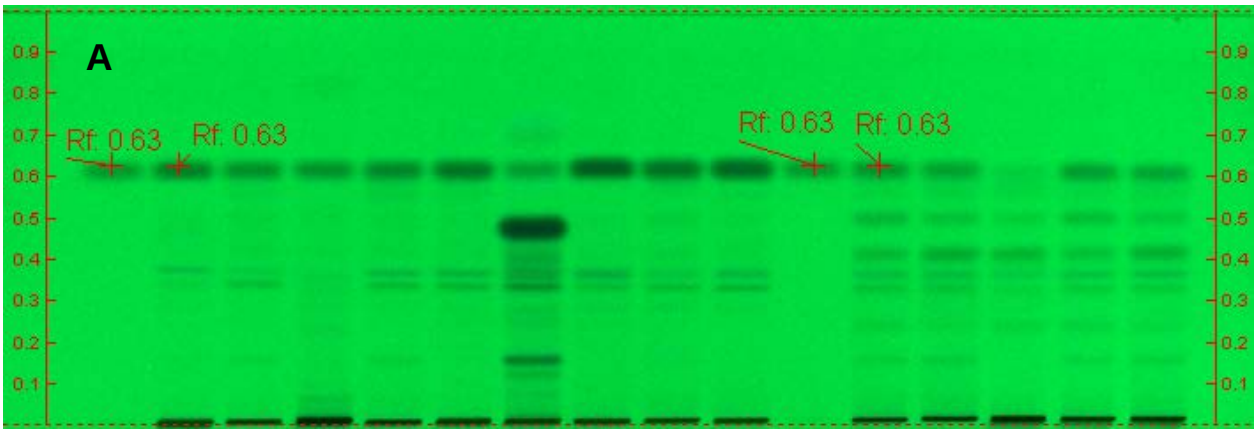
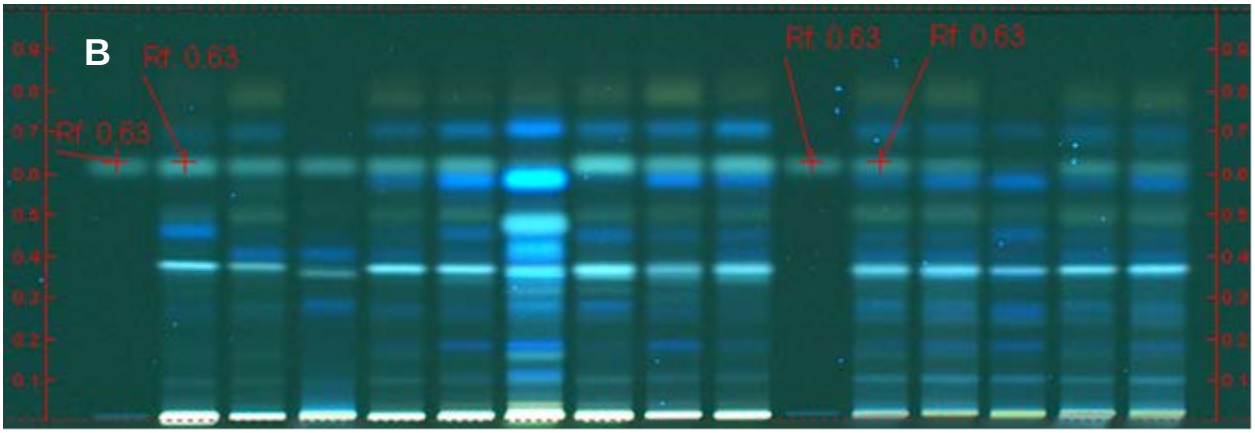
Herbal Medicines Compendium

U.S. Pharmacopeial Convention

Aegle marmelos Fruit – Identification

High-Performance Thin-Layer Chromatography





1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Typical HPTLC Chromatogram

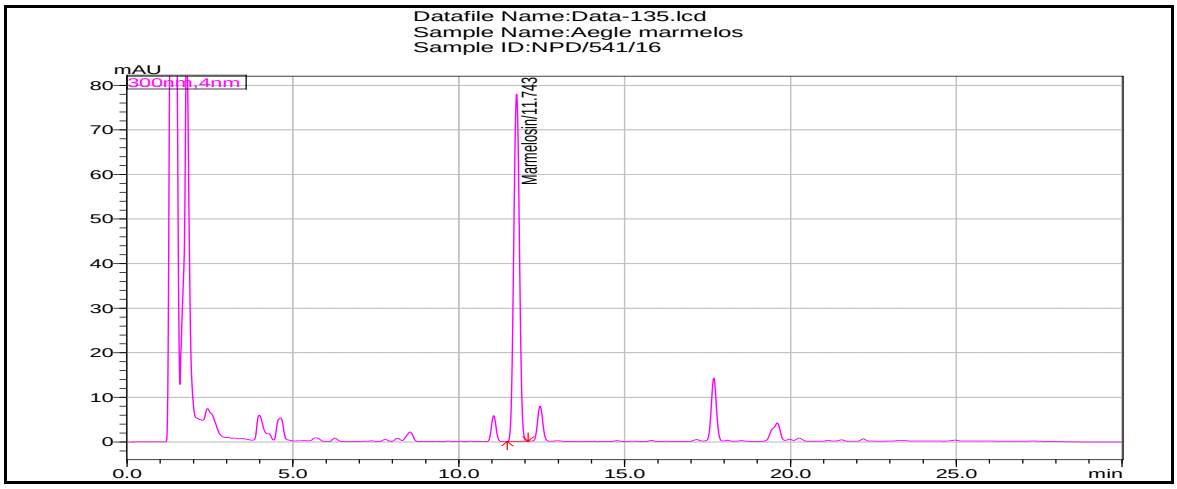
These chromatograms are supplied for information only

Track assignment: 1), 11) Marmelosin; 2-10,12-16) *Aegle marmelos* Fruit Samples.

Sample solutions:	according to the monograph
Standard solutions:	in methanol
Plate:	HPTLC, Silica gel 60 F_{254}, 5 µm
Application volume:	10 µL for standard solution, 5 µL for sample solution, as 8-mm bands

Relative Humidity:	about 33%
Developing solvent system:	toluene, ethyl acetate, methanol, and acetic acid (40:10:1.25:1)
Developing distance:	6 cm
Detection:	examine under UV 254 nm (A) and 365 nm (B)

HPLC (Marmelosin)



Representative chromatogram of Content of Marmelosin in *Aegle marmelos* Fruit

This chromatogram is supplied for information only

Solution preparation:	according to the monograph
Detector:	UV, 300 nm
Column:	4.6-mm × 10-cm; 2.7 µm packing L1
Flow rate:	0.6 mL/min
Injection volume:	20 µL
Solution A:	0.2% acetic acid in water
Solution B:	acetonitrile
Mobile phase:	see *Table 1*

Table 1

Time (min)	Solution A (%)	Solution B (%)
0	60	40
20	40	60
24	40	60
27	60	40
30	60	40