measuring 3-4 μ in diameter, which he has referred to as "sessile globose pseudoconidia 3-4 μ 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 *Phyllocoptus oleivord* (Ashm)² from Florida, U.S.A. The conidia in this species are slightly smaller (2·1–3·3 μ × 2·1–3·3 μ) 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
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**PHAEOTRICHOCONUS TERRESTRE SP. NOV., FROM SOIL**

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

*Phaeotrichoconus terrestre* Sp. Nov.

Colonies on oat-meal agar bearing aerial floccose hyphae brownish to blackish in colour, 3·3–5 μ thick, branched, septate when mature at the intervals of 20–28 μ, branches almost at right angles to the main axis; conidiophores not easily distinguishable from hyphae, septate with swollen apex, 40–100 × 3·3–5 μ, 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 × 14·8–17·2 μ; appendages smaller than conidia, hyaline, aseptate, erect, 30–40 × 1·5 μ; dark black sclerotia develop in the culture after a week, circular to irregular provided with many hyaline stiff bristles 33–120 μ in diameter.

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

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**FIGS. 1–3. Phaeotrichoconus terrestre sp. nov.**

Conidia. Fig. 2. Conidiophores. Fig. 3. Sclerotia with hyaline bristles.

*Phaeotrichoconus terrestre* Sp. Nov.

Coloniae in agaro ordeanceo producentes hyphas ætheræas floccosas, brunneas vel nigreolas, 3·3–5 μ crassas, fuscatas, septatas ad maturitatem, angulum rectum efformantes cum axi principis ad ramificationem. Conidiophoris haud faciliter distinguendæ hyphis, erecta, septata apice tumescente, 40–100 × 3·3–5 μ, singula conidium unicum ad apicem supportantia. Conidia elongatofusiformia, appendice longa ad apicem ornata, conidiophoris fixa per apicem latiorem, praedita cicatricibus fusce monstrante punctum unionis, transverse septata, septis 4–6 numero, fusce brunnea, parietibus crassis et contentis granularibus, haud consticta ad septa; cellula secunda et tertia a basi cellulis cæteris majores, 38–55 × 14·8–17·2 μ, appendices.
confidiis minores, hyalinae, aseptatae, erectae, 30-40 x 1-5 μ; sclerotia fusco-nigra evolvuntur in cultura post dies septem, circularia vel irregularia, pluribus setis hyalinis rigidis ornata, 30-120 μ diam.

Lectus a P. C. Gupta ex rhizosphera Ocmiustri mense Septembris 1966.

The genus Pheotrichococus 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, *Pheotrichococus terrestres* is being proposed to accommodate it.

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

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### CHROMOSOME NUMBERS IN SOME LOCAL CENTROSPERMOUS WEEDS

Of the several centrospermous 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 paramorphic of the same number. This may be ascribed to genotypic flexibility. PMC’s at active stages of division were squashed in acetocarmine and 18 bivalents were scored at diakinesis and metaphase 1 (Fig. 1). Pairing was found to be regular. The plant is a self-breeder and this coupled with normal pairing 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 1

<table>
<thead>
<tr>
<th>Name of species</th>
<th>Numbers reported</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Mollugo lotoides</em></td>
<td>(n = 18)</td>
<td>Sinha and Singh, 1967</td>
</tr>
<tr>
<td><em>M. spergula</em></td>
<td>(n = 18)</td>
<td>Raghavan and Senivasan, 1940</td>
</tr>
<tr>
<td><em>Saponaria vaccaria</em></td>
<td>(n = 15)</td>
<td>Sinha and Singh, 1967</td>
</tr>
</tbody>
</table>

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 1. The number for this species is the same as reported earlier.\(^1\)

Figs. 1–2. Fig. 1. Photomicrographs of metaphase 1 showing 18\(_n\) of *Mollugo lotoides*, × 1,250. Fig. 2. Photomicrographs of metaphase 1 showing 15\(_n\) of *Saponaria vaccaria*, × 1,250.

In *Saponaria vaccaria* L. (*S. perfoliata* L.) growing as a weed\(^2\) 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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