[Jour. Indian Chem. Soc., Vol. 47, No. 9, 1970]

NOTES

Tiliacoridine—A New Alkaloid from *Tiliacora racemosa* Colebr

A. K. Barua, (Miss) P. Chakrabarti and A. S. Dutta Gupta

The isolation of two alkaloids tiliacorine[1,2,3] and tiliarine[4] from *T. racemosa* Colebr was reported earlier. Recently Anjaneyulu *et al.*[5] have reported the isolation of three other new alkaloids, tiliacorinine, nortiliacorinine A and nortiliacorinine B from the leaves of the same plant. We wish to report here the isolation of another new alkaloid called tiliacoridine from the leaves of *T. recemosa.*

Using a very tenacious process of column chromatography over silica gel and neutral alumina, we have been able to isolate from the crude alkaloidal fraction a very small quantity of tiliacoridine, m.p. 153–56° (dec.). Analytical values for tiliacoridine were unsatisfactory most probably due to retention of solvent of crystallization. Its molecular formula, $C_{39}H_{40}O_8N_2$, was however, determined by its molecular ion at m/e 664 (accompanied by doubly charged ion peak at m/e 332) and by the high resolution measurement of exact mass of the former. Its uv. spectrum, λmax 292 mμ (log ϵ 3·94), λmin 264 mμ (log ϵ 3·52) is very similar to that of tiliacorine and tiliarine and this indicated the probability of tiliacoridine being a bisbenzyl tetrahydroisoquinoline group of alkaloids. But unlike tiliacorine and tiliarine, tiliacoridine does not appear to contain any dibenzo-*p*-dioxan system as it did not give any blue colour with a mixture of concentrated sulphuric and nitric acid[6].

The NMR spectrum (220 MHz, $CDCl_3$) of tiliacoridine shows the presence of three methoxyl groups (δ 3·99, 3·94 and 3·82 ppm) and eight aromatic protons but no N-CH_3 group.

Due to the extremely poor yield and difficulties in isolating tiliacoridine, no further work has yet been possible.

The authors wish to thank Prof. S. M. Sircar, Director and Dr. A. Sen, Head of the Department of Chemistry, Bose Institute for their interest in this work. The high resolution mass measurements were kindly carried out by Dr. David A. Evans, M.I.T., Mass., U.S.A. and Dr. B. C. Das, C.N.R.S., France, to whom our thanks are due. The authors are also grateful to Dr. W. C. Jankowski of Varian Associates, U.S.A. for the NMR spectrum.

Department of Chemistry,
Bose Institute,
Calcutta-9.

Received March 30, 1970

1. L. Van Italie and A. J. Stenhauer, *Pharm. Weekbald.*, 1922, **59**, 1381.
2. N. Saraswathi Bai, *Bull. Central Research Inst. Univ.*, Travancore, Series A, 1954, **3**, 109 : *Chem., Abstr.*, 1955, **49**, 11794.
3. K. V. Jagannadha Rao and L. R. Row, *J. Sci. Ind. India*, 1957, **16**B, 156.
4. K. V. Jagannadha Rao and L. R. Row, *ibid.*, 1959, **18**B, 247.
5. B. Anjaneyulu, T. R. Govindachari, S. S. Sathe, N. Viswanathan, K. W. Gopinath and B. R. Pai, *Tetrahedron*, 1969, **25**. 3091.
6. I. R. C. Bick and A. R. Todd, *J. Chem. Soc.*, 1950, 1606; M. Tomita and C. Tani, *J. Pharm. Soc.*, Japan, 1942, **62**, 94.