

Electronema halotolerans sp. nov. and Electrothrix laxa sp. nov.

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

| Proposed Taxon | Etymology | Description | Parent Taxon | Type | Registry URL |
|--|---|--|---------------------|--|---|
| Species <i>Electrothrix laxa</i> | [la'xa] L. fem. adj. <i>laxa</i> , large, referring to its relatively large cell diameter compared to other cable bacteria species | Filamentous bacteria of centimeter length that inhabit the surface of marine and coastal sediment and conduct electrons from sulfide-oxidizing cells to oxygen- or nitrate-reducing cells. Gliding motility. Gram-negative, with distinct ridges running longitudinally along the filament. Cell diameters 1-6 µm. Can assimilate acetate and propionate; CO ₂ fixation via the Wood-Ljungdahl pathway. Contains c-type cytochromes and type IV pili (PilA). Polyphosphate and polyglucose storage. Distinguishable by morphology and genome. | <i>Electrothrix</i> | NCBI Assembly: GCA_942492895.1 ^{Ts} | seqco.de/i:23723 |
| Species <i>Electronema halotolerans</i> | [ha.lo.to'le.rans] Gr. masc. n. <i>hals</i> , salt, brine; L. pres. part. <i>tolerans</i> , tolerating; N.L. part. adj. <i>halotolerans</i> , salt tolerant. Due to its presence in, and genomic adaptations to, brackish/saltwater. | Filamentous bacteria of centimeter length that inhabit the surface of brackish/intertidal sediment and conduct electrons from sulfide-oxidizing cells to oxygen-reducing cells. Gram-negative, width of individual cells is 1-2 µm. Can assimilate acetate but not propionate; CO ₂ fixation via the Wood-Ljungdahl pathway. Contains c-type cytochromes, type IV pili (PilA) and Na ⁺ antiporters. Polyphosphate and polyglucose storage. Distinguishable by morphology and genome. | <i>Electronema</i> | NCBI Assembly: GCA_942493095.1 ^{Ts} | seqco.de/i:23722 |