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Diagnosis

Lenisia gen. nov.
Small anaerobic, slightly elongated, prolate-shaped marine amoeboflagellate, with two flagella, one apical, one directed posteriorly in adherent cells; the cells swim but preferentially glide along substrates if present, typically forming filose pseudopodia. Swimming cells, with free and long posterior flagellum, move in wobbling motion. Uninucleate, bacterivorous and requires hypoxic to anoxic conditions. Feeding only if adherent, using filamentous pseudopodia for acquisition of food particles. No cysts observed. Differentiated from *Pygsuia* by elongated, branching mitochondria-related organelles with tubular cristae.

Lenisia limosa gen. et sp. nov.
Lenisia limosa is a marine species. Adherent cells are 4–9 µm long and 3–4 µm wide. Swimming cells 4–6 µm long and 3–4 µm wide. Anterior flagella are 3–8 µm and posterior flagella usually 7–19 µm (2–3 times longer). Filamentous pseudopodia are around 4 µm long but can extent up to 12 µm. Pseudopodia originate from the ventral side of the cell, particularly when gliding.

Habitat: *Lenisia limosa* was isolated from marine intertidal flat sediment collected at the oxic-anoxic sediment interface. The sampling site is commonly known as “Janssand” and located in the German Wadden Sea south of the island Spiekeroog (53.73585° N 7.69905° E).

Etymology: The genus name *Lenisia* is derived from the Latin word lenis meaning “soft, smooth” and refers to the smooth, gliding locomotion of adherent cells. The species epithet, *limosa* is derived from Latin meaning “muddy” and alludes to the habitat of the organism, which is an intertidal flat.