

FIG. 1. Showing whiteflies trapped inside the bell jar.

the observed habit of whiteflies to disperse sideways or upwards on being disturbed and their negatively geotropic orientation. The method comprises of using a bell jar of suitable size (height  $\times$  diameter: 15  $\times$  21 cm or 50  $\times$  29 cm) to cover the plant and slightly disturbing the plant. All the whiteflies on the plant immediately left the plants and rested on the inner wall of the bell jar and started moving upwards towards light (Fig. 1). Whitefly counts were then taken without any difficulty.

The method proved much more convenient than that of Sastry and Singh<sup>4</sup> as the data could be collected with ease and considerable economy of time and labour. The time required for sampling one plant was only 6 minutes. Another advantage is that it gives much more accurate data of whitefly population on the entire plant than that arrived through stratified sampling. The method may be usefully employed in other crops as well, provided they are small enough to be covered by a bell jar.

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#### A NEW SPECIES OF *SIROSPORIUM* BUBAK AND SEREBRIANIKOW FROM INDIA

DURING a survey of foliicolous fungi of A.P., India, a new species of *Sirosporium* Bubak and Serebrianikow parasitising leaves of *Diospyros* sp. was collected from Anantagiri forest locality of Vikarabad, A.P., India. The genus *Sirosporium* is characterised by macronematous or semimacronematous, mononematous, straight or flexuous, mid-brown conidiophores with polyblastic, integrated, terminal, sometimes intercalary, cicatrized conidiogenous cells, and conidia that are solitary, dry, acropleurogenous, straight or coiled, cylindrical, ellipsoidal or obclavate, olivaceous golden brown, smooth or verrucose. They are mostly transversely euseptate but often have vertical or oblique septa. Some species now assigned to this genus were previously described in *Helicocoeras* Linder, *Clasterosporium* Schw., *Cercospora* Fres., *Helminthosporium* Link ex Fr. and *Heterosporium* Klotzsch. Ellis<sup>2</sup> has shown that *Sirosporium* Bubak and Serebrianikow is the earliest valid generic name for these fungi. Ellis<sup>3-4</sup> has provided details of eleven species of *Sirosporium*, including *S. carissae* Kapoor from India. *S. gliricidiae* (Syd.) Deighton has also been recorded from India.<sup>4</sup> *S. celtidis* (Biv.-Bernh. ex Sprengel) M. B. Ellis and *S. mori* (H. & P. Syd.) M. B. Ellis were previously described as *Helicocoeras celtidis* (Biv.-Bernh. ex Sprengel) Linder parasitising leaves of *Celtis* sp.<sup>6</sup> and *Clasterosporium mori* Sydow on living leaves of *Morus alba* L. from India<sup>1,5</sup>.

The present collection is distinctive from the known species of *Sirosporium*, in shape and size of conidia and is different from *Sirosporium diospyri* (Thüm. Deighton which has thinner, paler, narrower conidia. The present fungus also has longer, broader, dark brown, thick-walled conidia. It is, therefore, described as a new taxon, *Sirosporium suttonii* Manoharachary and Venugopal Rao sp. nov.

*Sirosporium suttonii* Manoharachary and Venugopal Rao sp. nov. (in honour of Dr. B. C. Sutton, Principal Mycologist, C.M.I., Kew, United Kingdom)

Coloniae effusae, hypophyllae, brunneae vel atrae; mycelium partim immersum, partim superficiale:

