Identification of pathogenesis related proteins in seedlings of *Capsicum baccatum* var. *pendulum* infected with the pepper yellow mosaic virus

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The main threat in pepper cultivation is the occurrence of diseases that present a limitation to the production. Among the diseases the yellow mosaic caused by the Pepper Yellow Mosaic Virus (PepYMV) is considered one of the most important to the pepper culture and are considered priority in the genetic improvement in Brazil. Pathogenesis related proteins are proteins generally induced and associated to the pathological status, they are found in several plant species and are constituted of 17 families. The aim of this work was to identify PR proteins in seedlings of Capsicum baccatum var. pendulum infected with PepYMV. The control and infected seedlings were grown at 24, 48, 72 and 96 h after inoculation. Later, the leaves were collected in the described times and proteins were extracted from these tissues and analyzed to the presence of the PR-2 (B-1,3-glucanase), PR-3 (chitinase), PR-9 (peroxidase) and PR-14 (lipid transfer protein). It was not observed difference in the proteic pattern between the control and infected seedlings to the PR-2, 3 and 14. However to the PR-9 there were differences to the time of 48 and 72 h after inoculation in which the infected seedlings presented a higher expression when compared to the control seedlings. The sequence of this PR is underway. This data indicate that this PR-9 might be involved in the resistance mechanism of C. baccatum var. pendulum to PepYMV.

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