

Crystallization of Molybdate-Binding Protein of *Xanthomonas citri*

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We report the crystallization and preliminary data of the periplasmic molybdate-binding protein (ModA) of the plant pathogen *Xanthomonas citri*, responsible for the canker disease affecting citrus plants. Structures of molybdate transporters have been solved in other species including *Escherichia coli* and *Azotobacter vinelandii* [1, 2], however, no ortholog derived from plant-associated bacteria have been reported so far. The 26 kDa protein has been overproduced in *E. coli*, purified, and crystallized in complex with Na₂MoO₄. The crystallization of ModA using the sitting-drop vapour-diffusion method with PEG 4000 as precipitant is described. Crystals belong to the orthorhombic space group P222₁, with unit-cell parameters a = 68,16, b = 172,21, c = 112,05. A X-ray diffraction data were collected to a maximum resolution of 1,7 Å using a synchrotron-radiation source. Structure refinement is in progress. The ongoing biochemical characterization in combination with the structural analysis, will assist the elucidation of the structure-activity relationship in regulating the uptake of molybdate in *Xanthomonas*.

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[2] Lawson D.M., Williams C.E., Mitchenall L.A., Pau R.N., *Structure*. 1998, **6**, 1529-39.

Keywords: ModA protein, *Xanthomonas citri*, crystallization