

ous concentrations of U and Th is suggestive of a possible genetic link between the syenitic magma and the mineralizing hydrotherms. This, however, needs further study.

We thank Mr. A. V. Phadke, Director, Atomic Minerals Division for encouragement and permission to publish this note. This work was guided by Mr. T. M. Mahadevan and Mr. B. N. V. Raju, and the former critically reviewed the manuscript. M/s A. C. Saraswat and M. Ramachandran are thanked for field guidance, Dr. S. Sagar and Mr. P. Rajasekharan for fruitful association in the field investigations and M/s. Y. Lal B. N. Tikoo and P. V. S. Naidu and their associates for analytical support.

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### **TRICHODERMA PSEUDOKONINGII RIFAI AGGR: A NEW RECORD FOR INDIA**

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DURING a survey of moulds on cattle feed in Nainital, a species of *Trichoderma* viz., *T. pseudokoningii* was isolated from bran. A perusal of lists of fungi identified so far, including Bilgrami *et al.*<sup>1</sup>, revealed that this is the first report of the species from India.

Colonies on Potato dextrose agar and Czapek's solution agar white at first, becoming light green in 4-5 days. Vegetative hyphae septate and hyaline. Conidiophores arise as branches of aerial mycelium; phialides nine-pin-shaped (narrow at the base and more so above); arise singly and laterally; 5-13.5  $\mu\text{m}$  long and 1.4-3  $\mu\text{m}$  wide in the centre. Conidia thin-walled, smooth, hyaline, oval to slightly globose; 2.8-5.5  $\times$  2.1  $\mu\text{m}$  in size.

The culture has been deposited in the Herbarium at CMI, Kew, England (IMI No. 224797).

The author is thankful to Professor B. S. Mehrotra for encouragement and laboratory facilities and to the Director, CMI for confirmation of the identification.

6 April 1982; Revised 29 September 1982

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### **RICCIA CURTISII (AUST.) JAMES. FROM KUMAON HIMALAYAS**

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THE hepaticae of Kumaon Hills is known through the collections of various workers from time to time<sup>1-6</sup>. However, an interesting species of *Riccia*, *R. curtisii* has never been collected from any part of the Kumaon Hills. A few thalli of this species were once collected by the side of a lake in Mohanlalganj (Lucknow) and reported for the first time from India by Pande and Ahmad<sup>7</sup>. They had noted that some spores of this plant were perhaps brought to the site of its occurrence from somewhere in the hills but somehow the species could not get stabilized in the plains. Curiously enough the plant has not been gathered so far from any other part of the country<sup>8</sup>.

During a plant collection trip to Chaurgalia (foothills) on Haldwani-Tanakpur road at an elevation of

