Cytomixis was not encountered in single flowered *C. ternatea* ($2n = 16$) white and *C. ternatea* ($2n = 16$) violet.

The factors responsible for cytomixis are not yet clearly understood. Levan[10], Salesses[15] and Simyarkhina and Kuptsou[20] are of the opinion that cytomixis mostly occurs in plants showing irregular physiological and/or cytological behaviour. On the contrary, the occurrence of cytomixis in meiotically normal species (Gates and Rees[6], Kamra[9], de Nettancourt and Grant[4], Schnack and Fehleisen[18], Stebbins[21], Bell[1], Narain[12], Omara[13]), support the view of Gottschalk[8] that meiotic irregularities may not be the sole criteria for causing cytomixis. Various other factors have also been reported to be responsible for cytomixis (see Narain[12]). However, cytomixis in *C. ternatea* var. *pleniflora pleniflora*, with no meiotic irregularity, may be attributed to either genetic or physiological disturbances. The genetic control proposed by Brown and Bertke[3] is supported by the fact that *C. ternatea* white and *C. ternatea* violet did not show cytomixis whereas *C. ternatea* var. *pleniflora pleniflora*, which may be a mutant of *C. ternatea* violet, exhibited such behaviour.

The origin of aneuploids through cytomixis (Sarvella[17], Salesses[15] and Gottschalk[8]) has relevance in the present investigation, because 3 PMCs had 9 bivalents instead of normal 8 and there is every likelihood that PMCs with 7 bivalents might also be present. The above analysis has special significance because in *C. biflora* the zygotic number is 14 and they associate into 7 bivalents at metaphase I (unpublished).

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A NEW METHOD FOR COUNTING WHITEFLY (*BEMISIA TABACI* GENN.) POPULATION IN MUNG BEAN [*VIGNA RADIATA* (L.) WILCZEK]

RAPID and reliable estimation of the field population of insect vectors is of basic importance for proper understanding of the epidemiology of virus diseases and to devise ways and means for their control. This is particularly so in respect of whitefly-borne viruses, most relationships of which seem to be as little understood as the biology of vectors like *Bemisia tabaci* Genn. which transmits over 25 different diseases. The economic losses due to whitefly-borne virus diseases in India such as tomato leaf curl, yellow vein mosaic of *Bhindi*, yellow mosaic of mung bean, urd bean, soybean, etc., are often quite heavy[3–5]. The present communication is the outcome of the difficulties experienced by the authors in estimating whitefly populations on mung bean and consequent development of a suitable method.

Naresh and Thakur[3] examined the whitefly population on 20 plants of black gram selected at random from each plot. But their account lacked details of the procedure adopted to estimate the vector population. The method employed by Banks[1] and Sylvester and Cox[6] for aphid counts was followed by Sastry and Singh[4] with slight modifications to estimate whitefly populations on *Bhindi*. During *kharif* (1974) we followed the method of Sastry and Singh[4] for counting the whitefly population in an experimental plot meant for evaluation of insecticides against yellow mosaic vector. The sampling technique was cumbersome and time consuming, requiring as much as 30 minutes per plant on an average to take counts of the insects on leaves at different positions. Therefore, a 'Bell Jar Method' was devised taking into consideration

