

ABSTRAK

Siput laut *Paramoionchis tumidus* dan *Telescopium telescopium* merupakan gastropoda yang sering dimanfaatkan oleh masyarakat pesisir dijadikan sebagai bahan pangan dan obat. Karakteristik kimia dan aktivitas antioksidannya menjadi penting dilakukan untuk mendukung pengembangan pangan fungsional berbasis sumber hayati lokal. Tahapan penelitian dilakukan dimulai dari penentuan lokasi, pengambilan sampel, identifikasi sampel, preparasi sampel, dan ekstraksi. Analisis yang dilakukan meliputi morfologi, morfometrik, rendemen, kadar air, kadar abu, kadar abu tak larut, kadar lemak dan kadar protein, fitokimia, aktivitas antioksidan, IC_{50} dan analisis data menggunakan uji T dan data disajikan dalam bentuk grafik, tabel dan gambar. Hasil analisis proksimat menunjukkan perbedaan komposisi antara kedua spesies. *Paramoionchis tumidus* memiliki kadar air $69,570 \pm 2,671\%$, abu $4,743 \pm 0,163\%$, abu tak larut $3,835 \pm 0,899\%$, lemak $38,163 \pm 5,973\%$, protein $9,817 \pm 2,140$. Siput laut *Telescopium telescopium* memiliki kadar air $58,689 \pm 2,925\%$, abu $9,161 \pm 0,896\%$, abu tak larut $3,267 \pm 2,292\%$, lemak $24,525 \pm 5,299\%$, protein $10,968 \pm 1,536\%$. Perlakuan perbedaan jenis siput laut *Paramoionchis tumidus* dan *Telescopium telescopium* pada kandungan proksimat yang berbeda nyata yaitu pada kadar protein dan kadar abu tak larut. Daging dari siput laut *Paramoionchis tumidus* dan *Telescopium telescopium* mengandung senyawa bioaktif berupa flavonoid, alkaloid, dan steroid, dengan aktivitas antioksidan nilai IC_{50} sebesar 38,167 ppm *Telescopium telescopium* dan *Paramoionchis tumidus* menunjukkan IC_{50} 33,157 ppm pada ekstrak metanol. Siput laut *Paramoionchis tumidus* dan *Telescopium telescopium* dari perairan Pamekasan berpotensi dikembangkan sebagai bahan pangan fungsional dan sumber antioksidan alami.

Kata Kunci: Antioksidan, fitokimia, nutrisi, *Paramoionchis tumidus*, *Telescopium telescopium*,

ABSTRACT

The sea slugs *Paramoionchis tumidus* and *Telescopium telescopium* are gastropods frequently used by coastal communities as food and medicine. Their chemical characteristics and antioxidant activity are important to support the development of functional foods based on local biological resources. The research stages were carried out starting from location determination, sampling, sample identification, sample preparation, and extraction. The analysis included morphology, morphometrics, yield, water content, ash content, insoluble ash content, fat and protein content, phytochemicals, antioxidant activity, IC₅₀ and data analysis using the T test and the data were presented in the form of graphs, tables and figures. The results of the proximate analysis showed differences in composition between the two species. *Paramoionchis tumidus* has a water content of $69.570 \pm 2.671\%$, ash $4.743 \pm 0.163\%$, insoluble ash $3.835 \pm 0.899\%$, fat $38.163 \pm 5.973\%$, protein 9.817 ± 2.140 . The sea slugs *Telescopium telescopium* has a water content of $58.689 \pm 2.925\%$, ash $9.161 \pm 0.896\%$, insoluble ash $3.267 \pm 2.292\%$, fat $24.525 \pm 5.299\%$, protein $10.968 \pm 1.536\%$. The treatment of differences in the types of sea snails *Paramoionchis tumidus* and *Telescopium telescopium* on the proximate content that is significantly different is in the protein content and insoluble ash content. The meat of the sea slugs *Paramoionchis tumidus* and *Telescopium telescopium* contains bioactive compounds in the form of flavonoids, alkaloids, and steroids, with antioxidant activity IC₅₀ value of 38.167 ppm *Telescopium telescopium* and *Paramoionchis tumidus* showed IC₅₀ 33.157 ppm in methanol extract. Sea slugs *Paramoionchis tumidus* and *Telescopium telescopium* from Pamekasan waters have the potential to be developed as functional food ingredients and sources of natural antioxidants.

Keywords: Antioxidants, phytochemicals, nutrition, *Paramoionchis tumidus*, *Telescopium telescopium*.