ISOLATION OF APPARICINE FROM THE LEAVES OF ERVATAMIA CORONARIA

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Ervatamia coronaria Stapf (Apocynaceae) is a glabrous, evergreen tree that occurs abundantly in the gardens of West Pakistan. E. coronaria has found use in the indigenous system of medicine for the treatment of ophthalmia, for application on wounds and inflamed parts of the body, and as an anthelmintic. A number of alkaloids have been reported previously from the leaves, stem-bark, and roots of the plant (1-8).

We have isolated an alkaloid that has been identified by spectroscopic studies as apparicine, mp 192-194°, $\{\alpha\}D$ 177° (CHCl₃), not previously reported from the leaves of this plant.

EXPERIMENTAL

EXTRACTION AND ISOLATION OF APPARICINE.—Powdered *E. coronaria* leaves (50 kg) were extracted by percolation with EtOH. The crude extract was acidified and defatted with light petroleum ether and CHCl₃. The defatted extract was then basified with NH₃ solution and extracted with CHCl₃. The dried CHCl₃ extracts (30 g) were subjected to column chromatography on alumina. Elution was carried out with increasing polarities of light petroleum ether, EtOAc, and MeOH. The fraction obtained on elution with light petroleum ether-EtOAc (3:1) afforded an alkaloid (5 mg) that was further purified by preparative tlc on silica gel plates in Me₂CO.

The alkaloid was identified as apparicine on the basis of spectral data (ms, nmr, ir, and uv) which were identical with those reported in the literature (9). Apparicine has not been found previously in the leaves of this plant, but has been isolated from *Tabernaemontana cumminsii* (10), *Tabernaemontana citrifolia* (11), *Pandaca calcarea* (12), *Pandaca debrayi* (12), *Pandaca eusepala* (13), *Ervatamia orientalis* (14), and flowers of *E. coronaria* (15).

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