

Changes of peroxidase activity and ascorbate content in apoplast of tomato leaves after *Botrytis cinerea* infection

Jacek Patykowski, Henryk Urbanek, Elżbieta Kuźniak

Changes in NADH oxidase/oxidase, superoxide dismutase (SOD), ascorbate peroxidase (APX) and peroxidase (PO) activities with guaiacol, ferulic acid, syringaldazine as well as ascorbate content in apoplast were studied after infection of tomato leaves with *Botrytis cinerea*. NADH oxidase/oxidase activity increased more than twofold while SOD activity grew only slightly after infection. PO activities with all three studied phenol substrates were increasing starting from 24 hour after treatment with the fungus. However, the anionic apoplastic PO measured with ferulic acid and syringaldazine increased more markedly. The oxidized ascorbate content decreased but reduced ascorbate content did not change significantly.