Cassia Seed *(Semen Cassiae)* – 决明子

Sample source

Commercially available Cassia Seed

Chemical reference substances

Chrysophanol (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 110796-200309)

Preparation of test solution

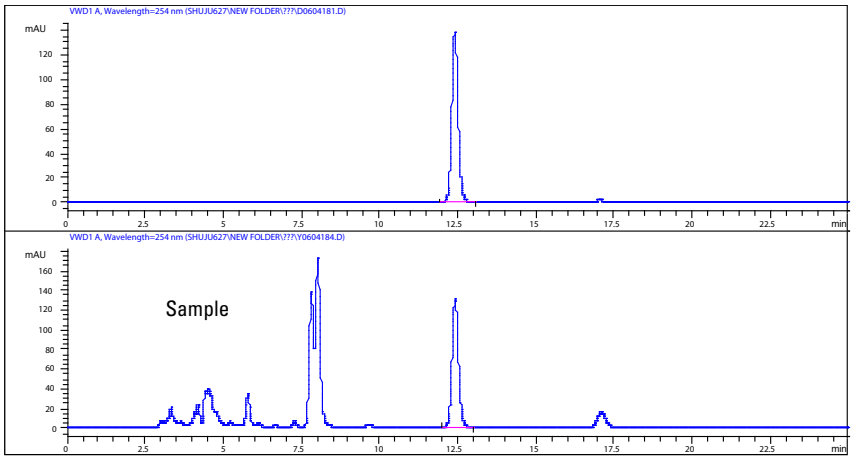
Accurately weigh 0.5 g of the powder in a stoppered conical flask, accurately add 50 mL of methanol and weigh. Heat under reflux for 30 minutes, allow to cool, weigh again, replenish the lost weight with methanol, mix well and filter. Accurately measure 25 mL of the filtrate and evaporate the filtrate to dryness. Add 30 mL of 10 % hydrochloric acid to the filtrate. Heat for 1 hour on a water bath and cool immediately. Extract the filtrate with four 30 mL quantities of chloroform. Combine chloroform extracts, evaporate to dryness on a water bath. Dissolve the residue with a mixture of dehydrated ethanol and ethyl acetate (2:1) in a 10 mL volumetric flask. Dilute with the same solvent to volume, mix well, filter, and use the filtrate as test solution.

Chromatographic conditions

- Column: ZORBAX SB C18 4.6×250 mm, 5 µm (880975-902)
- Column temperature: 25 °C
- Mobile phase: methanol-0.1 % phosphoric acid (87:13)
- Detector wavelength: 254 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 thermostatted column compartment
- Agilent 1200 Series variable wavelength detector
- System control through Agilent ChemStation revision B.01.01



Components	Ret Time (min)	Height (mAU)	Area (mAU*s)	n	Rs	USP T$_f$
Chrysophanol	12.418	130.44	1873.7	18733	8.23	1.06