UNICORN ROOT
FOR HOMOEOPATHIC PREPARATIONS

ALETRIS FARINOSA
FOR HOMOEOPATHIC PREPARATIONS

Aletris farinosa ad praeparationes homoeopathicas

DEFINITION

Dried rhizome of *Aletris farinosa* L.

IDENTIFICATION

A. Cylindrical, brownish rhizome, 5-7 cm long with a few millimetres in diameter, bearing numerous little adventitious roots; surface showing prominent, annular ridges. On the upper part possible fibres and scales representing the remnants of leaves. Whitish fracture.

B. Reduce the rhizome to a powder (355). The powder is light brown. Examine under a microscope using *chloral hydrate solution R*. The powder shows the following characteristic elements: fragments of parenchyma consisting of more or less ovoid cells, some of them contain raphides of calcium oxalate; scarce fragments of punctuate and reticulate wood vessels; raphides of calcium oxalate either free or in bundles; long fibres with thickened cell-walls and narrow lumen. Examine under a microscope, using *glycerol* (50 per cent *V/V*) *R.* The powder shows very numerous starch granules, about 30 µm in diameter, isolated most of the time and sometimes in groups of 2 or 3, but most of them grouped in clusters preserving the shape of the cells they were in.

C. Thin layer chromatography (*2.2.27*).

Test solution. Add 30 mL of *ethanol* (*65 per cent V/V*) *R* to 3 g of powdered drug (355). Heat under a reflux condenser on a water-bath at 60 °C for 15 min. Allow to cool. Filter.

Reference solution. Dissolve 5 mg of *diosgenin R* and 10 mg of *hederagenin R* in 10 mL of *ethanol* (*96 per cent*) *R*.

Plate: *TLC silica gel plate R*.

Mobile phase: *methanol R, toluene R, methylene chloride R* (10:45:45 *V/V/V).*

Application: 20 µL, as bands.

Development: over a path of 10 cm.

Drying: in air.

Detection: spray with *alcoholic solution of sulfuric acid R* and heat at 100-105 °C for 10 min. Examine in ultraviolet light at 365 nm.

Results: see below the sequence of fluorescent zones present in the chromatograms obtained

The General Chapters and General Monographs of the European Pharmacopoeia and Preamble of the French Pharmacopoeia apply.

with the reference solution and the test solution. Furthermore other faint, fluorescent zones may be present in the chromatogram obtained with the test solution.

Top of the plate	
-----	-----
	A purple zone An orange-pink zone
Diosgenin: a purplish-blue zone	
	A blue zone
-----	-----
Hederagenin: an orange zone	
	A purplish-blue zone A pink zone
Reference solution	**Test solution**

TESTS

Loss on drying (*2.2.32*): maximum 11.0 per cent, determined on 1.000 g of powdered drug (355), by drying in an oven at 105 °C for 2 h.

Total ash (2.4.16): maximum 6.0 per cent, determined on 1.000 g of powdered drug (355).

STOCK

DEFINITION

Unicorn root mother tincture is prepared with ethanol (65 per cent *V/V*) using dried rhizome of *Aletris farinosa* L.

PRODUCTION

Method 1.1.10 (2371). Drug fragmented into 1-3 cm long segments. Maceration time: 3-5 weeks.

CHARACTERS

Appearance: brownish-yellow colour.

Earthy odour

IDENTIFICATION

Thin layer chromatography (*2.2.27*).

The General Chapters and General Monographs of the European Pharmacopoeia and Preamble of the French Pharmacopoeia apply.

Test solution. Mother tincture.

Reference solution. Dissolve 5 mg of *diosgenin R* and 10 mg of *hederagenin R* in 10 mL of *ethanol* (*96 per cent*) *R*.

Plate: *TLC silica gel plate R*.

Mobile phase: *methanol R, toluene R, methylene chloride R* (10:45:45 *V/V/V*).

Application: 20 µL, as bands.

Development: over a path of 10 cm.

Drying: in air.

Detection: spray with *alcoholic solution of sulfuric acid R* and heat at 100-105 °C for 10 min. Examine in ultraviolet light at 365 nm.

Results: see below the sequence of fluorescent zones present in the chromatograms obtained with the reference solution and the test solution. Furthermore other faint, fluorescent zones may be present in the chromatogram obtained with the test solution.

Top of the plate	
-----	-----
	A purple zone An orange-pink zone
Diosgenin: a purplish-blue zone	
	A blue zone
-----	-----
Hederagenin: an orange zone	
	A purplish-blue zone A pink zone
Reference solution	**Test solution**

TESTS

Ethanol (*2.9.10*): 60 per cent *V/V* to 70 per cent *V/V*.

Dry residue (*2.8.16*): minimum 0.7 per cent *m/m*.

The General Chapters and General Monographs of the European Pharmacopoeia and Preamble of the French Pharmacopoeia apply.