6-Substituted Indanoyl Isoleucine Conjugate Induces Tobacco Plant Responses in Secondary Metabolites

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To characterize the role of the phytotoxin mimic 6-substituted indanoyl isoleucine conjugate 1 in plant secondary metabolism, tobacco (Nicotiana tabacum L. K326) was treated with compound 1. The volatile compounds of tobacco leaves were analyzed by GC-MS. In contrast to the control, three compounds, farnesene (2), santalol (3) and tetradecanal (4), were induced by treatment with 1 mM of compound 1. Concurrently other volatile compounds were also regulated.

Key words: 6-Substituted Indanoyl Isoleucine Conjugate, Coronatine, Secondary Metabolism