



Inheritance of resistance to Pepper yellow mosaic virus in *Capsicum baccatum* var. *pendulum*

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ABSTRACT. We investigated inheritance of resistance to Pepper yellow mosaic virus (PepYMV) in *Capsicum baccatum* var. *pendulum* accessions UENF 1616 (susceptible) crossed with UENF 1732 (resistant). Plants from generations P₁, P₂, F₁, F₂, BC_{1:1}, and BC_{1:2} were inoculated and the symptoms were evaluated for 25 days. Subsequently, an area under the disease progress curve was calculated and subjected to generation means analysis. Only the average and epistatic effects were significant. The broad and narrow sense heritability estimates were 35.52 and 21.79%, respectively. The estimate of the minimum number of genes that control resistance was 7, indicating that resistance is polygenic and complex. Thus, methods to produce segregant populations that advocate selection in more advanced generations would be the most appropriate to produce chili pepper cultivars resistant to PepYMV.

Key words: Chili peppers; Genetic control of disease resistance; Genetic parameters; Heritability; Mean generation analysis