subsequently collapse (Ellis, 1971). Some specimens of this interesting hyphomycete were collected from the State of Andhra Pradesh and Maharashtra of which some revealed features of interest like the production of branched synnemata (polycephalous) and the distribution of the conidiogenous vesicles on the newly formed conidiophores. The same are presented herein.

The synnemata of all the collections are effuse, erect, mostly monocephalous, unbranched with a small or broad capitate to fan-shaped head. The conidiogenous vesicles are distributed terminally and laterally all along the conidiophores as found in the type. *Fusarium* sp., growing as a mycoparasite on the heads of some synnemata was observed (MRL 732). Production of polycephalous synnemata, a character not known in *Psathrama)a,* was found in one of the collections (MRL 1535) wherein the new coremia originate from the mother stalk consisting of parallel hyphae. Some of the hyphae of the mother stalk come out laterally or at right angles and form a new synnema. The process takes place at 2 or 3 different points and also it is repeated in the newly produced synnema. As a consequence, coremia with only 3–4 hyphae are formed. Thus the thickness of the stalk and the number of hyphae constituting the new coremia is far less than the mother stalk and coremium. It is pertinent to note that new coremia never originate from the head part. The number and distribution of the conidiogenous vesicles on the newly formed conidiophores is either fewer or often possesses a terminal vesicle. The proliferation of the conidiophores reported from the apical conidiogenous vesicle (Dev Rao, 1972) has been observed in the present collection too. In addition, it shows proliferation from the base of the vesicle (apical) during which it is pushed to one side. It is significant to point out that the newly formed conidiophore (after proliferation) is invariably sterile.

The present taxon (MRL 1535) is similar to the type in all the morphological details, however, differs in having branched synnemata. Occurrence of both the branched and unbranched (about 50%) synnemata in the same collection does not warrant its classification in a new species. The study of factors influencing the formation of coremia received little attention in the past despite the fact that in some hyphomycetes its formation is mandatory for sporulation (Barron, 1968). The only studies of Taber (1961), Taber and Vining (1959), Loughheed (1961, 1963) and Carlile *et al* (1961) on *Isaria cretaaea, Hirsutella gigantea* and *Penicillium claviforme* suggest that the structure and development of synnema is an expression of nutritional and environmental factors. However, nutritional factors tested may be only a fraction of those that are theoretically possible and are likely to occur in nature. An account of the formation of synnema in this hyphomycete and allied taxa will be presented elsewhere.

P. sundara, the type, was originally collected from Narsapur forest (Medak, A. P.). The present study reveals its occurrence at high altitudes (Adilabad) and also in a valley (Araku Valley).

Specimens stulied : On unidentified barks, Narsapur forest (Medak), Oct. 1962. DR, MRL 734; Nov. 1962, DR., MRL 735; Nov., 1965, DR., MRL 733; on unidentified woods and barks, Adilabad, Jan. 1974, DR., MRL 1178, 1177; Parbhani (Maharashtra). Oct. 1975, DR., MRL 732; on unidentified twigs, Araku Valley. Jan. 1976, DR., MRL 1367; on unidentified barks, Forest Nursery Gunegal, Sept. 1977, DR., MRL 1535.

The Research Grant made available to Dr. Dev Rao by the University Grants Commission, New Delhi, to study the synnematous genera is gratefully acknowledged.

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PTERION ARRANGEMENT IN THE RHESUS MONKEY (*MACACA MULATTA*)

PTERION is an area in the temporal fossa of the cranium where the frontal, sphenoid, parietal and squamous part of the temporal bone closely adjoin one another. An irregular H-shaped arrangement of sutures can be seen in the anterior part of the fossa. Among old-world primates, two types of sutural formation at the

pteric region can be recognised[1]. In man, the more or less horizontal limb of the H is formed by the sutures between the anterior-inferior part of the parietal and the upper border of the greater wing of the sphenoid bene (Spheno-parietal pterion). In monkeys, the frontal and the temporal bones articulate at this place (Fronto-temporal pterion)[1]. The spheno-parietal type of pterion is considered typical of man, while the fronto-temporal type is characteristic of monkeys.

It has been observed while examining the crania of Rhesus monkey that, though the fronto-temporal arrangement of pterion is more common, spheno-parietal pterions may also be found. Present note records the incidence of spheno-parietal type of pterions in Rhesus monkey.

In all a total of 434 pterions were examined basing the observations on 113 male and 104 female skulls. Age has no effect on the type of articulation because a particular type of sutual arrangements in the pteric region is present at the time of birth and does not change afterwords[2]. No distinction was made for left and right as side also seems to have no effect on the type of contact[2]. The results of the observations are as under:

	Males	Females
Total No. of Pterions	226	208
Fronto-temporal (F–T)	188 (83·2%)	181 (87·0%)
Spheno-parietal (S–P)	38 (16·8%)	27 (13·0%)

This type of variation has been recorded in macaques (11·3%)[3], gorilla (1·3%)[4] and chimpanzee (11·2%)[4]. In man, orang-utan and gibbon, though the articulation is of spheno-parietal type, variation for the fronto-temporal contact has also been recorded (European, 1·9%; Orang-utan 29·0% and Gibbon 19·4%)[4]. The incidence for a few Indian populations has been recorded as 9·26% (Uttar Pradesh), 3·70% (Bihar) and 13·10% (Andhra Pradesh)[5].

Reasons for this dichotomy of form are associated with differential ossification in the bones of this region[6]. Both genetic and environmental factors can cause the differential ossification leading to this variation[6]. The manifestation of this variant in the skeleton being developmental in origin, its presence or absence forms a part of natural variation of a species[6]. It is probable that those regions which show greater differences in the arrangement of bones may be regarded as regions in which "phylogenetic stability" has not yet been achieved[7–8].

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ALLOXAN INDUCED LEUKEMOID CONDITION IN A FRESH WATER TELEOST *CLARIAS BATRACHUS*

Clarias batrachus weighing 70 to 100 g. were collected from local fresh water resources and acclimated to the laboratory conditions for 7 days before starting the experiment. A 1% (W/V) solution of alloxan (Alloxan hexahydrate) was prepared immediately prior to use in citrate-phosphate buffer at pH 4·0. The dosage of alloxan injected intramuscularly contained 50 mg/kg body weight which was repeated in 42 experimental fishes every third day. Small groups of 6 treated fishes were autopsied 24 hours after the last dosage and the blood was collected from the caudal vein after 1, 10, 20, 30 and 40 days of the initial dosage when fishes reached to comasate condition and finally died. The results were compared and confirmed with those of 14 control fishes which were given equal amounts of citrate-phosphate buffer at pH 4·0.

In many alloxan treated fishes, the skin at the site of injection became red and swlloen after 3rd dosage. The swelling increased markedly after 30 days of treatment and the skin showed wide discolouration. The swelling finally became an open wound after 30 days and the fishes reached to comasate condition during 35 to 40 days of the initial dose. However, there was no mortality recorded upto 40 days of the treatment. After 40 days the wounds at injection site became enlarged and fishes started dying. The observations were made only upto 40 days of the treatment.

No appreciable change was recorded in the leucocyte count after 24 hours of the initial dose of alloxan. Regular increase in the number of leucocytes was observed after 10, 20, 30 and 40 days of the treatment (Table 1). No immature leucocyte could be seen in the blood smears upto 20 days of the treatment. Only a few immature leucocytes were encountered in the blood smears after 30 days of treatment while after 40 days of alloxan treatment (Fig. 2) approximately 50% of the total leucocytes were found to be immature (mainly myelocytes and few myeloblasts: recognised after Klontz *et al.*[2]). Karyokinesis was