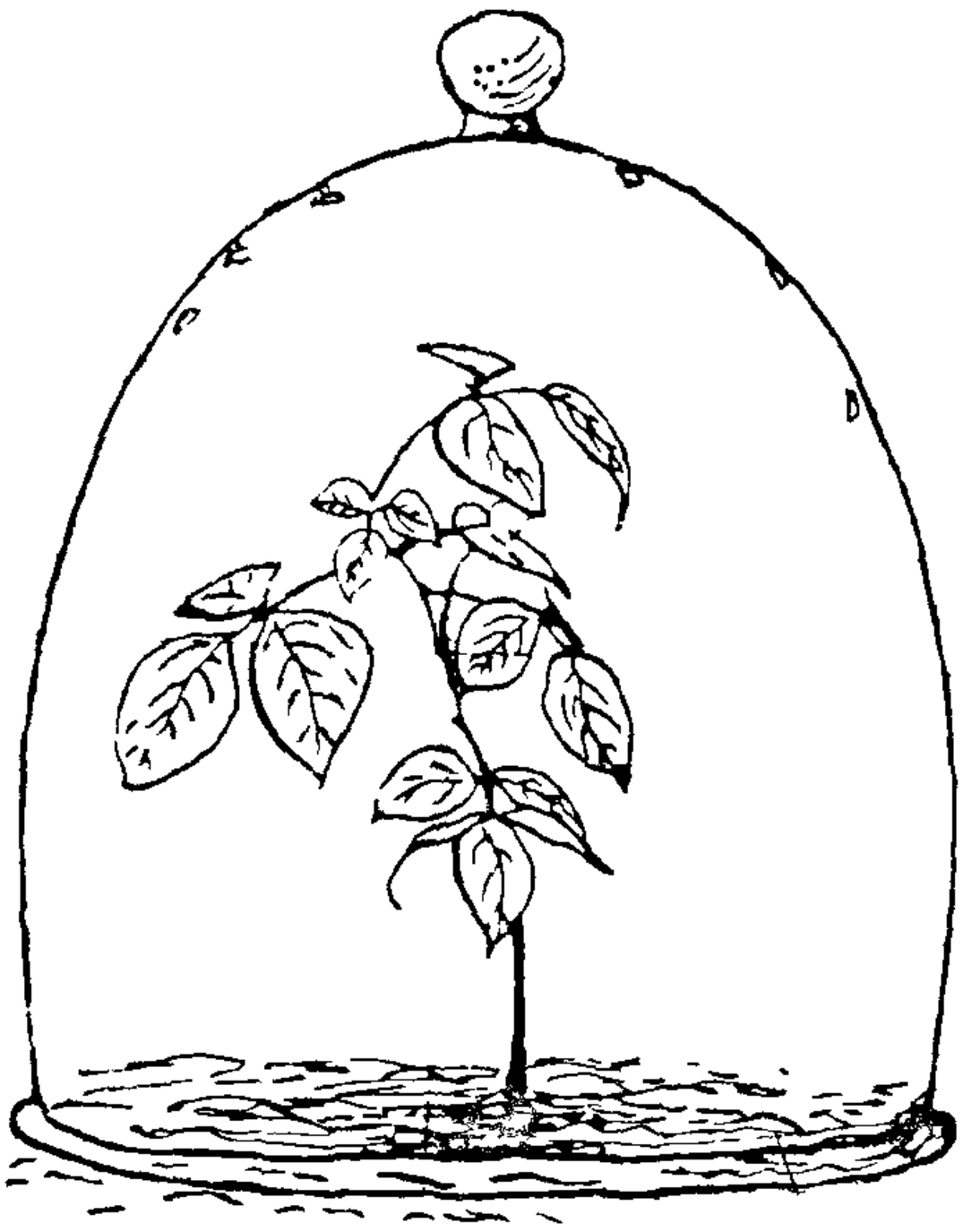

FIG. 1. Showing whiteflies trapped inside the bell jar.

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 × diameter: 15 × 21 cm or 50 × 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[4] 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* Bubák 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, cyclindrical, 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[2] has shown that *Sirosporium* Bubak and Serebrianikow is the earliest valid generic name for these fungi. Ellis[3–4] has provided details of eleven species of *Sirosporum*, including *S. carissae* Kapoor from India. *S. gliricidiae* (Syd.) Deighton has also been recorded from India.[4] *S. celtidis* (Biv.—Bernh. ex Sprengel) M. B. Ellis and *S. mori* (H. & P. Syd.) M. B. Ellis were previously described as *Helicoceras celtidis* (Biv.–Bernh. ex Sprengel) Linder parasitising leaves of *Celtis* sp.[6] and *Clasterosporium mori* Sydow on living leaves of *Morus alba* L. from India[1,5].

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 so. 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; myceium partim immersum, partim superficiale: