ABSTRACT

The isolation and structural elucidation of two Malaysian Annonaceae species have been carried out in this study. The structure of the flavonoids and alkaloids were elucidated by spectroscopic methods. The two species are *Fissistigma lanuginosum* and *Polyalthia hookerian*. Alkaloids were found in both species and flavonoids were only isolated from *Fissistigma lanuginosum*.

The flavonoids isolated from *Fissistigma lanuginosum* were pedicin **21**, 2', 5' - dihydroxy - 3', 4', 6' - trimethoxychalcone **22**, 5, 8 - dihydroxy - 6, 7 - dimethoxyflavone **23**, fissistin **33**, isofissistin **34**, 3', 4', 6' - trimethoxy - 2', 5' - quinochalcone **35** and alkaloids were liriodenine **39** and lanuginosine **40**. Two new ' condensed ' chalcones, **33** and **34**, were elucidated by spectral methods, especially 2D NMR.

Beside the main alkaloids and flavonoids isolated from *Fissistigma lanuginosum*, three other alkaloids were extracted from *Polyalthia hookerian* identified as lysicamine **41**, liriodenine and atherospermidine **42**.

ABSTRAK

Pengasingan dan elusidasi struktur juzuk-juzuk kimia bagi dua spesies Annonaceae yang terdapat di Malaysia telah dikaji. Struktur flavonoid dan alkaloid telah dielusidasi menggunakan kaedah spektroskopi. Dua spesies yang dikaji ialah *Fissistigma lanuginosum* dan *Polyalthia hookeerian*. Alkaloid telah ditemui dalam kedua-dua spesies tersebut manakala flavonoid hanya terdapat dalam *F. lanuginosum*.

Flavonoid yang dipisahkan dari *F. Lanuginosum* ialah pedicin **21**, 2',5'-dihidroksi-3',4',6'-trimetoksicalkon **22**, 5-8-dihidroksi-6,7-dimetoksiflavon **23**, fissistin **33**, isofissistin **34**, 3',4'6'-trimetoksi-2',5'-kuinocalkon **35** dan alkaloid pula ialah liriodenina **39** dan lanoginosina **40**. Dua calkon baru iaitu **33** dan **44** telah dielusidasi dengan kaedah spektroskopi terutama 2D RMN.

Disamping alkaloid dan flavonoid yang dipisahkan dari *Fissistigma lanuginosum*, tiga lagi alkaloid telah diekstrak dan diasingkan dari *Polyalthia hookerian* dan dikenalpasti sebagai lysicamina **41**, liriodenina **39** dan atherospermidina **42**.