under the tremendous pressure of enlarging ovaries. The location of the food reservoir is so perfect that without becoming an obstacle in the way of developing ovaries it can easily get filled up with air.

FIG. 1. Ventral view of *Sarcophaga ruficornis* (Sinton) showing rich tracheal branches arising from the crop to supply the ovaries laden with larvae. All other parts of viscera are removed, × 10.

Presumably, the air filling process is achieved by swallowing atmospheric air directly as is being done by a vast number of insects during moulting or other distressing developmental processes.[3 5]. The absence of these profusely regular and luxuriant tracheae in the males of the same species lends adequate support to conclude that the reported modifications serve (*a*) to reduce and remove the metabolic heat generated in case of larviparous females[6]; (*b*) to establish fresh routes for meeting the additional demands of gas exchange and, perhaps they also, (*c*) provide extra buoyancy for the fully loaded females and thus help in lowering the specific gravity, especially when in flight, to infest new hosts.

Further details will be published elsewhere.

Thanks are due to Dr. G. T. Tonapi for his valuable guidance and Prof. L. Mulherkar for the facilities.

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B-9 INDUCED GROWTH STIMULATION IN JUTE (*C. OLITORIUS* L.)

PRESENT investigation has been undertaken to determine the effect of B-9, a growth retardant, on internodal length in jute. For the experiment, plants of the variety J.R.O. 620 were grown in 9" flower pots during the rainy season of 1971 and treated with 50, 100, 200 and 400 ppm aqueous solution of the chemical at an age of 20 days. Treatment was given in the form of sprays to run off at the rate 1 per day for 7 successive days. On the plants being fully mature, length of different internodes on 10 of them for each of the 4 treatments and control was determined and averaged.

Data for the 4th to the 22nd internodes have been presented in Fig. 1, from which it could be seen that there is an acceleration of growth of the lower internodes upto the 8th one in all the treated plants as compared with control, the maximum effect being in 50 ppm. Higher up the stem, the order is reversed with control internodes superseding in length their counterparts on the treated.

Growth promotion by a growth retardant is unusual. As a case parallel to the present one, the work of Halvey and Wittwer[1] on *Antirrhinum majus*, where 50, 100, 500, 1,000 and 2,000 ppm of CCC brought about an increase in the overall height of the plants, could be cited. Though they have not recorded length of individual internodes.

their photograph clearly indicates that taller the plants, longer are they on them.

