Genus *Candidatus* Carsonella

Etymology

[Car.so.nel'la] **N.L. dim. fem. n.** *Carsonella*, named after Rachel Carson, an American naturalist and author of Silent Spring

Nomenclatural type

Species *Candidatus* Carsonella ruddii

Description

Candidatus Carsonella consists of pleomorphic bacteria found in the bacteriocytes of psyllids. They have a gram-negative type of cell wall and are found within membrane vesicles derived from host cells. Their 16S rRNA gene is directly upstream of the 23S rRNA gene. These genes have an unusually low G+C content in their DNA (35 to 38 mol%, 16S rDNA; 32 to 34 mol%, 23S rDNA). The 3′ end of their 16S rDNA lacks a sequence complementary to the mRNA ribosome binding site. Based on the sequence of the 16S and 23S rDNA, these organisms are members of the γ subdivision of the *Proteobacteria*. These organisms are transmitted vertically to host progeny, as is indicated by cospeciation between the host and the endosymbiont.
Candidatus Carsonella contains a single species, *Candidatus* Carsonella ruddii.

Classification

Unknown

Registry URL

https://seqco.de/i:559