

Two simple amine hydrochlorides from the soft coral *Lobophytum strictum*†

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Two simple amine hydrochlorides, viz., 1-amino-1,1-dimethyl-3-oxo-butane hydrochloride (I) (Diacetona-mine) and 2,2,6,6-tetramethylpiperidone hydrochloride (II) have been isolated from the fraction of the methanolic extract of the soft coral *Lobophytum strictum* and characterized from their spectral data.

Our preliminary investigations show that crude methanolic extract of the soft coral *Lobophytum strictum* has promising hypotensive activity in *in vivo* tests (25 mg/kg, 27-30 min). We have earlier communicated the isolation and characterisation of sterols and batyl alcohol from its lipid fraction¹. Herein we report the isolation and structure elucidation of two simple amine hydrochlorides I and II from its water-soluble fraction. Their structures have been assigned on the basis of the spectral data (IR, ¹H NMR, ¹³C NMR). Compound II has been reported to exhibit hypotensive and vasodilator activities². This is the first report of the isolation of these two compounds from a marine source.

Experimental

The polar water-soluble fraction was partially concentrated under reduced pressure and extracted with large excess of acetone. The acetone layer was concentrated at 40°C in a rotary evaporator and the

residual mass was column chromatographed over silica gel using CHCl₃-MeOH gradient system. The TLC of various fractions showing two major spots were combined and compounds I and II were isolated by preparative TLC (SiO₂, CHCl₃-MeOH-AcOH, 60:10:5). Both the compounds gave white precipitates with silver nitrate.

Compound I: R_f=0.3; IR (nujol): 3250-2600, 1710, 1500, 1370 cm⁻¹; ¹H NMR (CDCl₃): δ 8.45 (br, 3H), 3.0 (s, 2H), 2.2 (s, 3H), 1.55 (s, 6H); ¹³C NMR (CDCl₃): 207.98 (s), 53.54(s), 50.41(t), 31.25(q) and 25.84 (q).

Compound II: m.p. 188° (lit.²: 188-190°); IR spectrum identical with that of an authentic sample³; ¹H NMR (CDCl₃): δ 9.76 (br, 2H), 2.81 (s, 4H), 1.74 (s, 12H); ¹³C NMR (CDCl₃): 203 (s) 60.54(s), 50.40(t), 27.63(q); EIMS: 191(M⁺, v. weak), 155(M - HCl)⁺, 139, 111, 97 etc.

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