

***Aeromonas salmonicida* subsp. *pectinolytica* subsp. nov., a new pectinase-positive subspecies isolated from a heavily polluted river.**

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*Aeromonas* strains which phenotypically and genetically belong to the *Aeromonas salmonicida* species but that according to their phenotypic properties constitute a new subspecies have been isolated from the water of a heavily polluted river, the Matanza river, situated near the central district of Buenos Aires city. These strains were ascribed to the *A. salmonicida* species by using 65 biochemical tests and by DNA-DNA hybridization. They produce acid from -sorbitol, an unusual biochemical property found in a few members of the *A. salmonicida* species. They also utilize urocanic acid and do not ferment L-rhamnose or utilize LD-lactate, and are elastase- and gluconate-negative. The DNA relatedness was over 70%, the current limit accepted for the phylogenetic definition of a species, to the described *A. salmonicida* subspecies and nearly 100% within the new group of *Aeromonas* strains. Phenotypic differentiation from other *A. salmonicida* subspecies was readily achieved using the following characteristics: growth at 37 degrees C, melanin production, indole and Voges-Proskauer assays, growth on KCN broth, mannitol and sucrose fermentation and gas from glucose. A remarkable property of the strains of the new group was their ability to degrade polypectate, an unusual feature among *Aeromonas* species in general. The complete 16S rRNA gene of one strain of the new group was sequenced. Comparison with rDNA sequences of *Aeromonas* members available in databases revealed a close relationship between this strain and strains belonging to *A. salmonicida* subsp. *salmonicida*, *masoucida* and *achromogenes*, in agreement with the biochemical data. Since the new *A. salmonicida* strains constitute a tight genomic group that can be identified by phenotypic properties it was concluded that they represent a new subspecies for which the name *Aeromonas salmonicida* subsp. *pectinolytica* is proposed. The type strain of *A. salmonicida* subsp. *pectinolytica* is 34meIT (= DSM 12609T).