

Striations of secondary wall and distinct pit canals (Fig. 1 C, D). The lumen is divided into two or three equal or unequal chambers by one or two thin septa. The septum extends only up to the innermost secondary wall layer. Earlier report shows the negative reaction to cellulose tests by such septa<sup>2</sup>. However, the thin septa are found to be PAS-positive in the present investigation (Fig. 1 A, D). The compartments possess one nucleus each (Fig. 1 D). The lumens of the sclereids may be broad (Fig. 1 C) or narrow (Fig. 1 D). Amorphous PAS-positive substance was also observed in the lumen of sclereids (Fig. 1 A, C). The earlier report of De Bary<sup>1</sup> and Aranda Rao<sup>2</sup> confine to long and branched sclereids resembling fibres. Unlike this, our observation, probably, is the first report of occurrence of septate macrosclereids.

This work was carried out under the UGC project on "Studies of sapwood and heartwood of forest trees of Gujarat".

Department of Botany,  
Sardar Patel University,  
Vallabh Vidyanagar 388 120,  
September 7, 1976.

P. M. ELDO.  
J. D. PATEL.  
J. J. SHAH.

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#### CHOLESTEROL SYNTHESIS IN COLLETO-TRICHUM DEMATIUM (PERS. EX. FR.) GROVE

STEROLS are known to occur in dilute concentrations in a large number of fungi. Ergosterol, a fungi sterol is quite wide-spread and is known from diverse groups of fungi. Its amount is usually 1.0% or less of the total dry weight of the mycelium<sup>1</sup>. A comprehensive survey has been made by Pruess<sup>2</sup> and others<sup>3</sup>. The highest level (1.7%) so far reported is from *Pacilomyces variotii*. Cholesterol, which is a precursor of several metabolites and ergosterol have not been reported previously from the fungi while some other sterols (except ergosterol) have been tentatively identified. The present investigation reports cholesterol in four isolates of *Colletotrichum dematium*. The isolates were obtained from leaf spots of different medicinal plants. The isolates were grown in Asthana and Hawker's medium A and the mycelium was harvested after 10 days of incubation. Preliminary tests for cholesterol were done by the method suggested by Plummer<sup>4</sup> and quantitative estimations by colorimetry<sup>5</sup>. The results are presented in Table I.

TABLE I

Showing amount of cholesterol in the dried mycelial mats of different isolates of *C. dematium*

Isolates	Growth yield (in mg)	Total amount of Cholesterol in dried mycelium (mg.)	Percentage of cholesterol
I	89.4	1.143	1.28
II	82.0	1.180	1.44
III	92.2	0.885	0.96
IV	110.8	0.894	0.80

Interestingly, the highest percentage of cholesterol was an isolate (II) which had comparatively a poor growth rate, while the lowest percentage was in an isolate (IV) with maximum growth. This appears to suggest that higher cholesterol content retards growth in *C. dematium*. It may be mentioned that fluctuation in the percentage of sterols as seen here has previously been reported in different single spore strains of fungus<sup>6, 7</sup>.

Further work is in progress.

Post-graduate Department of Botany, Bhagalpur University,  
Bhagalpur-812007,  
November 1, 1976

A. K. ROY.  
K. S. BILGRAMI.

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