Prosiliicoccus vernus gen. nov. sp. nov.

Submitted by Nguyen, Huong

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Genus *Prosiliicoccus*	[Pro.si.li.i.coc'cus] **L. v.** *prosilio*, to leap, jump, rush, spring forth; **Gr. masc. n.** *kokkus*, a grain; **N.L. masc. n.** *Prosiliicoccus*, a coccus that springs forth	Francis et al. (2019): Members of the genus *Ca.* Prosiliicoccus are predicted to be obligate aerobes, with currently no indication of fermentation or anaerobic respiration. They are heterotrophic, marine surface water dwelling bacteria, capable of using glycans and proteins as primary sources of organic matter. The three species have been detected in seawater sampled in the North Sea during spring phytoplankton blooms via metagenomic assembly and fluorescence in situ hybridisation. Cells are coccoid, and may be detected using FISH probe ULV995 [49]. High quality 16S rRNA gene sequences share approximately 94% identity with closely related genera *Ulvibacter* and *Gilvibacter*. G + C content for all three species is between 36% and 37%. The genus *Ca.* Prosiliicoccus belongs to the family *Flavobacteriaceae*, order *Flavobacteriales*, class *Flavobacteriia*, and phylum *Bacteroidetes*. Type species is *Candidatus* Prosiliicoccus vernus.	*Flavobacteriaceae*	*Prosiliicoccus vernus*^{Ts}	seqco.de/i:39015
Species *Prosiliicoccus vernus*^{Ts}	[ver'nus] **L. masc. adj.** *vernus*, pertaining to spring	Francis et al. (2019): Genome annotation allows prediction of consumption of protein, peptides, and amino acids, as well as putatively the polysaccharide laminarin. The spectrum of glycans putatively available to *Candidatus* Prosiliicoccus vernus is restricted, with laminarin appearing to be the most significant polysaccharide, while it may also consume chitin. Genome size is small relative to described *Flavobacteriia*, at an estimated 1.9 Mbp. Fluorescence microscopy reveals the cells to be coccoid, with diameter ranging between 0.5 and 1 µm. Bloom-forming behaviour is observed in *Candidatus* Prosiliicoccus vernus during and immediately after phytoplankton blooms in the North Sea. Type material is the metagenome assembled genome 'Prosiliicoccus_vernus_reassembled_20100413' submitted to ENA in project PRJEB28156, and also to the Digital	*Prosiliicoccus*	NCBI Assembly: GCA_964186675.1 ^{Ts}	seqco.de/i:318

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
		Protologue database under TaxoNumber CA00022.			