

ANALYTICAL AND PHYTOCHEMICAL STUDIES ON GLORIOSA SUPERBA

M.A.N. Kumudini, L.S.R. Arambewela

Ceylon Institute of Scientific &amp; Industrial Research, Colombo 7.

*Gloriosa superba* is a potential commercial source of colchicine. The total alkaloids of leaves, tubers and seeds were determined by extracting with ethanol. The extract was dissolved in aqueous sodium sulphate, washed with ether and extracted with ether and extracted with chloroform after basification. The highest content of alkaloids (about 0.6%) was observed in the seeds. The alkaloids in the tubers varied from 0.2 - 0.4% and leaves from 0.05 - 0.2%.

The densitometric estimation of colchicine was carried out by scanning the plates at 350 nm. The highest colchicine content was found in the seeds. In the tubers, it varied from 0.05 - 0.2%. The colchicine content in the leaves was low (less than 0.05%). A variation in the total alkaloids and colchicine contents with maturity was also observed. The low values for colchicine reported by *Dunwille et al* may be due to loss during the process of isolation.

Isolation of the alkaloids and their identification by spectral methods revealed that colchicine was the major alkaloid in the mature plant while N-formyl desacetyl colchicine was also found in substantial quantities.

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*References*

- Dunwille R, Balasubramaniam, K. Bibile S.W., (1968)  
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