pada perlakuan P1A1 kadar NaCl sebesar 53,52%, pada perlakuan P2A2 kadar NaCl sebesar 59,47%, pada perlakuan P3A3 kadar NaCl sebesar 68,39%, dan pada perlakuan P4A4 didapatkan kadar NaCl sebesar 71,07%. Komposisi *brine* dan air laut berpengaruh terhadap kadar NaCl pada garam *low sodium* yang dihasilkan. Perlakuan P1A1 merupakan komposisi terbaik dalam proses produksi garam *low sodium*.

Kata Kunci: *Garam, Brine, Garam Low Sodium.*

Dewi Asmasari. NPM. 16.03.4.1.1.00072. Effect of Brine and Seawater Composition on Low Sodium Salt Production. Under the guidance of Dr. H. Agus Romadhon, Sp.,M.Si.

ABSTRAK

Low sodium salt is a mixed salt that contains sodium chloride compounds with a mixture of other compounds such as magnesium and potassium. The analysis of brine composition for the production of low sodium salt aims to determine the level of NaCl in low sodium salt. The stages of this research include: taking raw materials of seawater and old water (brine), trial of low sodium salt production process with four different treatments P1A1 (Brine 100%: seawater 0%); P2A2 (75% brine: 25% seawater); P3A3 (50% brine: 50% seawater); P4A4 (0% brine: 100% seawater), plus control salt (without defoliating). measurement of parameters (seawater density, light intensity, humidity, water temperature, and ambient temperature), then laboratory analysis (water content, NaCl content, and sodium content). The results in this study obtained significantly different NaCl results in each treatment. In the control salt, the NaCl content was 90.08%, in the P1A1 treatment the NaCl content was 53.52%, in the P2A2 treatment the NaCl content was 59.47%, in the P3A3 treatment the NaCl content was 68.39%, and in the P4A4 treatment it was obtained NaCl content of 71.07%. The composition of brine and seawater affects the NaCl content of the low sodium salt produced. P1A1 treatment is the best composition in the low sodium salt production process.

Keywords: Salt, Brine, Low Sodium Salt.