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STUDIES ON MARINE ORGANISMS OF SRI LANKA : DISTRIBUTION OF STEROLS AND THEIR DERIVATIVES

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During our studies directed towards the isolation of biologically active constituents from marine organisms of Sri Lanka, we carried out a preliminary survey of two unidentified organisms, a soft coral and a sea anemone, for their regular sterol compostion.

Regular sterol mixtures were obtained from the light petroleum extracts of these organisms by column and preparative thin-layer chromatographic separations and their compositions studied by gas chromatography and gas chromatography–mass spectrometry (GC–MS). Sterol mixture from the sea anemone was found to contain cholesterol (minor) and 24β–methylcholesterol (major). Sterol mixture derived from the soft coral contained cholesterol, brassicasterol (22–dehydrocampesterol), 24β–methylcholesterol, 23–demethylgorgosterol, and gorgosterol (major).

From the hot methanol extract of an unidentified sea cucumber (Holothurian), after acidic hydrolysis, was obtained a pure compound, m.p. 315–316^{0}C, $(\alpha)_D$–21^0, whose spectral data indicated it to be the known 22,25–oxidoholothurinogenin.