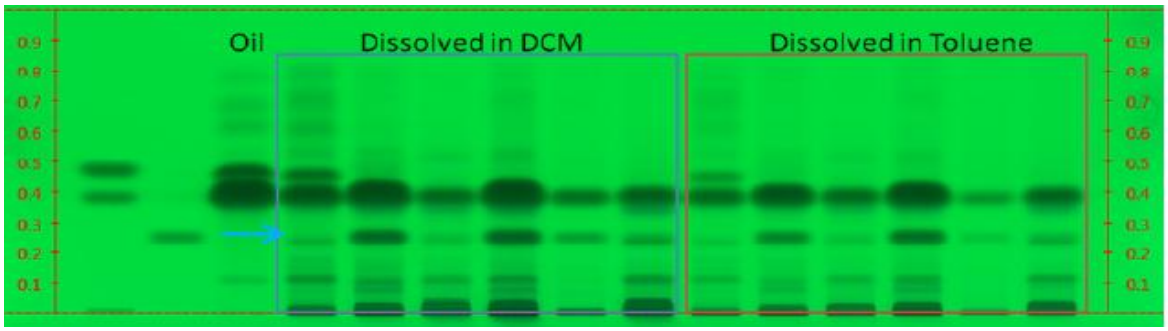
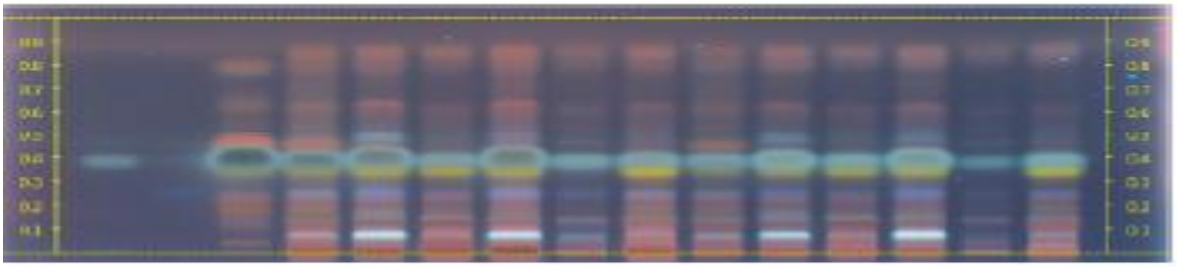
Cinnamomum cassia Twig — Identification

Thin-Layer Chromatography

Under UV 254 nm



After dipping with derivatization reagent, under UV 366 nm



Typical HPTLC Chromatograms

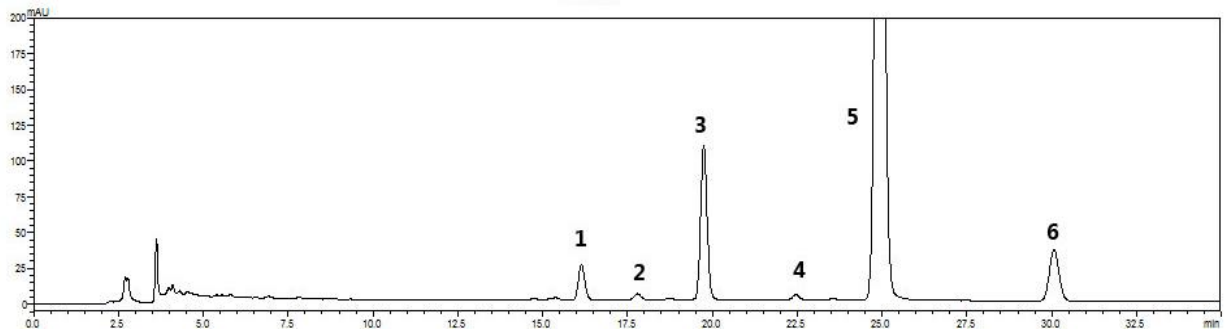
These chromatograms are supplied for information only

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:	2 µL for **1,2,3**, 6 µL for **4-15**, as 8-mm bands
Relative Humidity:	about 33%
Developing solvent system:	toluene, ethyl acetate (19:1)
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) Coumarin; 2) cinnamyl alcohol; 3) cinnamic acid; 4) 2-methoxycinnamic acid; 5) cinnamaldehyde; 6) 2-methoxycinnamaldehyde

Representative chromatogram of *Content* of *total phenypropanoids* in *Cinnamomum cassia* Twig

This chromatogram is supplied for information only

Solutions preparation: according to the monograph

Detector: UV, 265 nm

Column: 4.6-mm × 25-cm; 5-µm packing L1 (Phenomenex Luna C18 (2) 100 Å

Column temperature: 25°

Flow rate: 1.0 mL/min

Injection volume: 10 µL

Solution A: 0.05% Phosphoric acid in water

Solution B: Acetonitrile

Mobile phase: *See Table 1*

Table1

Time (minutes)	A (%)	B (%)
0	75	25
1	75	25
21	62	38
30	60	40
35	60	40