CHEMICAL CONSTITUENTS OF *DESMOS DUMOSUS*, ROXB.

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ABSTRACT

The chemical content of the leaves and bark of *Desmos dumosus* has been carried out in this study. The leaves yielded nine isoquinoline type of alkaloids and two flavones.

The isoquinoline alkaloids isolated were pronuciferine **37**, stepharine **39**, nornuciferine **40**, (-) - 3 - hydroxynornuciferine **41**, norlirioferine **42**, asimilobine **43**, liriodenine **44**, lysicamine **45** and *O* - methylmoschatoline **46**.

The flavones were 5 - hydroxy - 6,7 - dimethoxyflavone **47** and 5 - hydroxy - 7,8 - dimethoxyflavone **48**.

The same flavones, **47** and **48** and the alkaloids **45** and **46** were also present in the bark of this species. Another two isoquinoline alkaloids, namely *O* – methylisopiline **49** and discretamine **50**, were found only in the bark of *Desmos dumosus*.

All the above compounds were isolated by using chromatographic techniques, whereas the structural formula of the isolated compounds were elucidated using spectroscopic methods such as ^{1}H NMR, ^{13}C NMR, COSY, MS, IR and UV.

ABSTRAK

Di dalam kajian ini, kandungan kimia terhadap pokok Annonaceae (Malaysia) iaitu *Desmos dumosus* adalah ditentukan. Penyelidikan yang dijalankan adalah pada bahagian daun dan kulit batangnya.

Pada bahagian daun, sembilan alkaloid jenis Isokuinolina dan dua flavon telah ditemui. Alkaloid yang ditemui ialah pronusiferina **37**, stefarina **39**, nornusiferina **40**, (-) - 3 - hidroksinornusiferina **41**, norlirioferina **42**, asimilobina **43**, liriodenina **44**, lisikamina **45** dan *O*-metilmoskatolina **46.** Manakala flavonnya pula ialah 5 - hidroksi - 6,7 - dimetoksiflavon **47** dan 5 - hidroksi - 7,8 - dimetoksiflavon **48**.

Flavon yang sama iaitu **47** dan **48**, dan alkaloid **45** dan **46** juga telah ditemui dalam bahagian kulit batang sepsis ini. Dua alkaloid isokuinolina lain, iaitu *O*-metilisopilina **49** dan diskritamina **50** telah ditemui hanya dalam kulit batang *Desmos dumosus* .

Kesemua sebatian diatas telah dipisahkan dengan menggunakan teknik kromatografi manakala formula struktur bagi sebatian yang dipisahkan itu dielusidasikan menggunakan kaedah spektroskopi seperti ^{1}H NMR, ^{13}C NMR, COSY, MS, IR dan UV.

ABBREVIATIONS

spp.	species
NMR	nuclear magnetic resonance
IR	infra red
UV	ultraviolet
ppm	parts per million
nm	nanometer
Hz	hertz
CHO	
CO	- C = O
m/z	mass per electron
D_2O	deuterated water
$CDCl_3$	deuterated chloroform
CCl_4	carbon tetrachloride
C_6D_6	deuterated benzene
$NaBH_4$	natrium borohydride
[O]	oxidation
[H]	reduction
GCMS	gas chromatography mass spectra
OMe	OCH_3
dd	doublet of doublet
d	doublet
s	singlet
EI	electron impact
APCI	atmospheric pressure chemical ionization