E2-12 Dactyloidin, a new diarylnonanoid from *Myristica dactyloides*

H M T B Herath[1], A M A Priyadarshani[1], Wimal Padmasiri[2]
[1]*Institute of Fundamental Studies, Kandy* [2]*Dept of Chemistry, University of Colombo, Colombo 3*

In continuation of our studies on *Myristica* species of Sri Lanka, the hot dichloromethane extract of the root bark of *Myristica dactyloides* was investigated and found to contain a new compound, dactyloidin (1). Our previous chemical investigations on *M. dactyloides* afforded 8 aryl alkanones and 5 lignans. We have also reported the isolation and characterization of 4 aryl alkanones and a lignan from *M. ceylanica*. The structure of dactyloidin was suggested by ^{1}H and ^{13}C NMR, IR and High resolution Mass spectral data. Methylation of 1 with MeI/K_2CO_3 in acetone to give methylether, methyldactyloidin (2) and acetylation with acetic anhydride in pyridine to give the acetate, acetyldactyloidin (3) gave additional support for the structure.

Further, the comparison of the ^{13}C NMR spectral data of the pyran ring with that of the bicyclic ring system in averufin (4) isolated from *Aspergillus parasiticus*, indicated the presence of a similar bicyclic ring system. This is the first report of the isolation of a compound with this particular bicyclic ring system from the Myristicaceae family. The occurrence of diaryl alkanones such as malabaricone-B in *M. malabarica* and 1-(6-hydroxy-2-methoxyphenyl)-9-(4-hydroxyphenyl) nonan- 1-one (5) in *M. dactyloides* indicates a possibility of the occurrence of dactyloidin.