

ABSTRAK

Tanaman alor (*Suaeda maritima*) merupakan tanaman halofit yang mampu tumbuh secara alami di wilayah pesisir dan lahan basah asin, khususnya pada ekosistem mangrove, serta telah lama dikonsumsi masyarakat sebagai sayuran. Tanaman ini memiliki potensi dalam mendukung ketahanan pangan lokal, sehingga diperlukan kajian lebih lanjut mengenai kandungan senyawa bioaktif dan nilai gizinya. Penelitian ini bertujuan untuk menganalisis kandungan kadar air, kadar serat, fitokimia, aktivitas antioksidan, β -karoten, vitamin C, serta mineral (kalium, kalsium dan fosfor) pada alor segar dan alor kering. Penelitian dilakukan pada November 2023 sampai September 2025. Sampel alor diambil dari di Desa Tajungan, Kecamatan Kamal, Kabupaten Bangkalan. Analisis sampel dilakukan di Laboratorium Jurusan Kelautan dan Perikanan, Fakultas Pertanian, Universitas Trunojoyo Madura dan Laboratorium Terpadu Universitas Brawijaya. Perlakuan pengeringan dilakukan pada suhu 50°C selama 24 jam. Hasil penelitian menunjukkan bahwa kadar air alor segar berkisar antara 88,42%–88,95%, sedangkan pada alor kering berkisar antara 10,35%–15,70%. Kadar serat alor segar berada pada kisaran 3,69%–4,53%, dan meningkat pada alor kering menjadi 12,35%–13,75%. Analisis fitokimia menunjukkan bahwa alor segar mengandung senyawa alkaloid, flavonoid, saponin, dan steroid, sedangkan alor kering mengandung alkaloid, flavonoid, tanin, dan saponin. Aktivitas antioksidan alor segar memiliki nilai IC_{50} sebesar 635,50 mg/l, sedangkan alor kering menunjukkan aktivitas antioksidan yang lebih kuat dengan nilai IC_{50} sebesar 176,96 mg/l. Kandungan β -karoten pada alor segar rata-rata sebesar 93 μ g/g sampel dan meningkat pada alor kering menjadi 174,8 μ g/g sampel. Kandungan vitamin C alor segar memiliki rata-rata sebesar 0,97%, sedangkan alor kering sebesar 2,94%. Kandungan mineral menunjukkan bahwa kadar kalium pada alor segar sebesar 5,23% dan meningkat menjadi 16,321% pada alor kering. Kadar kalsium alor segar sebesar 0,060% dan alor kering sebesar 0,629%, sedangkan kadar fosfor alor segar sebesar 0,002% dan meningkat menjadi 0,151% pada alor kering.

Kata kunci: *Suaeda maritima*, senyawa bioaktif, ketahanan pangan

ABSTRACT

Alor (*Suaeda maritima*) is a halophytic plant that naturally grows in coastal areas and saline wetlands, particularly in mangrove ecosystems, and is commonly consumed by local communities as a vegetable. This plant has considerable potential to support local food security; therefore, further research on its bioactive compounds and nutritional value is required. This study aimed to analyze the proximate composition, phytochemical content, antioxidant activity, β -carotene, vitamin C, and mineral content of fresh and dried *S. maritima*. The study was conducted from November 2023 to September 2025. Samples were collected from Tajungan Village, Kamal District, Bangkalan Regency. Laboratory analyses were carried out at the Laboratory of the Department of Marine and Fisheries, Faculty of Agriculture, Trunojoyo University Madura, and the Integrated Laboratory of Universitas Brawijaya. Drying treatment was performed at 50°C for 24 hours. The results showed that the moisture content of fresh *S. maritima* ranged from 88.42% to 88.95%, while dried samples ranged from 10.35% to 15.70%. Crude fiber content in fresh samples ranged from 3.69% to 4.53% and increased to 12.35%–13.75% after drying. Phytochemical analysis revealed that fresh *S. maritima* contained alkaloids, flavonoids, saponins, and steroids, whereas dried samples contained alkaloids, flavonoids, tannins, and saponins. The antioxidant activity of fresh samples showed an IC_{50} value of 635.50 mg/l, while dried samples exhibited stronger antioxidant activity with an IC_{50} value of 176.96 mg/l. The average β -carotene content of fresh *S. maritima* was 93 μ g/g, increasing to 174.8 μ g/g in dried samples. Vitamin C content averaged 0.97% in fresh samples and increased to 2.94% in dried samples. Mineral analysis showed that potassium content in fresh samples was 5.23% and increased to 16.321% in dried samples. Calcium content increased from 0.060% in fresh samples to 0.629% in dried samples, while phosphorus content increased from 0.002% to 0.151%, respectively.

Keywords: *Suaeda maritima*, bioactive compounds, food security