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Short Communication

Simplified method for testing marijuana, tetrahydrocannabinol, hashish and derivatives

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This method is quite simple and a good separation of cannabinol, cannabidiol and tetrahydrocannabinol is obtained, compared to the paper chromatographic method [1]. In this paper chromatographic determination, 0.1% KaKo Blue B salt sprayer can be selectively and sensitively used [2].

Standards (−)*trans*-Δ^8-THC (94%) in dehydrated alcohol (UNC442), (−)-*trans*-Δ^9-THC (UNC441), cannabinol and cannabidiol are used.
Chromatographic paper Whatman No. 1, sheet 17 cm × 31 cm.
Samples extracts in petroleum ether, boiling range 40 - 60 °C.
Solvent
S1 chloroform:petroleum ether:methanol:glacial acetic acid (50:125:25:3).
S2: chloroform:petroleum ether:methanol:concentrated ammonia (50:125:25:3) v/v
Equilibration the tank is lined with Whatman No. 1 paper to attain equilibrium.
Development ascending, until the solvent front has advanced about 18 cm.
Time of run about 5 hours

Constituents	System S1 R_f	System S2 R_f
Δ^9 THC acetate	—	0.91
Cannabinol	0.78	0.84
Cannabidiol	0.86	0.81
Δ^9-THC	0.90	0.74
Δ^8-THC	0.90	0.72
Cannabidiolic acid	0.63	0.61

This method shows that UNC441 contains traces of Δ^9-THC acetate and cannabinol, and UNC442 contains traces of cannabidiol and cannabidiolic acid

1 D. A. Patterson and H. M. Stevens, J. Pharm. Pharmacol., 22 (1970) 391.
2 U. Win Pe, Forensic Sci., 10 (1977) 261