



WHERE $M = \text{Co(II)}, \text{Cu(II)}, \text{VO(IV)}, \text{Pt(II)} \text{ OR } \text{Ni(II)}$;
 $L = -\text{CH}_2\text{CH}_2-(\text{H}_2\text{PP}) \text{ OR } \text{C}_6\text{H}_4-(\text{H}_2\text{PB})$

Figure 1. Bivalent metal chelates of $o(\alpha$ -Pyridonemino) propanoic acid (H_2PP) and $o(\alpha$ -Pyridoneimino) benzoic acid (H_2PB).

metric COO^- stretching vibrations and has shown the presence of localized $-\overset{\text{O}}{\text{C}}-\text{O}-\text{Cu}$ structure, which shows carbonyl stretches in the $1660-1680 \text{ cm}^{-1}$ range¹. cm^{-1} range².

Based on analytical, spectral and magnetic studies these chelates may be represented by structure as shown in figure 1.

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A CHEMICAL EXAMINATION OF THE FUNGUS *STEREUM ELEGANS* RICH IN ERGOSTEROL

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DURING the chemical investigation of the wood-rotting fungi, a fungus growing under the shade of AONLA (*Emblice officinalis* Gaertn. syn. *Phyllanthus emblica* L.) trees was noticed on the lawns of the Safdarjung Tomb in South Delhi. It was identified as *Stereum elegans* by the Forest Research Institute, Dehra Dun (Specimen No. 8444, as incorporated in FRI Herbarium). The fungus has a flower-like physical appearance.

Stereum is a genus belonging to Friesian family, Thelephoraceae, which has about 900 species in 33 genera. About 100 species have been described under this genus¹. Some of the species of *Stereum* have been examined earlier for their chemical components²⁻⁶ which mainly belong to the groups of sesquiterpenes, benzofurans, proteins, polysaccharides and polyacetylenes.

In the present work, *S. elegans* has been extracted successively with light petroleum and acetone. The light extract on concentration and cooling yielded ergosterol (0.17% yield). The mother liquor was a complex mixture of small amounts of compounds which could not be separated even by chromatography. The acetone extract on concentration and subsequent extraction with benzene gave more of ergosterol (0.04%). Ergosterol is thus reported for the first time from *Stereum* genus and the present species seems to be a good source.

Experimental part

The air-dried fungus (100 g) was extracted exhaustively with light petroleum and acetone in succession in a Soxhlet apparatus for 6 hr each. The light petroleum extract was concentrated and cooled when a colourless solid separated out. It was crystallised twice from light petroleum when ergosterol was obtained as needle shaped (170 mg). The identity was confirmed by m.p. and m.m.p. with an authentic sample 163° (lit. m.p. 163°), TLC: R_f in CHCl_3 0.35 IR, NMR and mass spectra were superimposable with those of the authentic sample. Further, it formed an acetate giving colourless crystals, m.p. 176° (lit. m.p. 176°).

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