

**ROCKET CANDYTUFT  
FOR HOMOEOPATHIC PREPARATIONS**

**IBERIS AMARA  
FOR HOMOEOPATHIC PREPARATIONS**

**Iberis amara ad praeparationes homoeopathicas**

DEFINITION

Dried seed of *Iberis amara* L.

CHARACTERS

Macroscopic and microscopic characters described under identification tests A and B.

IDENTIFICATION

- A. Rocket candytuft seed is 2-3 mm long and 1-2 mm wide. It is rounded, red-brown and a membrane slightly protrudes round the edge. It possesses 2 integuments and a funicle. It is practically exalbuminous. The plantlet is developed and bent over on itself. The cotyledons are oval, entire, flat, fleshy and oleaginous.
- B. Reduce the drug to a powder (355). The powder is yellow-brown. When examined under a microscope using *chloral hydrate solution R*, the following are observed: fragments of outer integument consisting of polyhedral cells with thin cellulose walls and containing clusters of sclerous cells with slightly thickened walls; fragments of inner integument consisting of cells whose cellulose walls are slightly thickened at the corners; fragments of cotyledons consisting of more or less ovoid cells packed with starch granules and numerous oily droplets.
- C. Thin-layer chromatography (2.2.27).

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

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

*Plate:* TLC silica gel plate R.

*Mobile phase:* glacial acetic acid R, water R, butanol R (10:10:40 V/V/V).

*Application:* 20 µL, as bands.

*Development:* over a path of 10 cm.

*Drying:* in air.

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

**Detection:** first spray 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:** see below the sequence of fluorescent zones present in the chromatograms of the reference solution and of the test solution. Furthermore other fluorescent zones may be present in the chromatogram obtained with the test solution.

<b>Top of the plate</b>	
Isoquercitroside: a bright orange zone	A blue zone An orange zone A green-blue zone
Rutin: a bright orange zone	An orange zone A blue zone Two orange zones A green-blue zone
<b>Reference solution</b>	<b>Test solution</b>

## TESTS

**Foreign matter** (2.8.2): maximum 5 per cent.

**Loss on drying** (2.2.32): maximum 8.0 per cent, determined on 5.0 g of powdered drug (355), by drying in an oven at 105 °C for 2 h.

**Total ash** (2.4.16): maximum 12.0 per cent.

## STOCK

### DEFINITION

Rocket candytuft mother tincture complies with the requirements of the general technique for the preparation of mother tinctures (see *Homoeopathic Preparations (1038)* and French Pharmacopoeia Authority Supplement). The mother tincture is prepared with ethanol (65 per cent V/V) using the dried seed of *Iberis amara* L.

### CHARACTERS

**Appearance:** orange liquid.

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## IDENTIFICATION

- A. Add 1 mL of *ammoniacal silver nitrate solution R* to 3 mL of mother tincture. A brown precipitate forms, which turns black when heated.
- B. Thin-layer chromatography (2.2.27).

*Test solution.* Mother tincture.

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

*Plate:* TLC silica gel plate R.

*Mobile phase:* glacial acetic acid R, water R, butanol R (10:10:40 V/V/V).

*Application:* 20 µL as bands.

*Development:* over a path of 10 cm.

*Drying:* in air.

*Detection:* first spray 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:* 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	
Isoquercitroside: a bright orange zone	A blue zone An orange zone A green-blue zone
Rutin: a bright orange zone	An orange zone A blue zone Two orange zones A green-blue zone
<b>Reference solution</b>	<b>Test solution</b>

## TESTS

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

**Dry residue** (2.8.16): minimum 1.0 per cent m/m.

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