

sporeshedding rates under the given set of temperature and light conditions.

Although the effect of salinity on the growth and distribution of such diverse members like *Chondrus*, *Gigartina*, *Laminaria*, etc., have been studied by previous workers^{4,5}, its effect on spore liberation has not been recorded. Matsui⁶ who studied two species of *Gloiopeltis*, *G. tenax* and *G. furcata*, observed that tetraspore liberation was not significantly influenced by salinities between 17‰ and 52‰ and that their liberation rates decreased at salinities of 12‰ and 60‰. In contrast, our results show that salinity does effect the spore output, at least in *G. corticata*, and that there is an optimum range at which spore shedding is enhanced. Further studies in this direction on *G. corticata*, *Gracilariopsis*, *Hypnea* and other occurring along the Visakhapatnam coast are in progress.

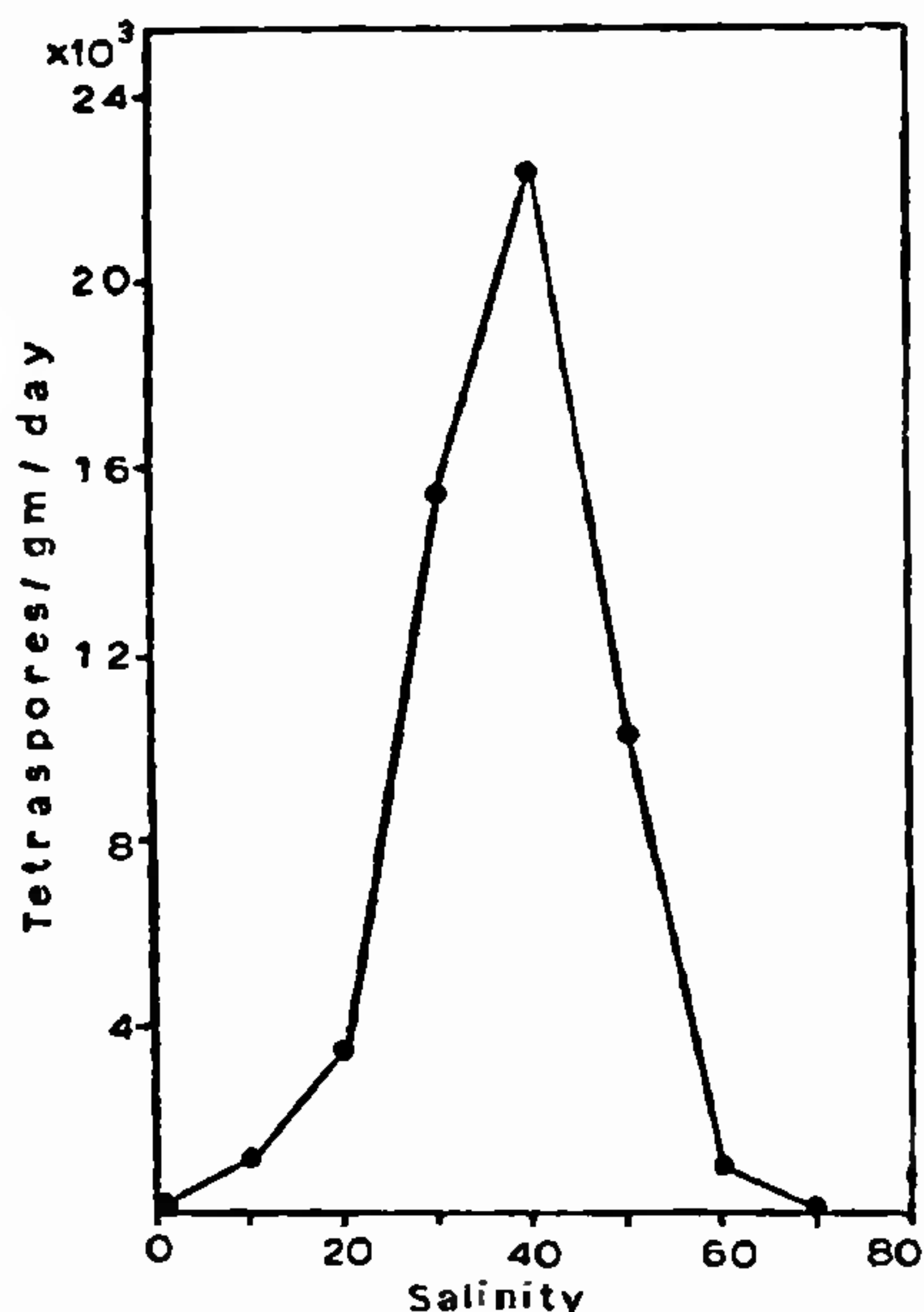


FIG. 1. Influence of salinity on tetraspore output in *Gracilaria corticata*.

