

measuring $3-4\mu$ in diameter, which he has referred to as "sessile globose pseudoconidia $3-4\mu$ diameter". But in the fungus under study only the globose type of conidia were found. A bit of the specimen was sent to Dr. Agnes H. S. Brown who kindly got it compared with an authentic specimen of *Hirsutella versicolor* Petch preserved in the Herbarium of the Commonwealth Mycological Institute, England, and found them to be similar. Hence the fungus under study may be referred to the same species. Even in the authentic specimen only the globose type of conidia could be found.

The only other report of a species of *Hirsutella* with globose conidia is *Hirsutella thompsonii* Fisher described on *Phyllocoptura oleivora* (Ashm)² from Florida, U.S.A. The conidia in this species are slightly smaller ($2.1-3.3\mu \times 2.1-3.3\mu$) but other general features are not much in common between the two species.

The specimen has been deposited in Herb. C.M.I., England. The author wishes to record his grateful thanks to Dr. Agnes H. S. Brown, C.M.I., England, for the valuable help rendered in the identification of the fungus.

Plant Pathology B. P. CHAKRAVARTI.
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PHÆOTRICHOCOONIS TERRESTRE SP. NOV., FROM SOIL

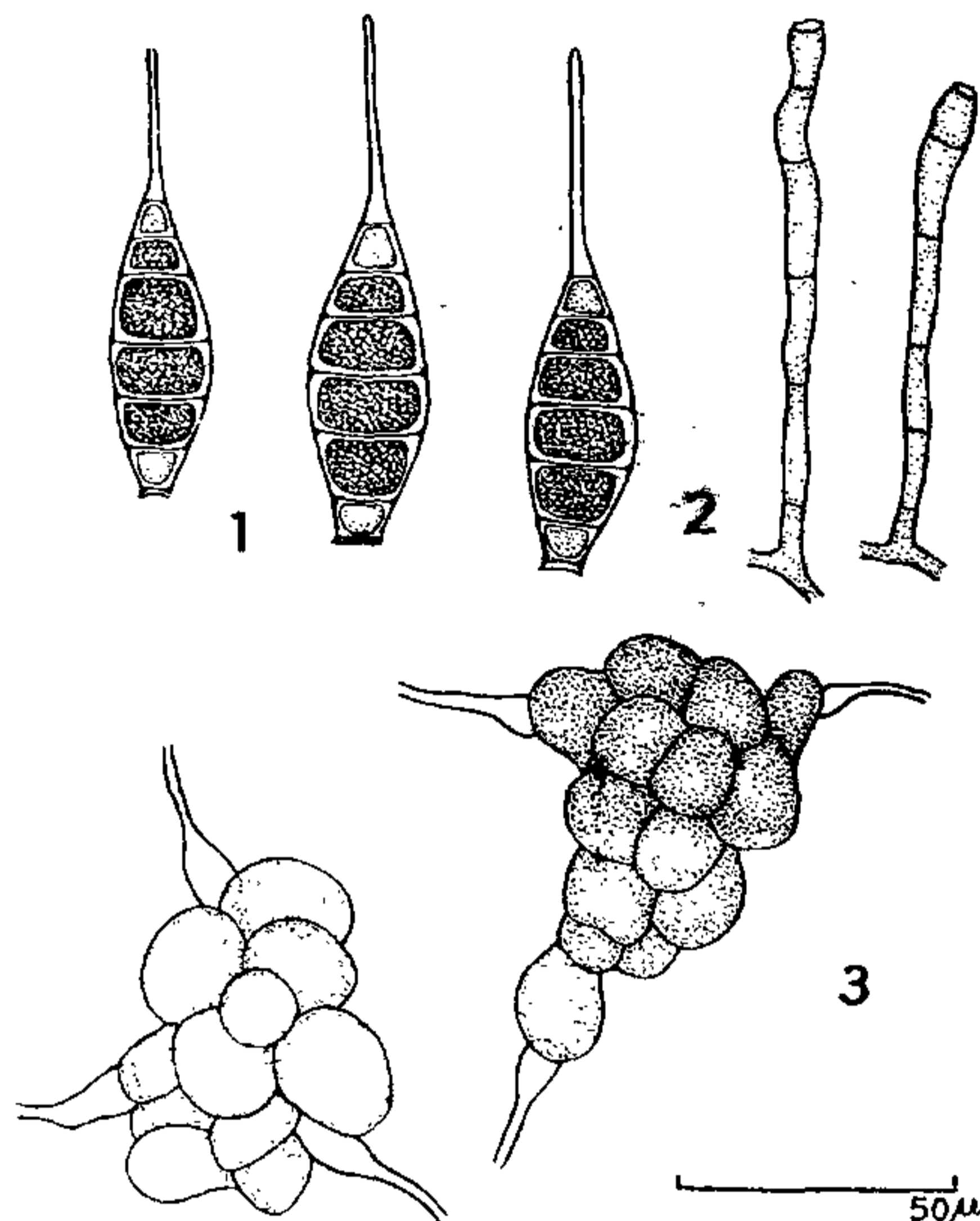
DURING the course of investigation of rhizosphere mycoflora of *Ocimum sanctum* Linn. a new species of *Phæotrichoconis* was isolated. The cultural study of the fungus was done at 25°C .

