

## **Transgenic Potato Plants Expressing the Potato Virus X (PVX) Coat Protein Gene Developed Resistance to the Viral Infection**

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The gene coding for potato virus X (PVX) coat protein (CP) was expressed in transgenic potato plants obtained by *Agrobacterium tumefaciens* transformation. One hundred independent clones were analyzed in challenge experiments for resistance to PVX infection under greenhouse conditions as a preliminary test. From this test, 16 clones with the best resistance results were selected for a small-scale field trial. Clones 54, 60, 73 and 91 demonstrated the best values of resistance to PVX in the field. Statistical analysis of the field trial showed significant differences between means of optical density obtained in ELISA from transgenic clones and non-transformed plants ( $P < 0.05$ ). There was correspondence between resistance to virus infection and expression of the CP gene of PVX virus in the analyzed clones.

KEY WORDS: Coat protein mediated resistance; pathogen-derived resistance; PVX.

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Received Dec. 30, 2000; received in final form Dec. 5, 2001; <http://www.phytoparasitica.org> posting Jan. 21, 2002.

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