

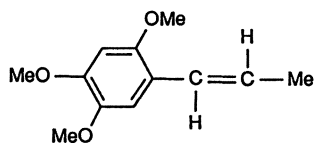
4.1 Introduction

Shichangpu, Rhizoma Acori graminei, is the dry rootstock of *Acorus gramineus* Soland. (Araceae) collected in fall and winter. It is listed officially in the Chinese Pharmacopoeia and used as a digestant, an expectorant, and as a stimulant against digestive disorders, diarrhea, and epilepsy.

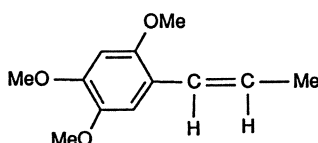
In the appendix of the Chinese Pharmacopoeia *A. calamus* L. is included.

4.2 Chemical Constituents

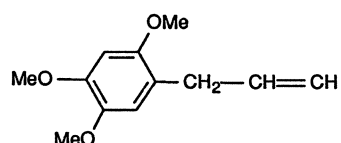
The rootstock of *A. gramineus* contains an essential oil from which α -asarone (4-1), β -asarone (4-2), γ -asarone (4-3) [1], and a compound named bisasaricin (4-4) [2] were isolated and identified. Irradiation of α -asarone in anhydrous ethanol with UV light for 5 h also yielded bisasaricin [2].



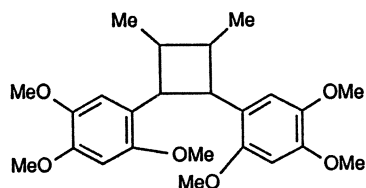
α -Asarone (4-1)



β -Asarone (4-2)



γ -Asarone (4-3)



Bisasaricin (4-4)

4.3 Pharmacology

α -Asarone, β -asarone, and γ -asarone isolated from *A. gramineus* have been tested for spasmolytic activity. All three compounds had a spasmolytic effect on isolated guinea pig trachea and ileum contractions induced by acetylcholine, histamine, serotonin, and barium chloride. Among these three compounds, α -asarone was the most effective [1].