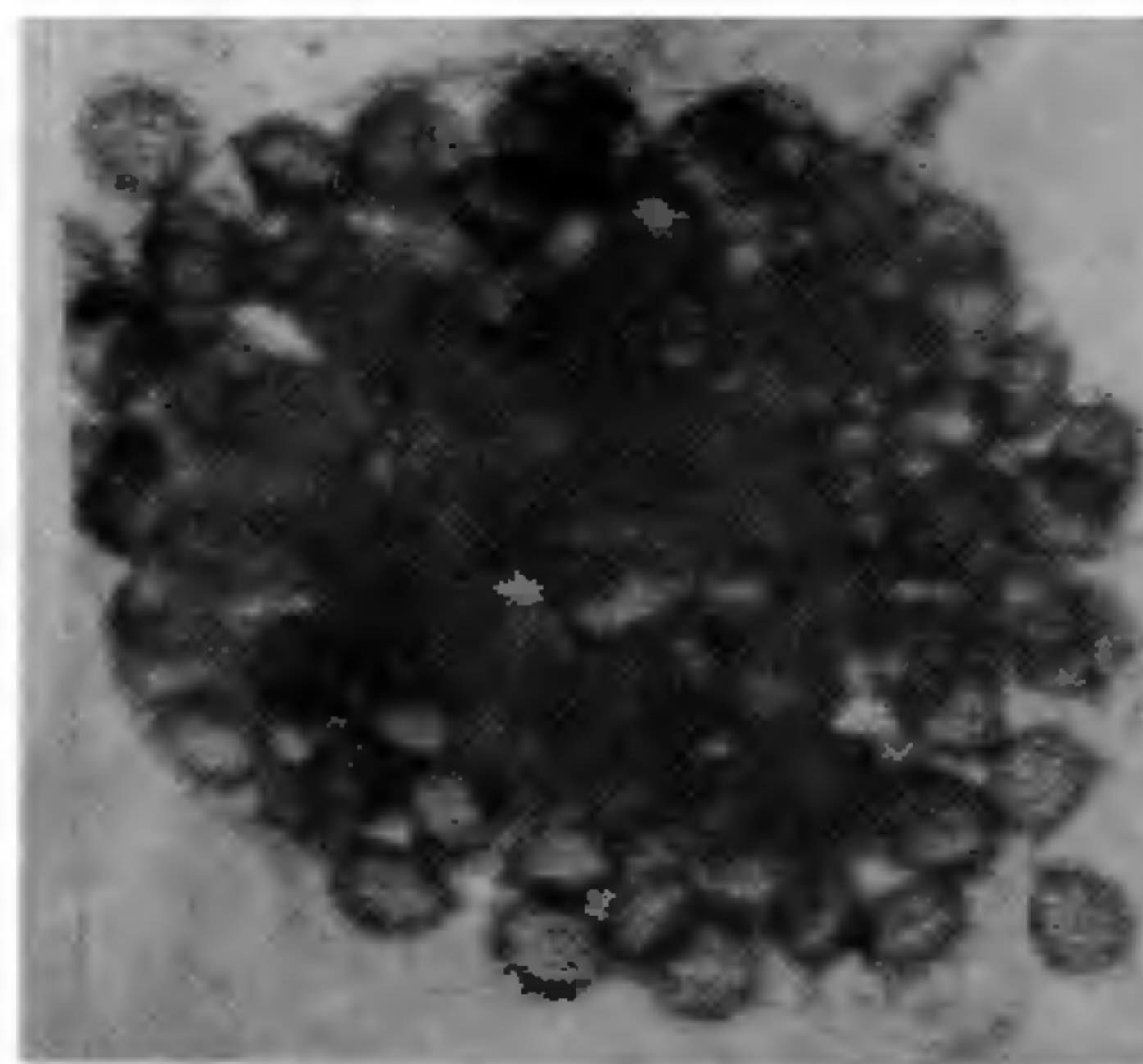
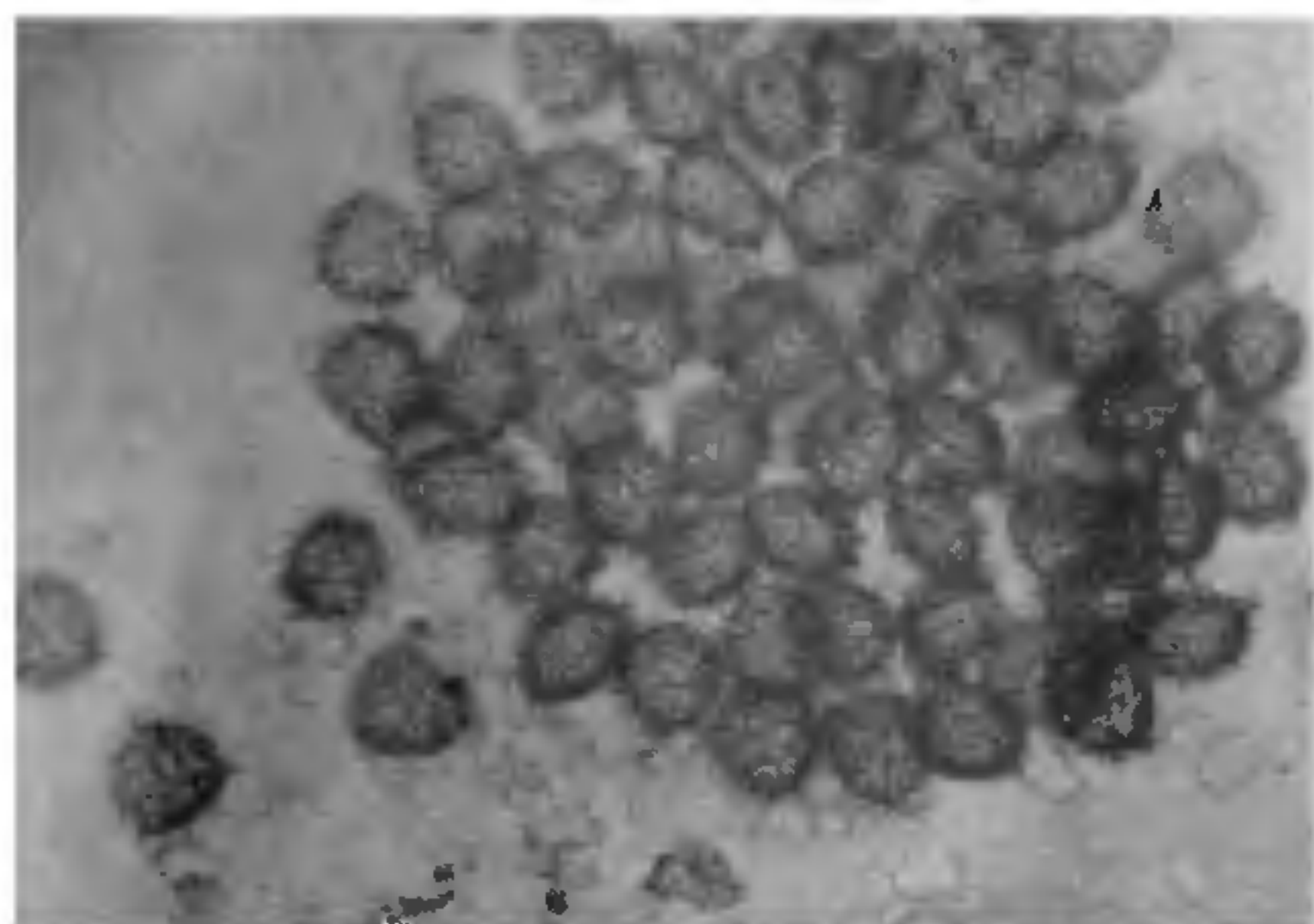