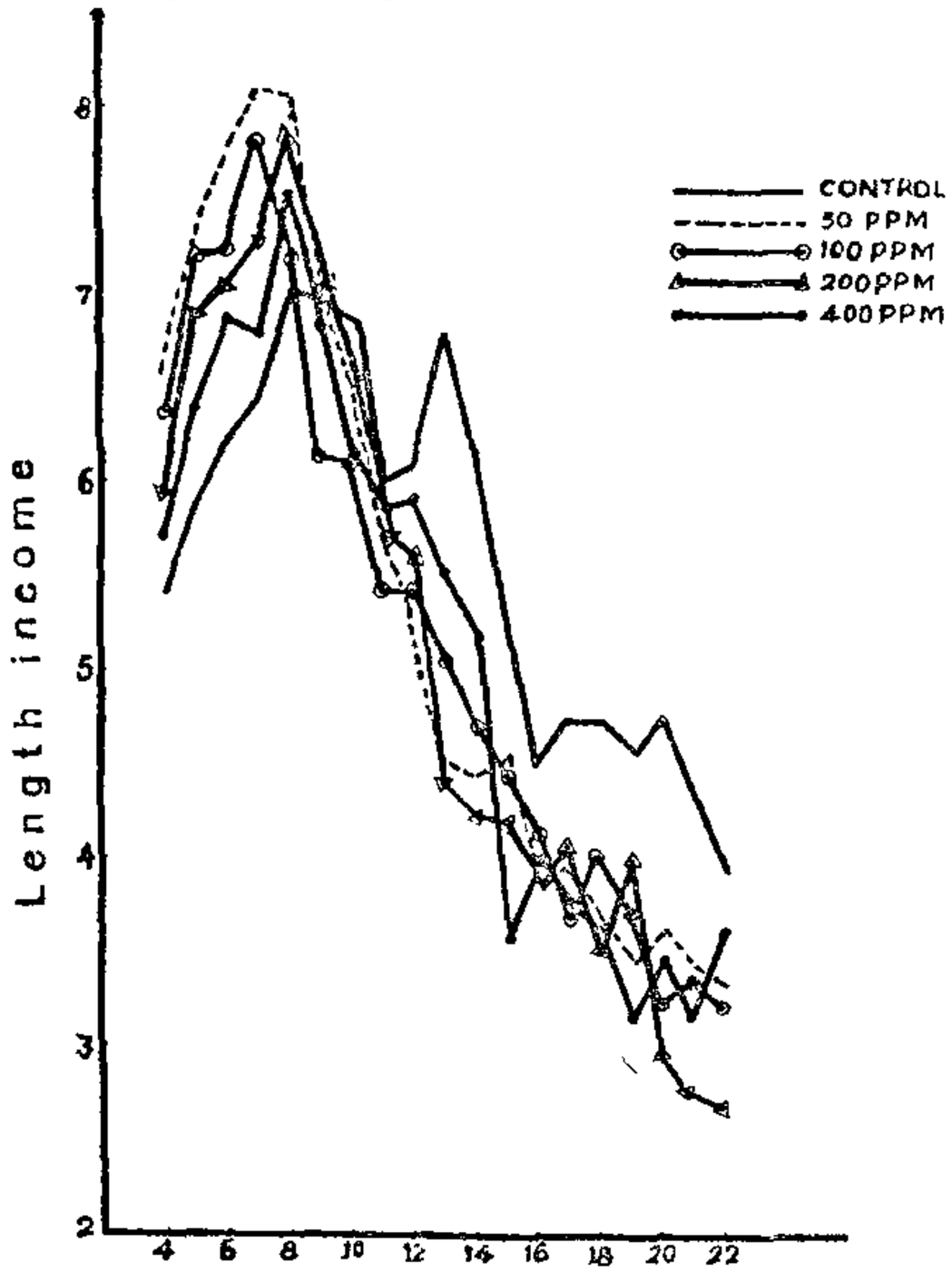

FIG. 1. Showing the effect of different concentrations of B-9 on internode length in jute.

One of the most interesting outcome of the present investigation lies in the fact that increased growth of lower internodes in treated plants, over their counterparts in the control, gets reversed higher up. Similar has been the observation of Chakravarti with GA treated plants of sesame[2], jute, pea, gram, yellow cosmos and dahlia[3] and of Chakravarti and Loshali of *Zinnia*[4].

Halvey and Wittwer[1] could not offer an explanation for the growth retardant CCC behaving in a way similar to that of the growth stimulant GA and even after more than a decade it is not possible to do the same for B-9.

Sample of B-9 was received through the kind courtesy of Dr. D. N. Sen.

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ISOLATION OF MYXOMYCETES FROM SOIL

THE application of moist chambers has been of particular advantage in the study of fungus plant pathogens of vascular tissues and in seed germination studies for inoculation experiments under sterile conditions[4]. This technique has also been employed for the isolation of certain true slime molds[1-5]. While studying the microfungi associated with different plant organs of *Sesamum orientale* and *Gossypium hirsutum*, the appearance of plasmodial and fruiting stages of certain myxomycetes was found to be dependent on the stage of decay of the plant organ concerned. Based on the observations on decaying leaves and stems incubated in moist chambers, an attempt was made to isolate the myxomycetes present as spores in soil.

The usual method is to incubate the leaves or other plant parts in the unsterilized petri-plates containing a moistened filter-paper. To avoid quick drying out, five pieces of blotting-paper are inserted in each of the inner pieces of the moist chambers followed by the addition of about 15 ml distilled water. These moist chambers are first autoclaved at 121° C temperature for 15 minutes as otherwise the aerial mycoflora interferes with the subsequent growth of the myxomycetes present on the incubated plant part. The rewetting with sterile water of the moist chamber is sometimes necessary to bring about sporulation of the myxomycetes growing within it.

The plant parts which were mature or had undergone considerable decomposition were usually colonized by maximum number of myxomycetes. The myxomycetes on older and decaying leaves usually underwent sporulation quickly (Figs. 3, 5 and 6) whereas those growing on recently dead or rarely the green leaves tended to remain in vegetative phase only (Fig. 1). This was probably due to the lack of sufficient bacterial population on the latter type of leaves to feed the myxomycetes growing upon them. The same was the case with the stem pieces. The internodes collected from the lowermost part or decaying part of the plant were colonized by sporulating myxomycetes (Fig. 4) but those collected from upper young regions of the plant represented the myxomycetes only by their plasmodial phase (Fig. 2). In parallel with this, decaying plant parts were extremely poor supporters of the saprophytic fungi other than the myxomycetes. The younger plant parts, on the other hand, behaved in a reverse manner.

These observations led us to employ the decaying plant parts as the baiting material for isolating