CADABICINE AND CADABICINE DIACETATE FROM *CRATAEVA NURVALA* AND *CADABA FARINOSA*

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We have reported several alkaloids from different Capparidaceous plants (1-3) including cadabicine (4) from *Cadaba farinosa* Forssk. We report here the isolation of cadabicine from stem bark of *Crataeva nurvala* Buch-Ham. (Syn. *C. religiosa* Hook., Capparidaceae), commonly found in Pakistan, which has many medicinal properties (5). In addition to cadabicine, cadabicine diacetate was also isolated from *Cr. nurvala* and *Ca. farinosa*. Their structures were elucidated by chemical and spectroscopic means and by comparison with authentic samples. This is the first report of the isolation of cadabicine diacetate from a natural source. No HOAc or EtOAc was used in the isolation procedure, and, therefore, the diacetate is a genuine alkaloid and not an artifact.

EXPERIMENTAL

PLANT MATERIAL.—The stem bark of *Cr. nurvala* was collected from Karachi and identified by a taxonomist of the Botany Department of Karachi University (herbarium No. SP.PL.444.1753).

EXTRACTION AND ISOLATION.—Air-dried and coarsely powdered stem bark of *Cr. nurvala* was extracted with EtOH. The EtOH extracts were processed according to standard procedure (4). The crude alkaloidal material, thus obtained, was chromatographed on a Si gel column using $CHCl_3$ and $CHCl_3$-MeOH-NH_4OH (8.5:1.4:0.1). The $CHCl_3$ fraction was concentrated and, when kept at 0°, deposited crystals of cadabicine diacetate. After recrystallization from MeOH, pure cadabicine diacetate was obtained. Fractions obtained from the $CHCl_3$-MeOH-NH_4OH elution were combined, concentrated, and kept in MeOH at 0° yielding pure cadabicine. Both these compounds were characterized by spectroscopic and chemical methods and also by direct comparison with authentic samples. Details are available upon request to the main author.

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