

CHAPTER 4

CONCLUSION

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Chromatographic separation of the leaves of *Desmos dumosus* (Roxb.), resulted in the isolation of two proaporphines, four aporphines and three oxoaporphines together with two flavones. The colored compounds isolated were the oxoaporphines and the flavones. This was due to their extensive conjugated nature.

The bark of *Desmos dumosus* (Roxb.) afforded one aporphine, two oxoaporphines and one tetrahydroprotoberberine as well as two flavones. All the compounds isolated in the bark were found in the leaves except *O*-methylisopiline **49** and discretamine **50**. The compounds isolated from *Desmos dumosus* are listed in table 4 and the structures are shown in figure 6.

All the alkaloids isolated were biogenetically related to each other, which involved the sequence of benzyloquinoline-aporphine-aporphine-oxoaporphine-tetrahydroberberine. The proposed biogenetic relationship is illustrated in scheme 14.

The flavones obtained were also very similar in structure. Thus, this shows that chemical compounds produced in plants are interrelated to one another and it is of prime importance to continue chemical studies on these plants to understand the role of these chemicals and to discover their possible uses to humanity.

Table 4: Compounds isolated from *Desmos dumosus*

Compound	Group
pronuciferine 37	proaporphine
stepharine 39	proaporphine
normuciferine 40	aporphine
(-)-3-hydroxynormuciferine 41	aporphine
norlirioferine 42	aporphine
asimilobine 43	aporphine
liriodenine 44	oxoaporphine
lysicamine 45	oxoaporphine
O-methylmoschatoline 46	oxoaporphine
5-hydroxy-6,7-dimethoxyflavone 47	flavone
5-hydroxy-7,8-dimethoxyflavone 48	flavone
O-methylisopiline 49	aporphine
discretamine 50	tetrahydroprotoberberine

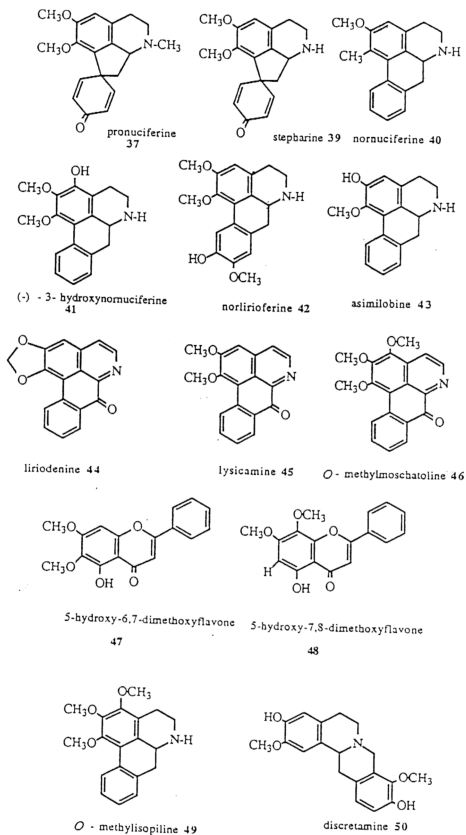
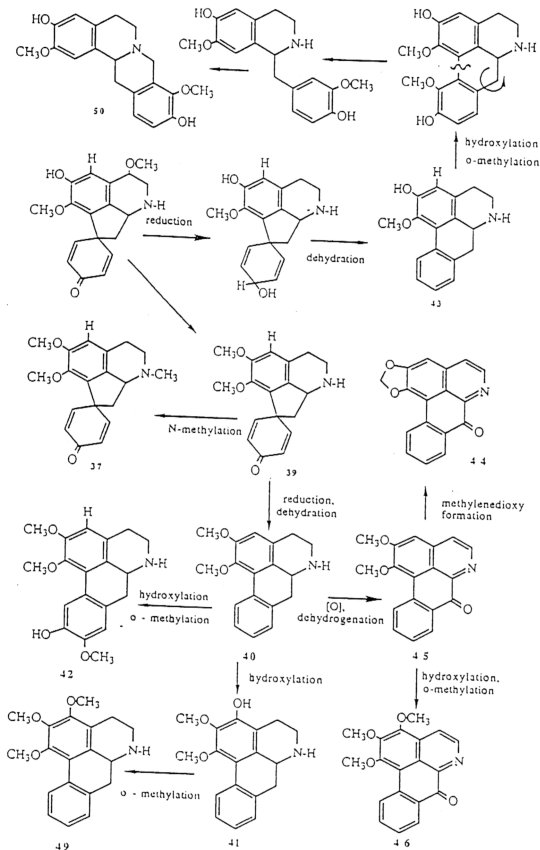


Figure 6: Structures of compound isolated from *Desmos dumosus*



Scheme 14: The proposed biogenetic relationship of the alkaloids isolated