

Virus resistance of transgenic potato plants (*Solanum tuberosum* L.) bearing PVYNTN-CP gene of potato virus Y coat protein

Stashevski Z., Il'inskaya O.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The PVYNTN-CP coat protein gene from a necrotic strain of potato virus Y (PVYNTN) has been transferred into two potato *Solanum tuberosum* L. cultivars, Mindenes and Somogyi kifli, via agrobacterial transformation. Expression of the PVYNTN-CP gene was revealed in 33 (89%) of 37 and 3 (75%) of 4 kanamycin-resistant regenerates of these cultivars, respectively. The level of virus resistance against two virus strains (PVYO, PVYNTN) of independent lines of transgenic potatoes varied from extreme resistance to full susceptibility. The three independent lines of transgenic potatoes proved to be extreme resistant to both PVY strains. © 2011 Pleiades Publishing, Ltd.

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Keywords

genetic transformation, potato virus Y, transgenic plants, virus coat protein