Biotransformation of Two Cytotoxic Terpenes, α-Santonin and Sclareol by *Botrytis cinerea*

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Two cytotoxic terpenes, α-santonin (1) and sclareol (3) were biotransformed by a plant pathogenic fungus *Botrytis cinerea* to produce oxidized metabolites in high yields. α-Santonin (1) on fermentation with the fungus for ten days afforded a hydroxylated metabolite identified as 11β-hydroxy-α-santonin (2) in a high yield (83%), while sclareol (3) was metabolized to epoxysclareol (4) (64%) and a new compound 8-deoxy-14,15-dihydro-15-chloro-14-hydroxy-8,9-dehydrosclareol (5) (7%), representing a rare example of microbial halogenation.