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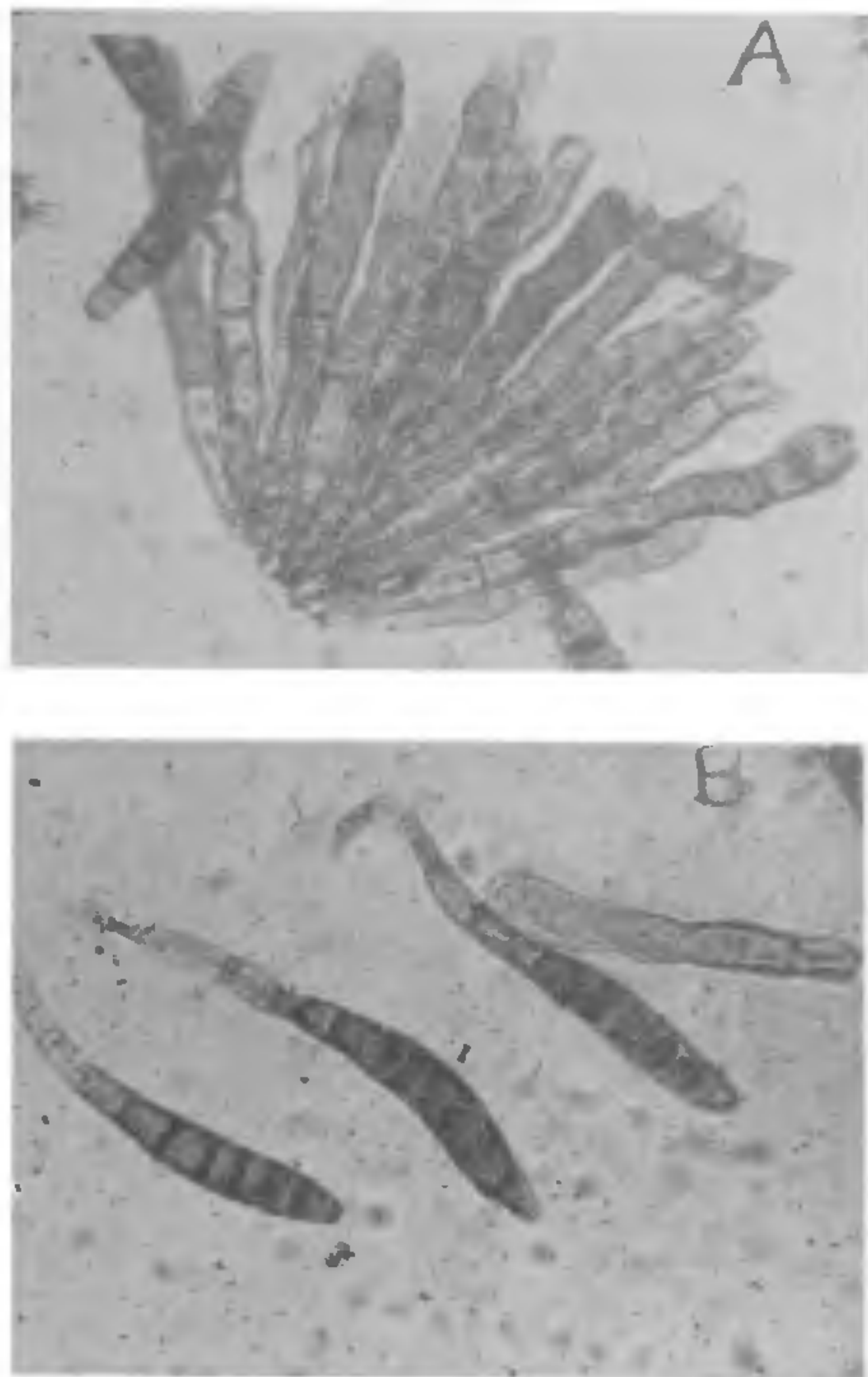


FIG. 1. Photographs of *Sirosporium suttonii* Maro-harachary and Venugopal Rao sp. nov.

(A, Conidiophores  $\times 800$ ; B, Conidia  $\times 800$ .)

conidiophora macronematosa, vel semi-macronematosa, mononematosa, fasciculata, simplicia, flexuosa aureo-brunnea vel atro brunnea, laevia,  $57.0-114.0 \times 5.5-8.0 \mu\text{m}$ ; cellulae conidiogenae polyblasticae, integratae, terminales, cicatricosa; conidia solitaria, sicca acropleurogena, simplicia, recta, obclavata, pallide vel atrobrunnea cum 3-14 septis transversis incrassatis,  $30.5-102.5 \times 4.0-9.5 \mu\text{m}$ .

In follis vivis vel senescentibus *Diospyri*, Anantagiri, Vikarabad, Andhra Pradesh, India—4 February, 1979, Rao and Chary IMI 239548, holotypus.

Colonies effuse hyphophyllous, brown to black, mycelium partly immersed and partly superficial; conidiophores macronematous or semimacronematous, mononematous, fasciculate, simple, flexuous, golden brown to dark brown, smooth,  $57.0-114.0 \times 5.5-8.0 \mu\text{m}$ ; conidiogenous cells polyblasticae, integratae, terminal, cicatrized; conidia solitaria, dry, acropleurogenous, simple, straight, obclavate, pale to dark brown, 3-14 transversely septate, septa thick,  $30.5-102.5 \times 4.0-9.5 \mu\text{m}$ .

Collected on living leaves (Scenscent) of *Diospyros* sp. Anantagiri hills, Vikarabad, Andhra Pradesh, India—4th February, 1979. Rao and Chary IMI 239548, holotype.

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## A SIMPLE TECHNIQUE FOR INJECTING CHEMICALS INTO TEAK

### Introduction

METHODS of tree injection to control plant diseases by introducing toxic chemicals using external pressure have been developed in U.S.A., Canada and South Africa<sup>1-6</sup>. In India these sophisticated techniques may be too expensive and are not convenient for use under field conditions. With the idea to chemically combat the angiospermic parasite, *Dendrophthoe falcata* var. *pubescens* Hook. f. on *Tectona grandis* L.f., a cheaper device for infusion of any water soluble compound into the tree, using commonly available materials, has been developed. This report gives the details of the technique together with an account of appropriate time for application and the distribution of tracer dye, rhodamine B, in teak.