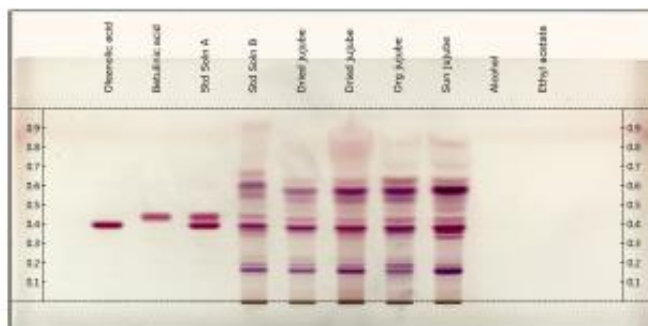


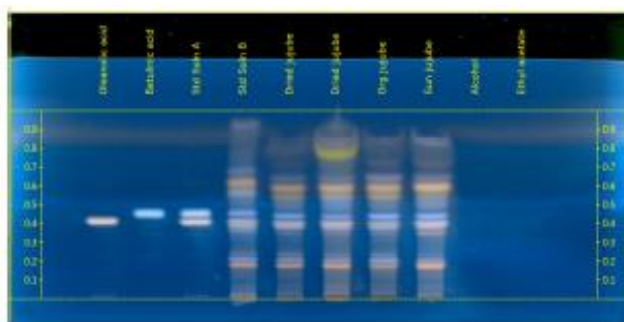
## ***Ziziphus jujuba* Fruit – Identification**

### **Thin-Layer Chromatography (Identification)**

Under white light after treat with Derivatization reagent and heat at 100° for 5 min



Under UV light at 365 nm after treat with Derivatization reagent and heat at 100° for 5 min



### **Typical HPTLC Chromatograms**

***These chromatograms are supplied for information only***

**Track assignment (1 to 10 from left to right):** 1) Oleanolic acid; 2) Betulinic acid; 3) Standard solution A; 4) Standard solution B; 5-8) *Ziziphus zuzuba* Fruit (commercial products); 9-10) Solvents

**Test solutions:** according to the monograph

**Plate:** HPTLC, Silica gel F<sub>254</sub>

**Saturation Time:** saturated chamber for 20 min

**Application volume:** 6 µL, as 8-mm bands

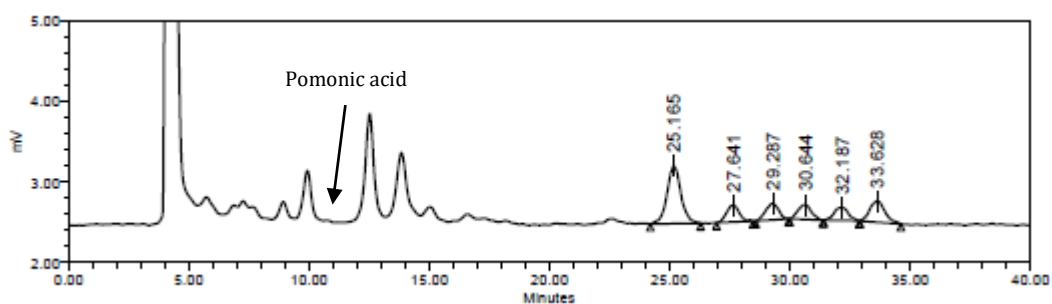
**Relative Humidity:** 36%

**Developing solvent system:** toluene, ethyl acetate, and glacial acetic acid (14:4:0.5)

**Developing distance:** 6 cm

**Derivatization reagent:** 10% sulphuric acid in ethanol

## HPLC chromatogram (Triterpenic Acids, Identification)



**Track assignment;** 25.2) betulinic acid; 27.6) oleanolic acid; 29.3) ursolic acid; 30.6) betulonic acid; 32.2) oleanonic acid; 33.6) ursonic acid

## Representative chromatogram of HPLC for Triterpenic Acids in *Ziziphus jujuba* Fruit

*These chromatograms are supplied for information only*

|                     |                                                 |
|---------------------|-------------------------------------------------|
| Test solution:      | Standard solution B, according to the monograph |
| Detector:           | ELSD                                            |
| Column:             | 4.6-mm × 25-cm; 5-μm packing L1 (Hypersil C18)  |
| Column temperature: | 25°                                             |
| Flow rate:          | 0.6 mL/min                                      |
| Injection volume:   | 20 μL                                           |
| Solution A:         | 5.0 mg/mL of ammonium acetate in water          |
| Solution B:         | methanol                                        |
| Mobile phase:       | Solution A and Solution B (17:38)               |