

flares up suddenly and rapidly after half the length of the con-in-cone structure. Sometimes the width increases gradually also. The base of the single cone varies in diameter from 0.6–10 cm, and almost circular to ovoidal in outline.

The first report of cone-in-cone structure was by David Ure from Scotland. Hausmann mentioned it as 'tutenmergel' (cone-in-cone) structure. Murchison illustrated a similar structure from the Silurian system under the name "*Cophinus dubius*" supposed to be a fossil zoophyte (cited in Tarr⁴). Later several workers reported and discussed these structures from different parts of world and from almost all ages of sediments. From India Chandra and Gupta² described such a structure in coals from West Bokaro coal-field. Kumar *et al.*⁵ have reported such a structure from Upper Flysch series (U. Cretaceous) of Malla Johar area, Uttar Pradesh. From the Upper Cretaceous rocks of South India this is the first descriptive record of con-in-cone structure.

The origin of the cone-in-cone structure has been variously discussed by different workers. Some are of the opinion that it is due to crystallisation of calcite, while others think pressure has played a major role. Particularly opinions differ very much as to the time of development of these structures. Generally there are three broad views as to the origin. In the present case the author feels that it may be the result of stress developed due to the overlying sediments and/or to pressure connected with the growth association of concretions in these beds. The evidence of faint slickensided features on the surface of the cone-in-cone structures also indicate the probable diastrophic effects. These structures are useful in understanding the diagenetic events of the sediments. A detailed investigation is in progress.

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Dept. of Post-graduate Studies and Research in Geology,
University of Mysore, Manasa Gangotri,
Mysore 570 006, India, June 2, 1978. *

M. N. MALUR.

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A REPORT OF ANTIBIOTIC PRODUCING MOLD FROM SOIL

DURING the survey of mold flora of Nagpur soil, the authors obtained a mold that produced dark yellow pigmentation in the culture medium. The mold grown on PDA for 5 days at 25° C forms orbicular, floccose, dense white colony measuring 3–5 cm in diameter. The microscopic observation of the mold showed that it consisted of septate, branched mycelium and conidiophores arising as short erect branches from aerial hyphae and measured 3.3 μ to 29.7 μ . Conidia were numerous, elliptical, straight, hyaline and were 1.33 μ to 3.99 μ in size. On the basis of the aforesaid characters the mold was identified as *Cephalosporium acremonium* Corda.

When the culture filtrate of *Cephalosporium acremonium* was assayed for antibiotic property, it was found to inhibit the growth of *Staphylococcus aureus* and *Salmonella paratyphi B*, completely. Chromatographic studies of the culture filtrate indicated the presence of cephalosporin N.

The culture of *Cephalosporium acremonium* has been deposited at Division of Mycology and Plant Pathology, I.A.R.I., New Delhi and at Commonwealth Mycological Institute, Kew, Surrey, England.

Many antibiotic producing species of *Cephalosporium* have been recorded from soils of different parts of the world^{1,2}. A careful survey of the literature^{3,4} reveals that this is the first report of isolation of *Cephalosporium acremonium*, an antibiotic producer, from Indian soil.

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University Department of Biochemistry and Microbiology,
K. V. SHANKHAPAL,
M.G. Marg, Nagpur 10,
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