VALIDASI METODE DAN PENETAPAN KADAR RESIDU FURAZOLIDON DALAM UDANG SECARA KROMATOGRAFI CAIR KINERJA TINGGI

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Abstract

Furazolidon is one of antibacterial nitrofuran derivate used in prawn cultivation. Existence of residue furazolidon in prawn can cause the carcinogenic effect, toxic effect, allergic reaction, and also improve the resistancy when it is consumed in along term. In this research were done validating method and determining of concentration of furazolidon residue in a various type of prawn used the High Performance Liquid Chromatography (HPLC) with the column of Phenomenex type Hypersil 5 μ m C18 (ODS) 25 cm, Φ 4.60 mm, loop 500 μl, detector UV λ at 366 nm, asetonitril : acetic acid 1% = 20-100 : 80-0 as mobile phase during 8 minutes, flow-rate 1.0 mL/minute, temperature 30.3 °C, pressured 3.6 – 9.8 psi. The results of the validation method analyze were met the validation criterion i.e., selectivity, linearity, accuracy, precision, LOD and LOQ. The residues concentration of furazolidon in prawn samples of *Penaeus vanamei* from Market A were 8.56x10-3 mg/100 g, while the residues of furazolidon in samples of prawn of *Penaeus vanamei* from Market of B, *Metapenaeus monoceros* from Market C, and *Penaeus monodon* from Market D were not found.

Keywords : prawn, furazolidon, validation method, determining of residue, HPLC