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ISOLATION OF RHAZIMOL FROM THE LEAVES OF *CATHARANTHUS ROSEUS*

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We have previously reported the isolation and structure of 16-epi-19-*S*-vindolinine, 16-epi-19-*S*-vindolinine-*N*-oxide, fluorocarpamine-*N*-oxide, vindolinine-*N*-oxide, fluorocarpamine, and pleiocarpamine from the leaves of *Catharanthus roseus* (L.) G. Don. (Apocynaceae) (1,2). We now report the isolation of r hazimol, not previously reported from this plant but isolated from *Rhazya stricta* (3) and *Picralima nitida* (4).

EXPERIMENTAL¹

PLANT MATERIAL.—Leaves of *C. roseus* were collected from a field on the University Campus in April 1982. The plant was identified by Dr. Irtifaq Ali, Professor of Botany, University of Karachi.

EXTRACTION AND FRACTIONATION.—The crude alkaloids (120 g) obtained from the alcoholic extract of the air-dried leaves (20 kg) of the plant were dissolved in CHCl_3 (400 ml) and extracted with pH-3 phosphate buffer (1 liter). The CHCl_3 layer was dried (anhydrous Na_2SO_4), concentrated to one-third of its original volume and petroleum ether (300 ml) added to the CHCl_3 solution, which caused some of the alkaloids to precipitate out. The precipitates were filtered, and the filtrate was again concentrated to a gum (36 g). The gum was dissolved in EtOAc (200 ml) and extracted with pH-2 phosphate buffer (1 liter). The aqueous layer was separated, washed with CHCl_3 , basified with NH_3 to pH-10, and again extracted with CHCl_3 (1 liter) to afford fraction (F₁) (20 g). This fraction was chromatographed on an alumina column (200 g), elution being carried out with EtOAc (5 liters). The eluates were concentrated and again loaded (10 g) on another column of tlc grade silica (30 g). The column was eluted with increasing polarities of petroleum ether (1 liter), EtOAc-MeOH (2 liters) and MeOH (1 liter).

ISOLATION OF RHAZIMOL.—Preparative tlc of the MeOH fraction (1.0) in 20% Me_2CO -80% petroleum ether yielded r hazimol (5 mg).

Comparison of ir, uv, pmr, and ms spectral data with those reported in the literature for r hazimol, as well as comparison with an authentic sample of r hazimol isolated by us from *Rhazya stricta* leaves, unambiguously established the identity of the material as r hazimol (3). This alkaloid has not previously been reported from *C. roseus*.

Full details of isolation and identification are available on request to the senior author.

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¹Spectra were recorded on Jasco-IRA-1 ir spectrophotometer, Shimadzu uv-240 uv spectrophotometer, Finnigan MAT 312 mass spectrometer, and Brüker WP-100 SY nmr spectrometer.