Phæotrichoconis terrestre Sp. Nov.

Colonies on oat-meal agar bearing aerial floccose hyphæ brownish to blackish in colour, $3.3-5\mu$ thick, branched, septate when mature at the intervals of $20-28\mu$, branches almost at right angles to the main axis; conidiophores not easily distinguishable from hyphæ, septate with swollen apex, $40-100 \times 3.3-5\mu$, bearing single conidium at the tip. Conidia elongate, fusiform with a long appendage at the apex, attached by their broad end with conidiophores, having a dark scar showing the point of attachment, transversely septate, septa 4-6 in number, dark brown, thick-walled with granular

contents, not constricted at septum, second and third cells from the base larger than rest of cells, $38-55 \times 14.8-17.2\mu$; appendages smaller than conidia, hyaline, aseptate, erect, $30-40 \times 1.5\mu$; dark black sclerotia develop in the culture after a week, circular to irregular provided with many hyaline stiff bristles $33-120\mu$ in diameter.

The fungus was isolated by P. C. Gupta from rhizosphere of *Ocimum sanctum* Linn. in September 1966, and will be deposited in Herb I.M.I., Kew.



FIGS. 1-3. *Phæotrichoconis terrestre* sp. nov., Fig. 1 Conidia. Fig. 2. Conidiophores. Fig. 3. Sclerotia with hyaline bristles.

Phæotrichoconis terrestre Sp. Nov.

Coloniæ in agar ordeaceo producentes hyphas æthereas floccosas, brunneas vel nigreolas, $3.3-5\mu$ crassas, furcatas, septatas ad maturitatem, angulum rectum efformantes cum axi principe ad ramificationem. Conidiophoris haud facilius distinguendæ hyphis, erecta, septata apice tumescente, $40-100 \times 3.3-5\mu$, singula conidium unicum ad apicem supportantia. Conidia elongatofusiformia, appendice longa ad apicem ornata, conidiophoris fixa per apicem latiore, prædita cicatrice fusca monstrante punctum unionis, transverse septata, septis 4-6 numero, fusce brunnea, parietibus crassis et contentis granularibus, haud constricta ad septa; cellula secunda et tertia a basi cellulis cæteris majores, $38-55 \times 14.8-17.2\mu$, appendices

conidiis minores, hyalinae, aseptatae, erectae, $30-40 \times 1.5 \mu$; sclerotia fusco-nigra evolvuntur in cultura post dies septem, circularia vel irregularia, pluribus setis hyalinis rigidis ornata, $30-120 \mu$ diam.

Lectus a P. C. Gupta ex rhizosphæra *Ocimi sancti* mense Septembri 1966.

The genus *Phaeotrichoconis* was established by Subramanian (1956) describing the type species *P. crotalariae*. The present species differs from the type species markedly in (i) having smaller conidia, (ii) straight appendages and (iii) appendages smaller than conidia. Therefore a new species, viz., *Phaeotrichoconis terrestre* is being proposed to accommodate it.

Sincere thanks are due to Fr. Dr. H. Santapau for the Latin diagnosis and to Prof. R. Misra for providing laboratory facilities.

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Varanasi-5, January 9, 1967.

