



The IJA appears now exclusively as a peer-reviewed on-line Open Access journal at <http://www.siamb.org.il>



Identification and Genotyping of *Vibrio ordalii*: A Comparison of Different Methods

T. Akayli*, G. Timur¹, G. Albayrak², B. Aydemir³

¹ Department of Fish Diseases, Faculty of Fisheries, Istanbul University, Istanbul, Turkey

² Department of Molecular Biology and Genetics, Faculty of Science, Istanbul, Turkey

³ Department of Biophysics, Cerrahpasa Faculty of Medicine, Istanbul, Turkey

(Received 27.2.09, Accepted 26.4.09)

Key words: gilthead sea bream, *Vibrio ordalii*, serology, SDS-PAGE, RAPD

Abstract

The phenotypical, serological, and molecular identification of *Vibrio ordalii* isolates recovered from diseased gilthead sea bream (*Sparus aurata*) in the Mediterranean area were investigated. Most isolates had similar phenotypic characteristics, but some showed small differentiation in biochemical analysis. Both slide agglutination and enzyme linked immunosorbent assay (ELISA) showed that the isolates were antigenically homogeneous and no different serotypes were detected. SDS-PAGE analysis showed that the structure of lipopolysaccharide (LPS) was heterogeneous, that outer membrane proteins (OMP) display homogeneous grouping protein banding patterns, and that the LPS profile of the isolates had different banding patterns. However, random amplified polymorphic DNA (RAPD) analysis revealed genetic variation (up to 90.4%) among isolates of the same species.

* Corresponding author. E-mail address: takayli@yahoo.com