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Reclassification of Alteromonas fuliginea (Romanenko et al. 1995) as Pseudoalteromonas fuliginea comb. nov. and emended description

A new aerobic marine bacterium, strain S3431, was isolated from swab samples of an unidentified polychaete near Canal Concepción, Chile. This strain was thought to represent a new taxon within the Pseudoalteromonas genus. Although DNA-DNA reassociation values showed less than 70% genomic DNA relatedness to established Pseudoalteromonas type strains, it had 78% DNA-DNA homology with Alteromonas fuliginea DSM 15748 (= KMM 216) (Romanenko et al., 1994). A. fuliginea has later been considered a heterotypic synonym of Pseudoalteromonas citrea (Ivanova et al., 1998). Therefore we here studied the relatedness between strains S3431, A. fuliginea DSM 15748 and the type strain P. citrea LMG 12323T. We found that physiological traits and genomic information are shared at a high level by strains S3431 and DSM 15748, but not between these and P. citrea LMG 12323T. We found only approximately 20% DNA-DNA homology between the type strain of P. citrea LMG 12323T and strains S3431 and DSM 15748. Based on the available phylogenetic and phenotypic data, reclassification of Alteromonas fuliginea DSM15748 (Romanenko et al., 1994) → Pseudoalteromonas citrea (Ivanova et al., 1998) as Pseudoalteromonas fuliginea is proposed, and S3431 should be assigned to this new species. The name Pseudoalteromonas fuliginea is proposed and the type strain is KMM 216 T = DSM15748 T = CIP105339 T.

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