Crystallization and Data Collection of *Xanthomonas citri* Maltose-Binding Protein

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In this work we report the crystallization and analysis of prelliminary data of the periplasmic maltose-binding protein (MBP) of the plant pathogen *Xanthomonas citri*, responsible for the canker disease affecting citrus plants all over the world. The 50,1 kDa protein has been overproduced in *Escherichia coli*, purified, and crystallized in complex with its substrate maltose. The crystallization of MBP using the sitting-drop vapour-diffusion method with PEG 20000 as precipitant is described. Crystals belong to the orthorhombic space group P2(1)2(1)2(1), with unit-cell parameters a = 105,83, b = 105,21, c = 262,32 A. X-ray diffraction data were collected to a maximum resolution of 3.2A using a synchrotron-radiation source. Structure refinement is in progress.

Structural analysis, in combination with ongoing biochemical characterization, will assist the elucidation of the structure-activity relationship in regulating the uptake of maltose in this bacteria.

Keywords: MBP, *Xanthomonas citri*, crystallization