

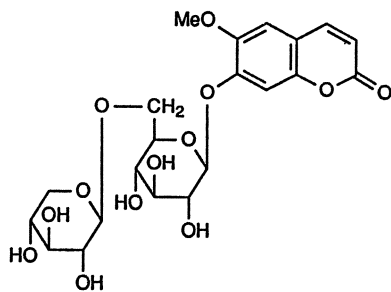
96.1 Introduction

Huashanshen, Radix *Physochlainae*, is the dry root of *Physochlaina infundibularis* Kuang (Solanaceae) collected in the spring. It is officially listed in the Chinese Pharmacopoeia and used as an antiasthmatic, expectorant, and sedative, but is not to be used for glaucoma patients. Therapy of pregnant women must be carried out with great care.

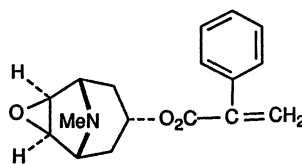
A galenic preparation of the roots of *P. infundibularis*, Huashanshen Pian, Tabellae *Physochlainae*, the tablets of the root extract is also officially listed in the Chinese Pharmacopoeia. The latter is produced by percolation of the root powder with ethanol containing 0.1% hydrochloric acid and concentration in vacuum.

96.2 Chemical Constituents

From the root of *P. infundibularis* the coumarin fabiatriin (96-1) and the alkaloids scopoline, atropine, anisodamine, scopolamine, and aposcopolamine (96-2) were isolated and identified [1]. The major alkaloids in *Physochlaina* tablets are anisodamine, hyoscyamine, and scopolamine [2].



Fabiatriin (96-1)



Aposcopolamine (96-2)

Physochlaina physaloides is another *Physochlaina* species with medicinal use occurring in China. From the root of *P. physaloides* hyoscyamine and anisodamine were isolated and identified [3]. It is a plant growing wild can also be cultivated. The anisodamine content in the root of cultivated *P. physaloides* was 0.03%–0.2% [4].