## Morning Glory Systemically Accumulates Scopoletin and Scopolin after Interaction with *Fusarium oxysporum*

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An isolate of non-pathogenic *Fusarium*, *Fusarium oxysporum* 101-2 (NPF), induces resistance in the cuttings of morning glory against *Fusarium* wilt caused by *F. oxysporum* f. sp. *batatas* O-17 (PF). The effect of NPF on phenylpropanoid metabolism in morning glory cuttings was studied. It was found that morning glory tissues responded to treatment with NPF bud-cell suspension (108 bud-cells/ml) with the activation of phenylalanine ammonia-lyase (PAL). PAL activity was induced faster and greater in the NPF-treated cuttings compared to cuttings of a distilled water control. High performance liquid chromatography analysis of the extract from tissues of morning glory cuttings after NPF treatment showed a quicker induction of scopoletin and scopolin synthesis than that seen in the control cuttings. PF also the induced synthesis of these compounds at  $10^5$  bud-cells/ml, but inhibited it at  $10^8$  bud-cells/ml. Possibly PF produced constituent(s) that elicited the inhibitory effect on induction of the resistance reaction. These compounds could potentially be useful as markers to detect early beginning interactions between *Fusarium* and morning glory tissues cuttings.

Key words: Morning Glory, Induced Resistance, Phenylpropanoid