

Species *Cyanobacterium stanieri*[†]

Etymology

[sta'nie.ri] N.L. gen. n. *stanieri*, named to honour Roger Y. Stanier, who pioneered the study of cyanobacteria in axenic cultures

Nomenclatural type

Strain: PCC 7202=ATCC 29140

Description

[Oren et al., 2022](#):

Cells solitary or in pairs, rarely aggregated within very fine, formless mucilage, cylindrical or subcylindrical, blue-green, more or less with homogeneous content, cell width 1.7–3 µm, cell length 2.6–5.2 µm (up to 12 µm in cells with delayed divisions), dividing transversely, symmetrically or asymmetrically. The cells contain thylakoids arranged densely and more or less in parallel over the whole cell protoplast. Non-motile euryhaline photoautotroph, not capable of facultative photoheterotrophic growth, nitrogenase activity not observed even under anaerobic conditions, insensitive to cyanophage ASM-1, C-phycoerythrin and phycoerythrocyanin not synthesized.

The genome of strain PCC 7202 consists of a chromosome of 3163381 bp with G+C content of 38.7 mol%, encoding 2837 proteins, 43 tRNAs, with three of each 5S, 16S and 23S rRNA genes, and three non-coding RNAs.

Holotype: Exsiccatum no. A-127–1, derived from the axenic strain PCC 7202; stored in the herbarium CBFS at the University of South Bohemia

Reference strain: the genus is represented by the euryhaline strain *C. stanieri* PCC 7202 (also deposited as strain ATCC 29140), isolated in 1963 by M. Lefèvre from an alkaline pond in Chad (genome: GCA_000317655.1; [CP003940.1](#)); 16S rRNA gene sequence accession number: AF132782.

Classification

Bacteria » *Cyanobacteriota* » *Cyanophyceae* » *Chroococcales* » *Geminocystaceae* » *Cyanobacterium* » *Cyanobacterium stanieri*[†]

References

- Effective publication: Rippka, Cohen-Bazire, 1983 [1]
Emendavit: Oren et al., 2022 [2]
Assigned taxonomically: Rippka, Cohen-Bazire, 1983 [1]

Registry URL

<https://seqco.de/i:33326>

References

1. Rippka, Cohen-Bazire (1983). The cyanobacteriales: A legitimate order based on the type strain *Cyanobacterium stanieri*?. *Annales de l'Institut Pasteur / Microbiologie*. DOI:10.1016/s0769-2609(83)80094-5
2. Oren et al. (2022). Validation of the names *Cyanobacterium* and *Cyanobacterium stanieri*, and proposal of *Cyanobacteriota* phyl. nov. *International Journal of Systematic and Evolutionary Microbiology*. DOI:10.1099/ijsem.0.005528