

Tenderia electrophaga sp. nov. and Tenderia gen. nov.

Submitted by Chuvochina, Maria

Table 1: Complete list of names proposed in the current register list.

| Proposed Taxon | Etymology | Description | Parent Taxon | Type | Registry URL |
|---|--|--|---------------------|--|---|
| Genus <i>Tenderia</i> | [Ten.de'ri.a] N.L. fem. n. <i>Tenderia</i> , named after Leonard M. Tender, a pioneering researcher in the development of microbial electrochemical technologies | The description is the same as given to the type species by Eddie et al (2016). | <i>Tenderiaceae</i> | <i>Tenderia electrophaga</i> ^{Ts} | seqco.de/i:23551 |
| Species <i>Tenderia electrophaga</i> ^{Ts} | [e.lec.tro.pha'ga] Gr. neut. n. <i>electron</i> , amber; Gr. verb <i>phago</i> , to eat; N.L. fem. adj. <i>electrophaga</i> , eater of electricity | The description is the same as given by Eddie et al., 2016: Slender rod-shaped bacteria, approximately 1.8 × 0.6 μm, Gram-negative, forms clumps on graphite or gold cathodes poised at 310 mV vs SHE. Autotrophic via the Calvin-Benson-Bassham (CBB) cycle, utilizing extracellular electron donors to generate ATP and reducing equivalents via reverse electron transport. Aerobic or microaerophilic, non-photosynthetic with no evidence of ability to grow chemolithoautotrophically with ammonium or reduced sulfur species as electron donors. Mesophilic growth in artificial seawater. The basis of recognition as a novel candidate genus and species within the <i>Gammaproteobacteria</i> is a phylogenetic position that is not clearly within any known family. The closest species with validly published names are within the orders <i>Chromatiales</i> and <i>Thiotrichales</i> . Cells are recognized with the 16S rRNA specific oligonucleotide probe Tel428 (5'-CGTCATTATCCTCCCTGCTGAA-3'). The DNA G+C content is 59.2 mol%. It grows as a member of a bacterial community enriched from marine sediments and seawater collected in near shore water at the Rutgers University Marine Field Station (Tuckerton, NJ, USA). | <i>Tenderia</i> | INSDC Nucleotide: CP013099 ^{Ts} | seqco.de/i:368 |