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CHROMOSOME NUMBERS IN SOME LOCAL CENTROSPERMIC WEEDS

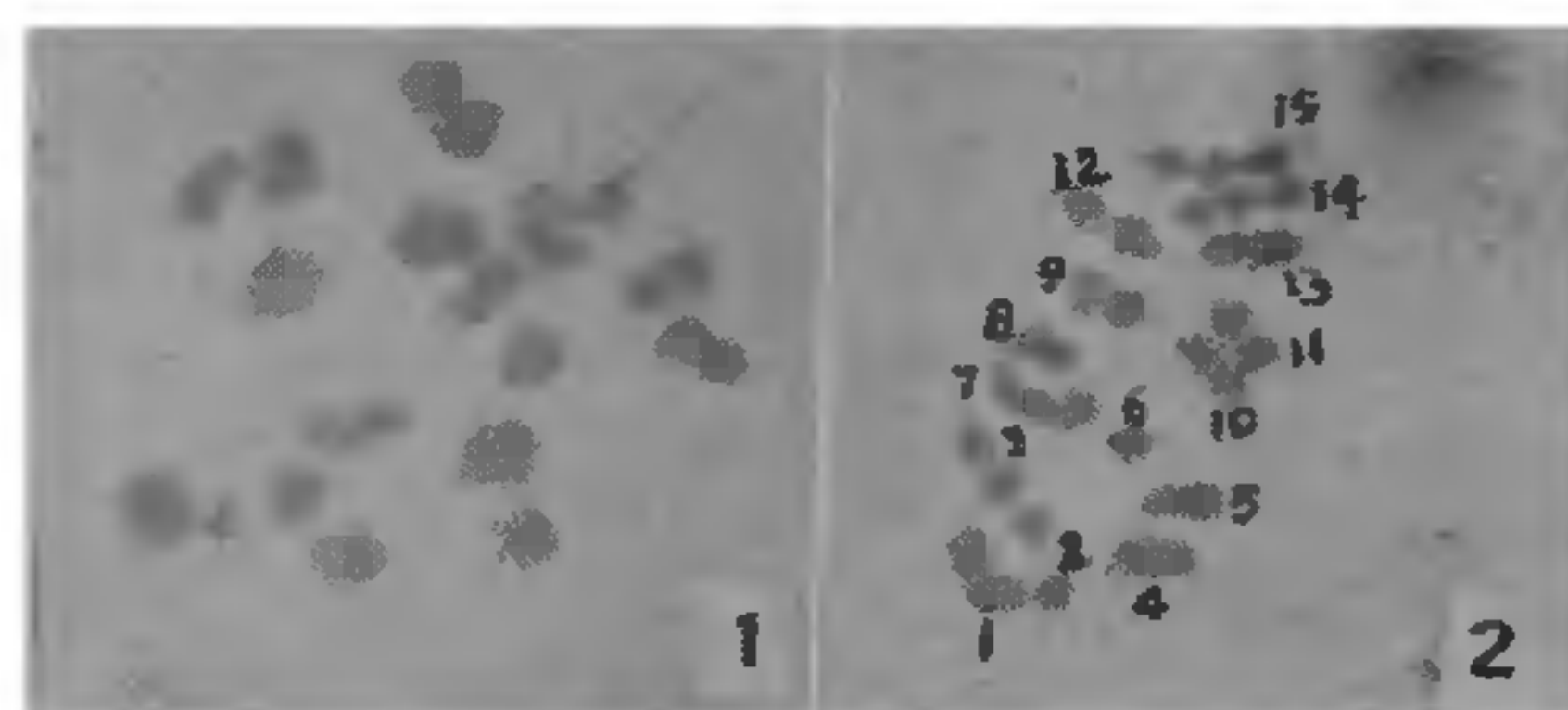
Of the several centrospermic weeds in the local flora, only three constitute the subject-matter of this report. *Mollugo lotoides* O. Kze. (*M. hirta* Thunb.) is supposed to be a polymorphic species.³ It appears to have a wide range of phenotypic plasticity in the local flora. All the phenotypes on cytological investigation, however, prove to be paramorph of the same number. This may be ascribed to genotypic flexibility. PMCs at active stages of division were squashed in acetocarmine and 18 bivalents were scored at diakinesis and metaphase I (Fig. 1). Pairing was found to be regular. The plant is a self-breeder and this coupled with normal pairing may lead to the inference that it is a diploid with $n = 18$. But this type of wide range of tolerance and phenotypic plasticity does not appear to be explainable in terms of diploidy, more so in a ruderal like this. It is

probable that this type of normal diploid behaviour has been acquired during long range successive autogamy with gradual decrease in heterozygosity.

TABLE I

Name of species	Numbers reported	Authors
<i>Mollugo lotoides</i>	$n = 18$	Sinha and Singh, 1967
<i>M. spergula</i>	$n = 18$	Raghavan and Srinivasan, 1940
<i>Saponaria vaccaria</i>	$n = 15$	Sinha and Singh, 1967

The other species under reference is *M. spergula* L. (*M. oppositifolia* L.) which is less abundant and has a narrow range of phenotypic expression. Here too 18 bivalents were seen at diakinesis and metaphase I. The number for this species is the same as reported earlier.¹



FIGS. 1-2. Fig. 1. Photomicrographs of metaphase I showing 18_{II} of *Mollugo lotoides*, $\times 1,250$. Fig. 2. Photomicrographs of metaphase I showing 15_{II} of *Saponaria vaccaria*, $\times 1,250$.

In *Saponaria vaccaria* L. (*S. perfoliata* L.) growing as a weed² of 'Rabbi' crop here 15 bivalents could be seen (Fig. 2). In other species of the genus the number reported is $2n = 28$ but the present investigation appears to have pointed out that the genus may be dibasic with both 14 and 15 as base numbers.

Thanks are due to Prof. R. P. Roy for helpful criticism and for providing necessary facilities during the course of this investigation.

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Patna University, M. K. SINGH.
Patna-5, July 19, 1967.

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