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Phylogenetic Analysis of the Myxosporea Detected from Emaciated Olive Flounder (Paralichthys olivaceus) in Korea

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Abstract : The Myxosporea to cause emaciation disease in the olive flounder (Paralichthys olivaceus) is a pathogen to cause severe losses in the aquafarming industry in Korea. The 3,362 bp of DNA nucleotide sequences of four myxosporean strains (EM-HM-12, EM-MA-13, EM-JJ-14, and EM-MS-15) detected by PCR method from olive flounder suffering from emaciation disease in Korea during 2012-2015 were sequenced and deposited in GenBank database (GenBank accession numbers: KU377574, KT321705, KU377575 and KU377573, respectively). The homologies of DNA nucleotide sequences of four strains were compared to each other and were more than 99.7% homologous between the four strains. All of the strains were identified as Parvicapsula petunia based on the results of phylogenetic analysis. The results in this study would be useful for the research of emaciation disease in olive flounder of Korea.

Keywords : disease, emaciation, olive flounder, phylogenetic analysis
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