

The effect of three strains of tobacco mosaic virus on peroxidase and polyphenol oxidase activity in *Nicotiana tabacum*

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Abstract

Polyphenol oxidase activity, peroxidase activity and virus titer were determined at 2-day intervals for 22 days in tobacco leaf tissue singly infected by three strains of tobacco mosaic virus (TMV). The aucuba and yellow strains induced large diffuse chlorotic lesions on inoculated leaves. Small necrotic areas occasionally developed on young leaves inoculated with the aucuba strain. The green strain did not induce readily distinguishable symptoms on inoculated leaves. Peroxidase and polyphenol oxidase activity increased significantly in leaves infected by the aucuba strain or yellow strain, but not in leaves infected by the green strain.