

286-1 **Detection and molecular characterization of *Cucumber mosaic virus* in hot peppers in the state of Pará**

(Detecção e caracterização molecular de *Cucumber mosaic virus* em pimentas no estado do Pará)

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Resumo

Hot pepper (*Capsicum chinense* and *C. frutescens*) is one of the main vegetables cultivated and consumed in the State of Pará. In vegetable producing municipalities, it is common to observe pepper plants of various cultivars presenting mosaic, deformation and foliar reduction. In order to identify and characterize the mosaic causing virus, we performed a purification of viral particles from samples of hot pepper cv. Cheiro and cv. Biquinho leaves, derived from Santa Isabel and Belém-PA, respectively. The purified viral particles were observed in electronic microscopy. We performed the extraction of the viral RNA, followed by the RT-PCR using *Cucumber mosaic virus* - CMV specific primers which permit the amplification of 2/3 of the protein coat and 1/3 of the non-translated region. The nucleotide sequencing was done directly from the product of the RT-PCR. We observed isometric particles of close to 28 nm of diameter. After the electrophoresis of the RT-PCR product, we observed the band of close to 488 pb, expected for the CMV which, after being cleaved with the EcoRI and MspI enzymes, presented the restriction profile characteristic of subgroup I. In addition, we observed a nucleotide identity of 98% with CMV accesses available in the *GenBank*. This is the first report of CMV in hot pepper in the State of Pará.

Apoio: FINEP, CNPq