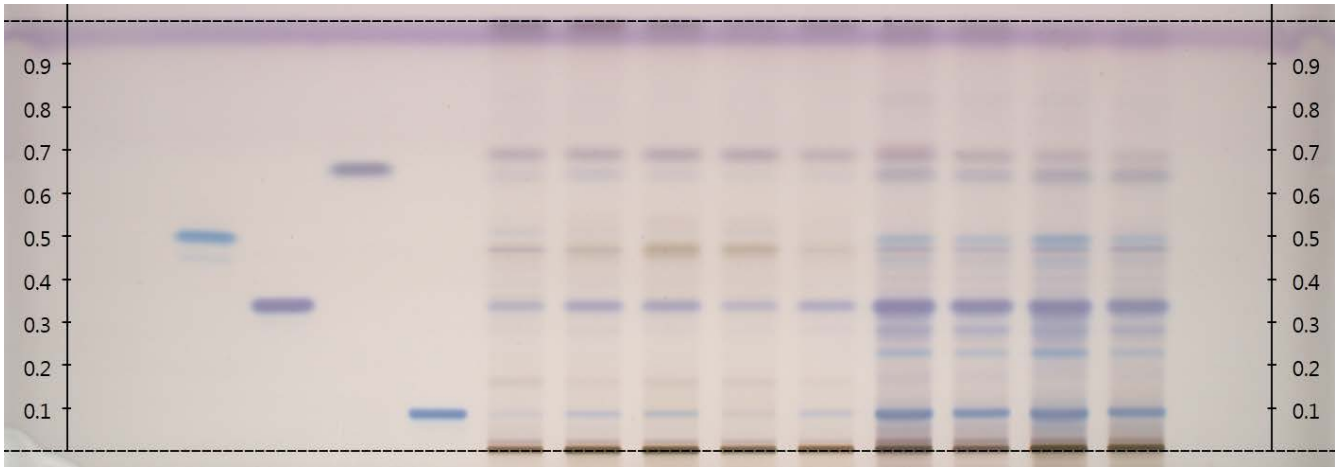
Herbal Medicines Compendium

U.S. Pharmacopeial Convention

Lagerstroemia speciosa Leaf — Identification

Thin-Layer Chromatography



Typical HPTLC Chromatograms

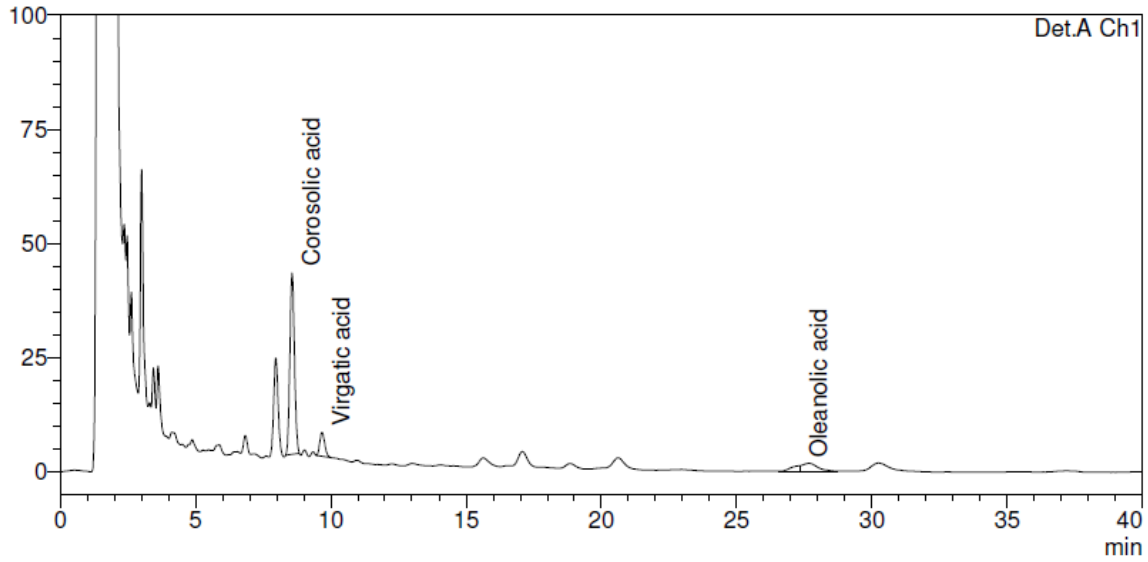
These chromatograms are supplied for information only

Track assignment: 1) virgatic acid (0.2 mg/mL); 2) USP Corosolic Acid RS (0.2 mg/mL); 3) oleanolic acid (0.2 mg/mL); 4) asiatic acid (0.2 mg/mL); 5-9) *Lagerstroemia speciosa* Leaf, commercial samples;10) USP *Lagerstroemia speciosa* Leaf Powdered Extract (20 mg/mL);11-13) *Lagerstroemia speciosa* Leaf powdered extract, commercial samples (20 mg/mL)

Sample solutions:	according to the monograph
Standard solutions:	in methanol
Plate:	HPTLC, Si 60
Saturation Time:	un-saturated
Application volume:	6 µL, as 8-mm bands
Relative Humidity:	about 33%
Temperature:	25°
Developing solvent system:	toluene, ethyl acetate, glacial acetic acid (55:45:0.5)

Developing distance:	6 cm
Derivatization reagent:	anisaldehyde reagent – 85 mL of ice-cooled methanol mixed with 10 mL glacial acetic acid, 5 mL of sulfuric acid, and 0.5 mL of *p*-anisaldehyde.
Detection:	derivatize, heat at 100º for 3 min, and examine under visible light

HPLC (Corosolic acid)



Representative chromatogram of *Content of corosolic acid* in *Lagerstroemia speciosa* Leaf

This chromatogram is supplied for information only

Solutions preparation:	according to the monograph
Detector:	UV, 205 nm
Column:	4.6-mm × 25-cm; 5-µm packing L1 (Similar to Hibar ® 250-4.6; Lichrospher® 100, RP-18e; or Luna C18)
Column temperature:	25°±1
Flow rate:	1.6 mL/min
Injection volume:	20 µL
Solution A:	0.1% phosphoric acid in water
Solution B:	acetonitrile
Mobile phase:	a mixture of *Solution A* and *Solution B* (4:6)