

INTISARI

ISOLASI DAN KARAKTERISASI BAKTERI *VIBRIO* PADA UDANG VANAME (*Litopenaeus vannamei* Boone, 1931) DI KABUPATEN BANTUL

Bakteri *Vibrio* spp. merupakan bakteri alami yang berada di lingkungan perairan pantai dan tambak udang yang bersifat patogen oportunistik. Penelitian ini bertujuan untuk mengisolasi dan mengidentifikasi bakteri *Vibrio* spp. dari udang vaname (*Litopenaeus vannamei*) dan air tambak di Pesisir Bantul. Isolasi bakteri dilakukan dengan menggunakan medium *Thiosulfate Citrate Bile Salt Sucrose* (TCBS) agar. Sedangkan identifikasi bakteri dilakukan dengan pengamatan morfologi koloni, morfologi sel dan uji biokimia serta analisis molekuler yang dilakukan dengan RISA (*Ribosomal Intergenic Spacer Analysis*) dan analisis gen 16S rRNA. Hasil penelitian diperoleh sebanyak 40 isolat bakteri dari udang vaname dan air tambak dari Pantai Baru dan Pantai Depok, Pesisir Bantul. Berdasarkan analisis RISA diperoleh 4 kluster isolat dan masing-masing kluster, dipilih satu isolat untuk diidentifikasi baik secara penotipik maupun analisis gen 16S rRNA. Hasil identifikasi menunjukkan bahwa isolat 2.1.2 diduga merupakan bakteri *V. parahaemolyticus*, isolat 5.2.2 diduga merupakan *V. alginolyticus*, isolat A.1.2 diduga merupakan *V. diabolicus* dan isolat A.5.1 diduga merupakan *Paenibacillus naphthalenovorans*.

Kata kunci: *Vibrio*, vaname, RISA, gen 16S rRNA.

ABSTRACT

ISOLATION AND CHARACTERIZATION VIBRIO SPECIES FROM WHITE SHRIMP (*Litopenaeus vannamei* Boone, 1931) IN BANTUL REGENCY

Vibrio spp. is a common bacteria in coastal waters and shrimp ponds that can be opportunistic pathogen. This study aims to isolate and identify the *Vibrio* spp. from white shrimp (*Litopenaeus vannamei*) and pond water in the coast of Bantul regency. Bacterial isolation was carried out using *Thiosulfate Citrate Bile Salt Sucrose* (TCBS) agar medium. Meanwhile, the identification of bacteria was based on colony morphology, cell morphology and biochemical tests. Molecular analysis was carried out by RISA (*Ribosomal Intergenic Spacer Analysis*) and 16S rRNA gene analysis. The research results obtained as many as 40 bacterial isolates from white shrimp and pond water from Baru coast and Depok coast, Bantul regency. Based on the RISA analysis, 4 isolate clusters were obtained and one isolate was selected for each cluster to be identified both penotypically and analysis of the 16S rRNA gene. The identification results showed that the isolate 2.1.2 was suspected to be *V. parahaemolyticus*, isolate 5.2.2 was suspected to be *V. alginolyticus*, isolate A.1.2 was suspected to be *V. diabolicus* and isolate A.5.1 was suspected to be *Paenibacillus naphthalenovorans*.

Keywords: *Vibrio*, white shrimp, RISA, 16S rRNA gene