

Pharbitis Seed (*Semen Pharbitidis*) – 牽牛子

Sample source

Commercially available Pharbitis Seed

Chemical reference substances

1. Caffeic acid, 2. Caffeic acid acetate (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 1. 110885-200102, 2. 111678-200401)

Preparation of test solution

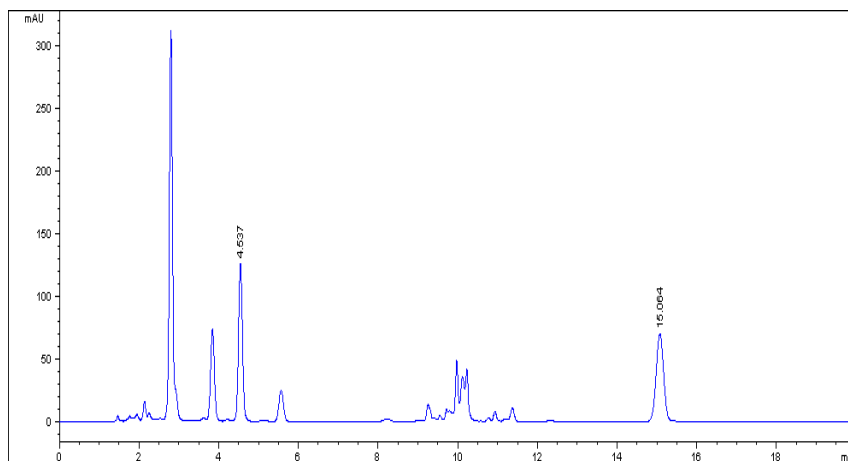
Accurately weight 2 g of the powder in a Soxhlet extractor, extract with a quantity of petroleum ether (60-90 °C) under reflux for 2 hours, discard petroleum ether, and evaporate the residue to dryness. Extract the residue with a mixture of chloroform and methanol (3:1) for 6 hours, evaporate the extract to a small quantity, transfer to a 10 mL volumetric flask, wash the container with the same solvent, combine the washings in the same volumetric flask. Dilute to volume, and mix well.

Chromatographic conditions

- Column: ZORBAX XDB C18, 4.6×150 mm, 5 µm (993967-902)
- Column temperature: 25 °C
- Mobile phase: A: acetonitrile, B: 0.04 % phosphoric acid (containing 2 % isopropanol); 0-6min, A: 15 %; 6-7min, A: 15-28 %; 7-20 min, A: 28 %
- Detector wavelength: 325 nm
- Flow rate: 1.0 mL/min
- Injection volume: 5 µL

Chromatographic system

- Agilent 1200 Series quaternary pump with vacuum degasser
- Agilent 1200 Series high-performance autosampler
- Agilent 1200 Series thermostated column compartment
- Agilent 1200 Series variable wavelength detector
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU*s)	n	USP T _r
Caffeic acid	2.025	4.537	126.1	870.6	10475	1.04
Caffeic acid acetate	9.043	15.064	70.07	902.6	31751	0.99