

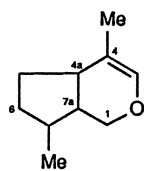
### 65.1 Introduction

Duzhong, Cortex Eucommiae, is the dry stem bark of *Eucommia ulmoides* Oliv. (Eucommiaceae) peeled in April to June. It is officially listed in the Chinese Pharmacopoeia and is one of the oldest tonic herbs in traditional Chinese medicine and used in the treatment of hypertension.

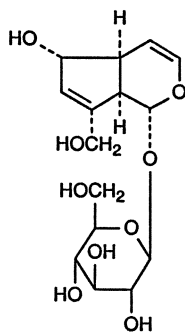
### 65.2 Chemical Constituents

The main constituents isolated from the stem bark of *E. ulmoides* so far have been irridoid glycosides and lignan glucosides. Iridoids are monoterpene cyclic ethers with a basic skeleton of hexahydrodimethylcyclopenta[*c*]pyran (65-1). At first, six iridoids were detected in the ethanolic extract of the stem bark of *E. ulmoides* and five of them were identified as the known compounds aucubin (65-2), harpagide acetate (65-3), ajugoside (65-4), reptoside (65-5), and a new compound named eucommiol (65-6) [1]. Aucubin was the major constituent, with a content of 0.1%–4.0% in stem bark and 1.6%–1.7% in the leaves [2].

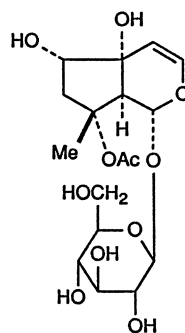
An aucubigenin diglycoside named ulmoside (aucubigenin-1- $\beta$ -isomaltoside, 65-7) [3], eucommioside I (65-8), geniposidic acid (65-9), and geniposide (65-10) [4] were further isolated and structurally determined. Recently, the isolation of 4-deoxyeucommiol from the stems as well as from the leaves [6] of *E. ulmoides* was also reported.



Hexahydrodimethyl-  
cyclopenta[*c*]pyran (65-1)



Aucubin (65-2)



Harpagide acetate (65-3)