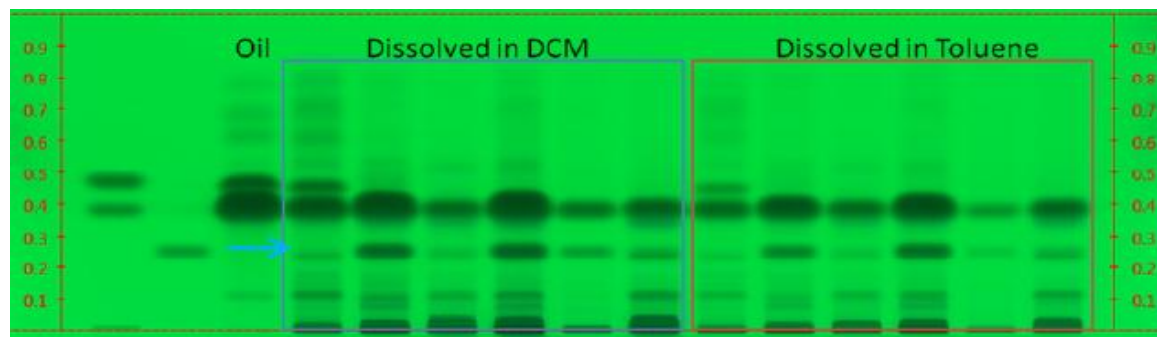


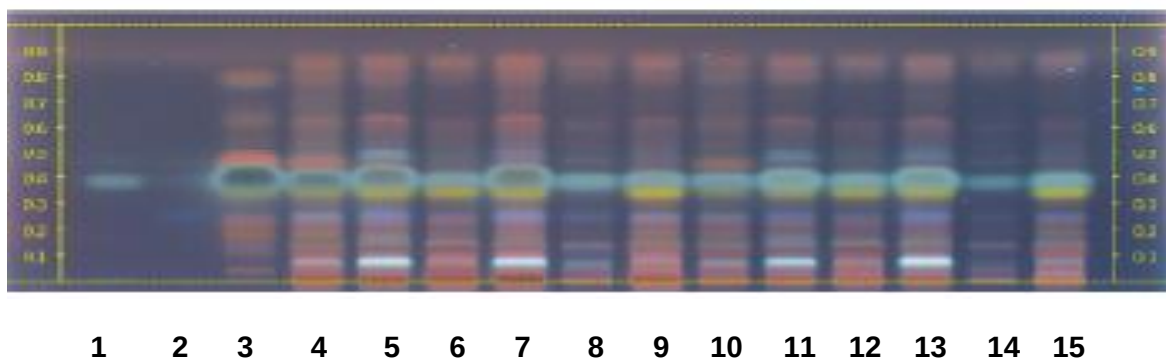
***Cinnamomum cassia* Twig – Identification**

Thin-Layer Chromatography

Under UV 254 nm



After dipping with derivatization reagent, under UV 366 nm



Typical HPTLC Chromatograms

These chromatograms are supplied for information only

Track assignment: 1) Cinnamaldehyde; 2) Coumarin; 3) *C. verum* oil; 4, 10) *C. verum* bark; 5, 11) *C. cassia* bark; 6, 9, 12, 15) *C. cassia* twig; 7, 13) *C. bejolghota* bark; 8, 14) *C. burmanni* bark

Sample solutions: according to the monograph, dissolved in toluene or dichloromethane (DCM)

Standard solutions: in methanol

Plate: HPTLC, Si 60 F254

Saturation Time: saturated chamber (20 min with filter paper)

Application volume: 3 µL for 1,2,3, 6 µL for 4-15, as 8-mm bands

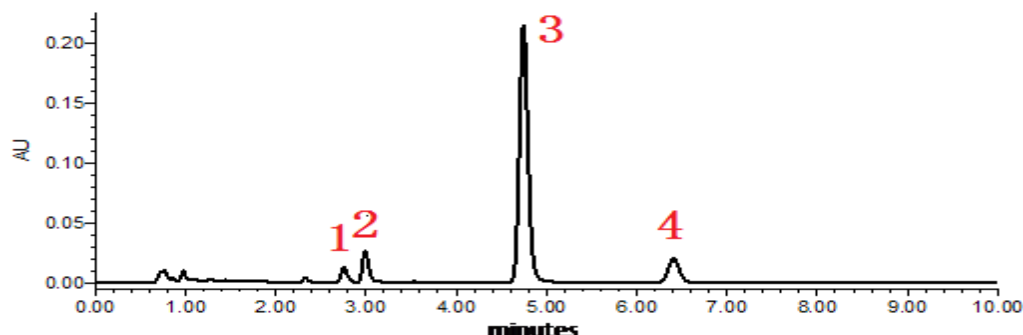
Relative Humidity: about 33%

Developing solvent system: toluene, ethyl acetate (95:5)

Developing distance: 7 cm

Derivatization reagent: 10 mL of sulfuric acid are carefully added to an ice-cooled mixture of 170 mL of methanol and 20 mL of acetic acid. To this solution, 1 mL of p-anisaldehyde is added.

HPLC Chromatography



*1) Co-elute of coumarin and cinnamic alcohol; 2) Cinnamic acid; 3) Cinnamaldehyde; 4) 2'-methoxycinnamaldehyde

Representative chromatogram of Content of cinnamaldehyde in *Cinnamomum cassia* Twig

This chromatogram is supplied for information only

Solutions preparation: according to the monograph

Detector: UV, 290 nm

Column: 4.6-mm × 10-cm; 3.5-μm packing L1 (Agilent Zorbax SB C18)

Column temperature: 30°

Flow rate: 1.2 mL/min

Injection volume: 5 μL

Solution A: 0.01% Phosphoric acid in water

Solution B: Acetonitrile

Mobile phase: *Solution A and Solution B (65:35)*