ISOLATION OF HYDROXYLATED TRITERPENE ACIDS FROM SEVERAL *SHOREA* RESINS

Z. A. M. Faisal, A. A. L. Gunatilaka, S. Sotheeswaran
(*Department of Chemistry, University of Peradeniya*)
and
I. A. U. N. Gunatilaka
(*Department of Botany, University of Peradeniya*)

The genus *Shorea* belongs to the family Dipterocarpaceae. More recently the Dipterocarp genus *Doona* has been absorbed into the genus *Shorea* (Ashton, 1972). Bisset *et al*. (1966) have investigated several *Doona* resins. However, the acidic fractions of the resins were not studied by them. Bandaranayake *et al*. (1975) studied the acidic fractions of the resins of *Dipterocarpus hispidus*, *Dipterocarpus zeylanicus*, *Doona congestiflora* and *Doona macrophylla* and isolated asiatic acid in large amounts. They also isolated ursolic acid from the resins of *Doona congestiflora* and

Doona macrophylla and also showed the presence of 2α, 3β-dihydroxy urs-12-en-28-oic acid in three of the resins studied by them. Since the genus *Doona* referred to above has now been incorporated into the genus *Shorea*, the present investigation was started with the view to obtaining a chemical justification to this botanical re-classification. The results of the analysis of the acidic fractions of some of the *Shorea* resins are given in Table I.

TABLE I

Name of Plant**	Percentage of Acids isolated*		
	I	II	III
Shorea worthingtonii Ashton (142) ..	32	13	20
Shorea worthingtonii Ashton (72) ..	17	11	20
Shorea disticha (Thw.) Ashton ..	18	25	24
Shorea congestiflora (Thw.) Ashton ..	18	14	15
Shorea stipularis Thw. ..	18	18	21
Shorea stipularis Thw. ..	23	12	16

* I—Asiatic acid; II—2α, Hydroxy ursolic acid; III—Ursolic acid.

** The girth size in cm. is given in parenthesis.

References:

1. Ashton, P. (1972), *Blumea*, XX, **2**, 357.
2. Diaz, M. G., Ourisson, G. and Bisset, N. G. (1966), *Phytochemistry*, **5**, 855.