

Two-Dimensional TLC Separation and Mass Spectrometric Identification of Anthraquinones Isolated from the Fungus *Dermocybe sanguinea*

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A new two-dimensional TLC technique was developed to separate substituted anthraquinones on silica plates using *n*-pentanol-pyridine-methanol (6:4:3, v/v/v) and toluene-ethyl acetate-ethanol-formic acid (10:8:1:2, v/v/v/v) as eluents. The good separation power of the new technique was demonstrated by applying it to the analysis of complex anthraquinone mixtures isolated from the Scandinavian *Dermocybe sanguinea*. Emodin, physcion, endocrocin, dermolutein, dermorubin, 5-chlorodermorubin, emodin-1- β -D-glucopyranoside, dermocycin-1- β -D-glucopyranoside and dermocycin, and five new, earlier in *D. sanguinea* unidentified compounds, 7-chloroemodin, 5,7-dichloroemodin, 5,7-dichloroendocrocin, 4-hydroxyaustrocorticone and austrocorticone, were separated and identified on the basis of R_f values, UV/Vis spectra and mass spectra.