

ABSTRAK

Undur-undur laut (*Emerita emeritus*) merupakan salah satu biota pesisir yang berpotensi menjadi sumber pangan alternatif, namun informasi mengenai kandungan gizi dan aktivitas antioksidan masih sangat terbatas. Penelitian ini bertujuan untuk menganalisis perbedaan kandungan proksimat pada daging undur-undur laut yaitu bertelur dan tidak bertelur dengan pengolahan segar dan goreng, serta menganalisis total astaxanthin pada karapas dengan lama waktu ekstraksi berbeda. Sampel dikumpulkan dari Pantai Setrojenar, Kebumen. Sampel dianalisis menggunakan metode proksimat dan pengukuran astaxanthin dengan spektrofotometer pada panjang gelombang 486 nm. Data dianalisa dengan menggunakan Rancangan Acak Lengkap (RAL). Hasil penelitian menunjukkan bahwa seluruh parameter proksimat berbeda nyata antar perlakuan ($p < 0,05$), kecuali pada protein. Kadar air tertinggi terdapat pada sampel segar tidak bertelur (74,18%), sedangkan kadar air terendah pada sampel goreng bertelur (58,56%). Kadar abu tertinggi ditemukan pada perlakuan goreng tidak bertelur (3,62%), sedangkan kadar abu terendah pada sampel segar tidak bertelur (1,90%). Kadar lemak tertinggi terdapat pada goreng bertelur (4,47%), sedangkan kadar lemak terendah pada segar tidak bertelur (2,15%). Nilai serat kasar tertinggi pada perlakuan goreng bertelur (0,85%), sementara kadar serat kasar terendah terdapat pada segar tidak bertelur (0,41%). Kadar protein tertinggi terdapat pada goreng bertelur (17,84%), sedangkan kadar protein terendah terdapat pada segar bertelur (16,37%). Nilai karbohidrat tertinggi pada perlakuan goreng bertelur (15,93%), sementara kadar karbohidrat terendah terdapat pada segar tidak bertelur (4,59%). Kandungan total astaxanthin menunjukkan peningkatan seiring lamanya waktu ekstraksi yaitu 3,41 µg/g (1 jam), 3,87 µg/g (2 jam), dan 4,74 µg/g (3 jam).

Kata kunci: *Emerita emeritus*, proksimat, astaxanthin

ABSTRACT

Emerita emeritus is one of the coastal biota that has the potential to be an alternative food source, but information on nutritional content and antioxidant activity is still very limited. This study aims to analyze the difference in proximate content in seaweed meat, namely egg and non-egg with fresh and fried processing, and to analyze the total astaxanthin in carapace with different extraction times. Samples were collected from Setrojenar Beach, Kebumen. Samples were analyzed using proximate methods and astaxanthin measurements with spectrophotometers at 486 nm wavelengths. Data were analyzed using a Complete Random Design (RAL). The results showed that all proximate parameters differed significantly between treatments ($p < 0.05$), except for proteins. The highest moisture content was found in fresh samples without eggs (74.18%), while the lowest moisture content was in fried samples with eggs (58.56%). The highest ash content was found in the non-egg-laying frying treatment (3.62%), while the lowest ash content was found in the fresh non-egg-laying sample (1.90%). The highest fat content was found in fried eggs (4.47%), while the lowest fat content was found in fresh without eggs (2.15%). The highest crude fiber value was found in egg fry (0.85%), while the lowest crude fiber content was found in fresh, non-egg (0.41%). The highest protein content was found in fried eggs (17.84%), while the lowest protein content was found in fresh eggs (16.37%). The highest carbohydrate value was found in the egg-fried treatment (15.93%), while the lowest carbohydrate content was found in the fresh, egg-free (4.59%). The total astaxanthin content showed an increase over the extraction time, namely 3.41 $\mu\text{g/g}$ (1 hour), 3.87 $\mu\text{g/g}$ (2 hours), and 4.74 $\mu\text{g/g}$ (3 hours).

Keywords: *Emerita emeritus*, proxy, astaxanthin