

Abstract

The pharmacological studies indicated that the essential oil from *Curcuma* showed strong anti-tumor and anti-thrombus bioactivities. In this thesis, preparative isolation and purification of compounds from essential oil of *Curcuma wenyujin* using high performance centrifugal partition chromatography and separation and identification the chemical constituents of the essential oil of *C. kwangsiensis* were studied.

There are mainly three chapters for the thesis.

Chapter I introduced the background and strategy for the present study. It is a review for the study on chemical constituents and pharmacologic actions of the essential oil of *Curcuma* and so on.

Chapter II mainly contained two aspects. In one part, it introduced the research on separation and identification the chemical constituents of the essential oil of *C. kwangsiensis* and *C. wenyujin*. In another part, it introduced the experiment on preparative isolation and purification of compounds from essential oil of *C. wenyujin* using high performance centrifugal partition chromatography.

Chapter III contained the conclusion and discussion for the results of the study, the results indicated that was practical and feasible for the chemical study of the essential oil from *Curcuma*.

Key words: *Curcuma wenyujin*; *Curcuma kwangsiensis*, essential oil; high performance centrifugal partition chromatography (HPCPC); sesquiterpenoid; monoterpenoid