Figure 1. Longitudinal section of thallus showing nearly mature sporogonium. Also seen in the photograph is the neck of old archegonium.  $\times 235$ .



**Figure 2.** Mature spores showing spore tetrads.  $\times 235$ .

348 m in November 1981, we came across rosettes of profusely fruiting material of an interesting member of Ricciaceae, subsequently identified as *Riccia curtisii* (Aust.) James. The overlapping dicotomously branched, spongy, thalli of this species were seen growing on shady, moist, soil in close association with *Riccia fluitans* and an acrocarpous moss *Physcomitrium* sp. at Sunmanthapla Sal forest, Chaurgalia.

The remarkable features of this species are its hetrothallic nature, prominent areolations, abundant smooth-walled rhizoids and very few tuberculate rhizoids, absence of scales, ventrally scattered well-defined sporophyte (figure 1) and spores remaining permanently adherent in tetrads (figure 2).

The identification of the species was confirmed by Dr A. J. Harrington of British Museum (Natural History) London. The collection has been deposited in the Bryology Lab., D.S.B. College, Nainital Herbarium No. C. 3.

We are grateful to Dr A. J. Harrington of British Museum (Natural History) London for confirming the identification. Thanks are also due to Miss Neerja Pande for her assistance.

18 August 1982

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### **CATILLARIA MANIPURENSIS—A NEW SPECIES OF LICHEN AND A NOTE ON LOPADIUM AUSTROINDICUM FROM INDIA**

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TAXONOMIC investigations on lichens of Manipur have resulted in the discovery of a new species and a new combination which are dealt with. The specimens pertaining to the study are deposited in the CAL herbarium.

*Catillaria manipurensis* Singh sp. nov. (Figures 1-4)

Thallus corticolus, effusus, albido—cinereus, granulus vel minute verruculosus. Apothecia numerosa, porphyrea, dispersa adnata vel bene constricta, 0.4-0.6 mm diam.; margine tenue, indistinctae; disco pri-



**Figure 1** Part of the holotype of *Catillaria manipurensis* Singh  $\times 480$ .