

FLAVONOIDS OF SOME SRI LANKAN GARDENIA GUMS

A. A. Leslie Gunatilake, S. R. Sirimanne and
S. Sotheeswaran,

(Department of Chemistry, University of Sri Lanka,
Peradeniya Campus, Peradeniya)

S. Balasubramaniam,

(Department of Botany, University of Sri Lanka,
Peradeniya Campus)

and

T. Nakanishi

(Faculty of Pharmaceutical Sciences, Osaka University,
Osaka, Japan)

Plants belonging to the genus *Gardenia* (Rubiaceae) produce a characteristic yellow bud exudate (gum), some having insect repellent properties. Claims about the medicinal properties of these gums¹ prompted us to investigate the gums of the two endemic species, *G. fosbergii* and *G. cramerii* and here we report the isolation of 4', 5' 7-trihydroxy-6, 8-dimethoxyflavone (I), 3, 5,5'-trihydroxy-3,4', 6,7-tetramethoxy-flavone (II), 3', 5, 6, 7-tetrahydroxy-3, 3', 5'-trimethoxyflavone (III), and 5-hydroxy-3', 4', 5', 6, 7-pentamethoxyflavone (IV) from the chloroform extract of the gums of *G. fosbergii* and the flavone (II) from the chloroform extract of the gum of *G. cramerii*. Presence of the flavone (IV) in the latter extract was indicated by TLC studies. This is the first report of the isolation of the flavone (IV) in a pure state for characterisation.

The presence of the flavones with an oxygen substituent at C-3 in the Sri Lankan *Gardenias* is of significance as none of the seventeen previously described flavones from the other *Gadenias*² contained this substituent at C-3.

Financial support from the National Science Council of Sri Lanka is gratefully acknowledged.

References

1. R. N. Chopra, I. C. Chopra, K. L. Handa and L. D. Kapur in *Chopra's Indigenous Drugs of India*, U. N. Dhur & Sons, Private Ltd., Calcutta, 1958, p.597.
2. S. L. Chaabra, S. R. Gupta, C. S. Sharma and N. D. Sharma, *Phytochemistry*, 1977, 16(7), 1109 and references cited therein.