The authors are grateful to late Prof. T. Sreeramulu for his kind help and encouragement. One of us (G. S. R.) is thankful to the C.S.I.R., for the award of Junior Research Fellowship.

Botany Department,
Andhra University,
Waltair,
June 20, 1975.

G. SUBBA RANGAIAH.
M. UMAMAHESWARA RAO.
B. G. S. RAO.

1. Umamaheswara Rao, M., *Bull. cent. mar. Fish. Res. Inst.*, 1970, No. 20.
2. —, *Bot. Marina*, 1974, 17, 207.
3. —, and Sreeramulu, T., *J. Ecol.*, 1964, 52, 595.
4. Norton, T. A. and South, G. R., *Okios*, 1969, 20, 320.
5. Burns, R. L. and Mathieson, R. C., *J. exp. mar. Biol. Ecol.*, 1972, 8, 1.
6. Matsui, T., *J. Shemonoseki. Univ. Fish.*, 1969, 17, 89.

SPINELESS MUTANT IN *SOLANUM KHASIANUM* CLARKE

COMMERCIAL cultivation of *Solanum khasianum* Clarke is made difficult by its thorny nature. Several attempts to develop spineless mutants have met with varying degrees of success. Notable among these are a curved spine mutant¹ and a less spiny mutant². However, in our mutation experiments, we were able to isolate almost fully spineless forms.

Seeds of *S. khasianum* of a commercial variety having a high alkaloid content (2.0–3.0% on dry weight basis) were given 20 and 30 kr doses of gamma radiation from a Co⁶⁰ source. Some of the highly vigorous R₂ plants were treated with 0.01 and 0.02 NMU. A M₃ progeny from the former treatment, produced some plants which are almost completely spineless (Fig. 1). These mutants are



FIG. 1. Spineless mutant in *Solanum khasianum*.

fully fertile and produce fruit profusely. The stems, younger leaves and floral parts are all devoid of thorns. However, an occasional rudimentary spine appears on one or 2 leaves probably due to

differential penetrance or expressivity. Large scale cultivation of the mutant is underway.

The authors are grateful to Dr. G. S. Randhawa, Director, Indian Institute of Horticultural Research, for his interest and encouragement.

Indian Institute of
Horticultural Research,
Bangalore 6, June 23, 1975.

U. R. MURTY.
K. ABRAHAM.

1. Bhatt, B., *Curr. Sci.*, 1972, 41, 889.
2. Anonymous, *News Letter*, Reg. Res. Labs. Jammu, 1975, 2, 5.

A NEW SPECIES OF *THAROOPAMA* SUBRAM.

SUBRAMANIAN (1956)³ described *Tharoopama* with *T. trina* as the type growing on dead culms of *Cynodon dactylon* Linn. and on dead pods of *Caesalpinia pulcherrima* Sw. In addition to the type species, Subramanian (1956) made *Trichosporium arborescens* Penz. and Sacc. congeneric with *Tharoopama*. *Tharoopama* is a dematiaceous fungus which is characterized by erect, superficial, conspicuous, brownish synnemata with a well defined stalk and fertile head composed of closely aggregated, parallel, septate, brownish hyphae; the fertile head constituted by the individual hyphae which are continued from the stalk, repeatedly branched, becoming progressively free in the fertile part, the ultimate branches (conidiogenous cells) arise in pseudoverticils; the ultimate branches being hyaline to brown, geniculate, cutting off hyaline, globose, one-celled conidia acrogenously. Patil (1964)²; Kapoor and Munjal (1966)¹ have reported *Tharoopama trina* Subramanian, growing on fallen leaves of *Ficus hispida* Roxb. and on dead culms of *Cynodon dactylon* Linn., respectively.

During a survey of microfungi from Warangal area, the authors have come across a species of *Tharoopama* Subramanian, growing on dead leaves of *Phoenix sylvestris* Linn. On comparison, the present fungus is found to differ from the other known species in the general morphology, size, shape of the synnemata, conidiophores and conidia, besides occurring on a new substratum. Hence, it is described as a new taxon.

Tharoopama naimnagarensis sp. nov. Reddy, Reddy and Manoharachary

Synnemata scattered, conspicuous, superficial, erect with short, simple, dark-brown stalk and sub-hyaline spreading fertile head; synnemata 375–535 μm long; stalk simple, cylindrical, measuring 50–61 μm across at the base and 38.8–50.0 μm in the farther region; the fertile head measuring upto 550 μm in diameter, consisting of individual, loosely arranged, fertile branched hyphae which are con-

tinued from the stalk to form conidiophores; conidiophores sub-hyaline to pale-brown, septate, repeatedly branched (1–3 times), ultimate branches fertile (conidiogenous cells) arranged pseudoverticillately, 25–67.5 \times 1.5–2.5 μm , geniculate; conidia produced acrogenously from the tips, conidia hyaline, ellipsoidal and beaked, one-celled, with a basal scar, 3.25–5.6 \times 1.3–2.3 μm (Fig. 1).

