

**KARAKTERISTIK FISIKO-KIMIA KITOSAN DAN OLIGO KITOSAN  
KULIT UDANG (*Litopenaeus vannamei*)**

**PHYSICOCHEMICAL CHARACTERISTICS OF CHITOSAN AND  
OLIGO CHITOSAN SKIN SHRIMP**

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**ABSTRAK**

Penelitian ini bertujuan untuk membuat kitosan dan oligo-kitosan serta mempelajari karakteristiknya. Parameter yang diuji pada penelitian ini adalah kadar air, kadar abu, kadar protein dan kadar lemak. karakteristik dari proses depolimerasi kitosan menjadi oligo-kitosan berpengaruh nyata menurunkan kadar protein, abu, lemak, derajat putih dan tetapi terdapat kenaikan kadar air, karena disebabkan proses pengeringan yang tidak optimal. Kadar air, kadar protein, abu, derajat putih dan viskositas kitosan dan oligo-kitosan masih berada di bawah standar mutu disebabkan oleh kurang optimalnya proses deproteinisasi, demineralisasi, deasetilasi dan depolimerisasi. Tingginya kandungan abu (mineral) menurunkan kelarutan dari kitosan dan oligo-kitosan sehingga nilai viskositas menjadi rendah.

Key words : *Kitosan, oligo-kitosan, depolimerisasi, kulit udang*

**ABSTRACT**

This study aims to make chitosan and oligo-chitosan and studied its characteristics. The parameters tested in this study were moisture, ash, protein and fat content. Characteristics of chitosan depolimerasi process into oligo-chitosan were significantly lower levels of protein, ash, fat, white and degrees but there was an increase of water content, because due to the drying process was not optimal. Moisture, protein, ash content, white degree and viscosity of chitosan and oligo-chitosan were still below the quality standard due to less optimal deproteinization, demineralization, deacetylation and depolymerization. The higher of ash was decrease solubility and viscosity of chitosan and oligo-chitosan.

Key words: *Chitosan, oligo-chitosan, depolymerization, shrimp shell*