CONCLUSION
CONCLUSIONS

The following plants have been investigated for flavanoid and biflavanoid contents. The constituents identified are shown below each of them.

1. Lycopodium clavatum Linn. (Lycopodiaceae)

From the acetone extracts of the leaves of Lycopodium clavatum Linn., a new acylated flavone glycoside has been structurally elucidated as apigenin-4'-O-(2",6"-di-O-p-coumaryl)-β-D-glucoside mainly by Mass, $^1$H- and $^{13}$C-NMR spectroscopy.

2. Callitris glauca n.Br. (Cupressaceae)

The acetone extracts of the leaves of Callitris glauca n.Br. have been examined. The flavanoids, isolated and characterized, are given below. Those marked with aestrick are only detected.

i) 3',4',5,7,8-Pentahydroxyflavone (Hypolaetin)

ii) Amentoflavone

iii) Sequoiaflavone

iv) Hinokiflavone

v) Di-O-methylamentoflavone

vi) Kaempferol-5-O-rhamnoside.
Kaempferol-5-O-rhamnoside is a new naturally occurring glycoside.

3. **Garuga pinnata** Roxb. (Burseraceae)

The only product isolated from the leaf extracts of *G. pinnata* Roxb. has been characterized as amentoflavone.

This constitutes the first example for the occurrence of a biflavone in Burseraceae family.

4. **Cunninghamia lanceolata** Hook. (Syn. *C. sinensis*) (Taxodiaceae)

Examination of the phenolic extractives of the leaves of *Cunninghamia lanceolata* H. led to the isolation and characterization of the following biflavones.

   i) Amentoflavone
   ii) Robustaflavone
   iii) Sequoiaflavone
   iv) Hinokiflavone
   v) Isocryptomerin
   vi) 1,7,II-7-Di-O-methylamentoflavone
   vii) Apigenin
   viii) Kayaflavone.
nubstaflavone is being reported for the first time in Cunninghamia genus.

5. *nhus insignis* Hook. f. (Anacardiaceae)

The flavanones isolated from the acetone extracts of dried and powdered leaves of *nhus insignis* Hook. f. have been characterized as:

i) 3,7,3',4'-Tetrahydroxyflavanone
ii) 3,5,7,3',4'-Pentahydroxyflavanone
iii) 5,7,3',4'-Tetrahydroxyflavanone
iv) 5,7,4'-Trihydroxyflavanone.