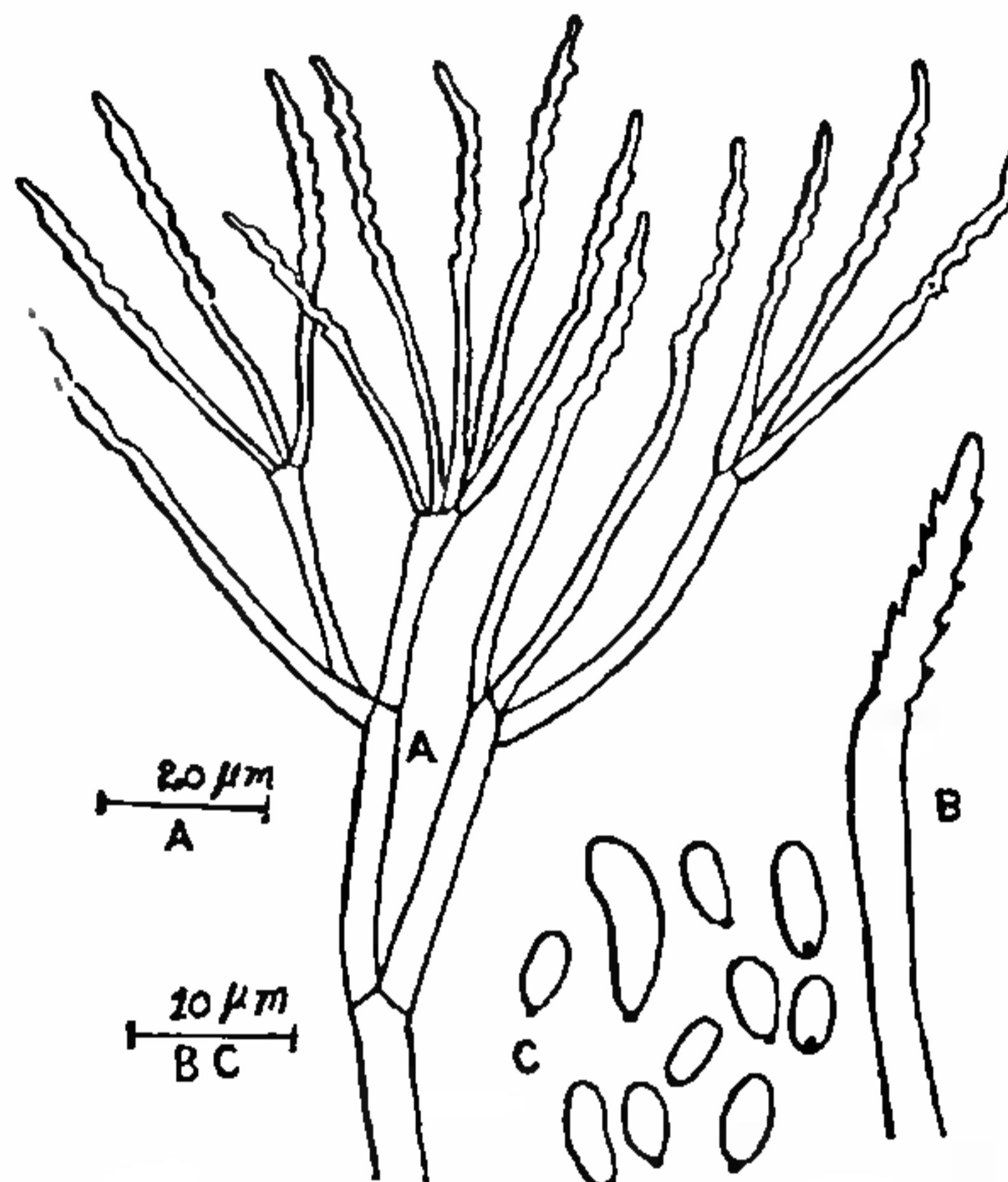


Fig. 1



D

FIG. 1. *Tharoopama naimnagarensis* sp. nov. A, Portion of Conidiophore showing Pseudoverticillate branching; B, Sporogenous cell; C, Conidia; D, Photomicrograph showing the Synnemata, \times 200.

Collected on fallen leaves of *Phoenix sylvestris* Roxb. September 23, 1973; Naimnagar, Warangal, A.P., India. Type deposited in the Department of Botany, Post-Graduate Centre, Warangal, Herb. No. PGCF, 192.