

A Psl-like polysaccharide has a key role in the biofilm architecture of two plant-associated *Pseudomonas*

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The Psl polysaccharide has only been studied in *Pseudomonas aeruginosa*, and its role in bacteria that interact with plants is still unknown. On the one hand, *P. syringae* is a model of study of plant-pathogen interactions. On the other hand, *P. chlororaphis* is a biocontrol agent of plant-fungal diseases, as the white root rot caused by *Rosellinia necatrix*. *In silico* analysis have let us identify in both species a genomic region which is ortholog to the Psl-encoding region of *P. aeruginosa* PAO1. We constructed mutants of this region in both strains and analysed its phenotype in biofilm formation, both in static microwell plates and dynamic flow-cell chamber experiments. The results revealed a different and an important role of this polysaccharide in the biofilm architecture of both strains. Furthermore, in *P. syringae* this Psl-like polysaccharide has a very important role in swarming motility. All these striking phenotypes led us further study the implication of this polysaccharide in the lifestyles of both models of plant-bacteria interaction.