

**LADY'S MANTLE
FOR HOMOEOPATHIC PREPARATIONS**

**ALCHEMILLA VULGARIS
FOR HOMOEOPATHIC PREPARATIONS**

***Alchemilla xanthochlora* ad praeparationes homoeopathicas**

DEFINITION

Whole, fresh, flowering plant *Alchemilla xanthochlora* Rothm. (*A. vulgaris* L. *sensu latiore*).

CHARACTERS

Macroscopic characters described under identification.

IDENTIFICATION

Lady's mantle is a glabrous or pubescent perennial with a more or less ramose, rhizomatous, hollow stem, greyish-green to yellow-green in colour, pubescent, and more or less longitudinally-grooved. Slender, erect stems, occasionally red at the base, emerge from the main stem and can be 10 - 30 cm high. The basal leaves are greyish-green, sometimes brown-green in places, kidney shaped to almost semi-circular, generally up to 8 cm in diameter and occasionally 11 cm. They have 7 - 9 or 11 lobes, and a long petiole. The smaller cauline leaves have a pair of large stipules at the base, and 5 - 9 lobes. They are either sessile or with a shorter petiole. The leaves are highly pubescent, especially on the underside, with a roughly dentate margin. The young leaves are tightly folded, pubescent and therefore silver-white in colour. The older leaves are slightly pubescent, with a fine network of prominent nerves on the underside. The greyish-green to yellow-green petiole is pubescent, about 1 mm in diameter with an adaxial groove. The apetalous yellowish-green to light green flowers are about 3 mm in diameter. The calyx is surmounted by the 4 lobes of the calycle that alternate with the 4 larger, sub-acute to triangular sepals beneath. The flower has 4 short stamens and a single carpel with a capitate stigma.

TESTS

Foreign matter (2.8.2): maximum 5 per cent

Loss on drying (2.2.32): minimum 60.0 per cent, determined on 5.0 g of finely cut drug, by drying in an oven at 105 °C for 2 h.

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

STOCK

DEFINITION

Lady's mantle mother tincture complies with the requirements of the general technique for mother tinctures (see *Homœopathic Preparations (1038)* and French Pharmacopoeia Authority Supplement). The mother tincture is prepared with *ethanol* (45 per cent V/V), using the whole fresh flowering plant *Alchemilla xanthochlora* Rothm.

Content: minimum 0.15 per cent *m/m* tannins, expressed as pyrogallol (C₆H₆O₃; M_r 126.1).

CHARACTERS

Appearance: brown liquid.

IDENTIFICATION

Thin-layer chromatography (2.2.27).

Test solution. Mother tincture.

Reference solution. Dissolve 10 mg of *caffeic acid R* and 10 mg of *chlorogenic acid R* in 40 mL of *ethanol* (70 per cent V/V) *R*.

Plate: TLC silica gel plate *R*.

Mobile phase: water *R*, methanol *R*, glacial acetic acid *R*, methylene chloride *R* (2:3:8:15 V/V/V/V).

Application: 20 µL, as bands.

Development: over a path of 10 cm.

Drying: in air.

Detection A: examine in ultraviolet light at 365 nm

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

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

Top of the plate	
Caffeic acid: a blue zone	A red zone (near the solvent front)
Chlorogenic acid: a blue zone	A blue zone A brown zone
Reference solution	Test solution

Detection B: first spray the plate with a 10 g/L solution of *diphenylboric acid aminoethyl ester R* in *methanol R*, then with a 50 g/L solution of *macrogol 400 R* in *methanol R*. Allow the plate to dry for about 30 min. Examine in ultraviolet light at 365 nm.

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

Top of the plate	
Caffeic acid: a green-blue zone	A yellow zone A green-blue zone more or less intense (caffeic acid)
Chlorogenic acid: a green-blue zone	A yellow zone A green-blue zone An orange zone
Reference solution	Test solution

TESTS

Ethanol (2.9.10): 40 per cent V/V to 50 per cent V/V.

Dry residue: minimum 1.5 per cent *m/m*.

ASSAY

Carry out the determination of tannins in herbal drugs (2.8.14).

Use 12.50 g of mother tincture.

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