

**KAJIAN METODE EKSTRAKSI DAN ANALISIS
SENYAWA ASTAXANTHIN YANG TERKANDUNG
DALAM UDANG**

NASKAH TUGAS AKHIR

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A183012**



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Kutipan atau saduran baik sebagian ataupun seluruh naskah, harus menyebut nama pengarang dan sumber aslinya, yaitu Sekolah Tinggi Farmasi Indonesia.

*Naskah tugas akhir ini ku persembahkan untuk mama,
papa dan adikku yang selalu mendukung dan mendoakanku
setiap hari, dan juga untuk keluarga serta sahabat-
sahabatku yang telah menemani dan menghiburku.*

ABSTRAK

Astaxanthin merupakan senyawa yang memiliki beragam aktivitas bermanfaat yang terdapat dalam organisme laut, contohnya udang. Bagi beberapa negara, udang merupakan salah satu komoditas andalan dalam sektor ekspor, dimana daging udang diolah untuk kegiatan ekspor dan bagian kepala, cangkang, karapas, dan ekornya tidak digunakan atau bahkan menjadi limbah. Beberapa penelitian yang telah dilakukan menunjukkan bahwa dalam udang terkandung senyawa astaxanthin yang memiliki potensi untuk dikembangkan menjadi suatu produk atau olahan yang dapat memiliki nilai tambah. Di dalam kajian ini dihimpun data ekstraksi dan analisis senyawa astaxanthin dalam udang, sehingga dapat menjadi referensi dalam menentukan metode ekstraksi dan analisis senyawa astaxanthin. Beberapa metode ekstraksi yang digunakan untuk mengekstraksi astaxanthin diantaranya yaitu maserasi, soxhlet, *ultrasound-assisted extraction*, *supercritical fluid extraction*, *high-pressure processing* dan menggunakan minyak nabati. Kandungan astaxanthin yang terdapat dalam setiap spesies udang bervariasi, hal tersebut dapat dipengaruhi oleh faktor internal dan eksternal. Metode analisis yang umum digunakan yaitu menggunakan KLT, Spektrofotometri UV/Vis, KCKT dan LC-MS.

Kata kunci: Astaxanthin, Udang, Ekstraksi, Analisis

ABSTRACT

Astaxanthin is a compound that has various beneficial activities found in marine organisms, for example shrimp. For several countries, shrimp is one of the mainstay commodities in the export sector, where shrimp meat is processed for export activities and the head, shell, carapace and tail are not used or even become waste. Several studies have shown that shrimp contains astaxanthin compounds which have the potential to be developed into a product or processed that can have added value. In this study, data on the extraction and analysis of astaxanthin compounds in shrimp are collected, so that they can become a reference in determining the method of extraction and analysis of astaxanthin compounds. Several extraction methods used to extract astaxanthin include maceration, soxhlet, ultrasound-assisted extraction, supercritical fluid extraction, high-pressure processing and using vegetable oils. The astaxanthin content contained in each shrimp species varies, this can be influenced by internal and external factors. The analytical methods commonly used are TLC, UV/Vis spectrophotometry, HPLC and LC-MS.

Keywords: *Astaxanthin, Shrimp, Extraction, Analysis*

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