FIG. 1

This is the first report of *Eriophyes prosopidis* Saksena on *Prosopis cineraria* (L.) Druce causing fruit gall in India or elsewhere[1-2].

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VARIATION AMONG FLOWERS OF ANDROGENETIC TOBACCO HAPLOIDS

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IN continuation of our communications[1-3] on cultures of androgenetic embryoids of *Nicotiana tabacum* cv. FCV Special, we now report the successful growth to maturity of haploids derived exclusively from the vegetative cell, the generative cell and the chimeral combination of the two. Based on ontogeny the three types of haploids have been designated the 'vegetative' plant, the 'generative' plant and the 'Chimera'. All of them produce abundant flowers but fail to set fruits. These plants, in addition to exhibiting several distinctive vegetative features, consistently show marked floral variations not only among themselves but also in comparison with the diploid. Although the haploid flowers are totally sterile, they share a few common features with those of the diploid like, the retention of the petal colour and possession of the component floral parts. But the three types of haploids reveal consistent individualistic variations with regard to the size of the flower, shape of the corolla tube and the opening of its lobes. Results of a statistical analysis of these variations in flowers are given in Table I. The flower length of the diploid with associated features like the uniform opening of the corolla lobes and the sudden dilation of the upper part of the corolla tube are inherited in the flowers produced by the 'generative' plant (Fig. 1A, A_1: C, C_1). In the flowers produced by the 'vegetative' plant (Fig. 1B, B_1), the average length of the flower is significantly shorter than that in the diploid, and the corolla tube is typically trumpet-shaped, a feature not seen in the diploid. Further, in the flowers of the 'vegetative' plant one or very rarely two adjacent corolla lobes fail to open out, a feature consistently repeated in the flowers borne on the vegetative sector of the chimeral derivative (Fig. 1D, D_1). The corolla lobes of flowers on the generative sector of the chimera (Fig. 1E, E_1) behave in the same way as those of the diploid and the pure 'generative' plant; however, the flower length stands in comparison with those produced by the 'vegetative' plant and on the vegetative sector of the chimera.

The '*t*' values of 2·26 and 2·44 obtained respectively for the floral lengths of the diploid plant (parent) and the pure 'vegetative' plant, and diploid (parent) and the chimeral plants support our observation that the difference in their floral length is significant whereas

TABLE I

Results of floral analysis

	Flowers of diploid (parent)	Flowers of haploid		
		Vegetative plant	Generative plant	Chimera
Number analysed	40	40	20	80
Average length* (in cm.)	4·9	4·14	4·6	4·18
% with infolded corolla lobe	Nil	97·5	Nil	55

* Critical value of '*t*' at 5% degree of freedom = 2·074—Significant.
Critical value of '*t*' at 1% degree of freedom = 3·792—Highly significant.

*Since deceased.

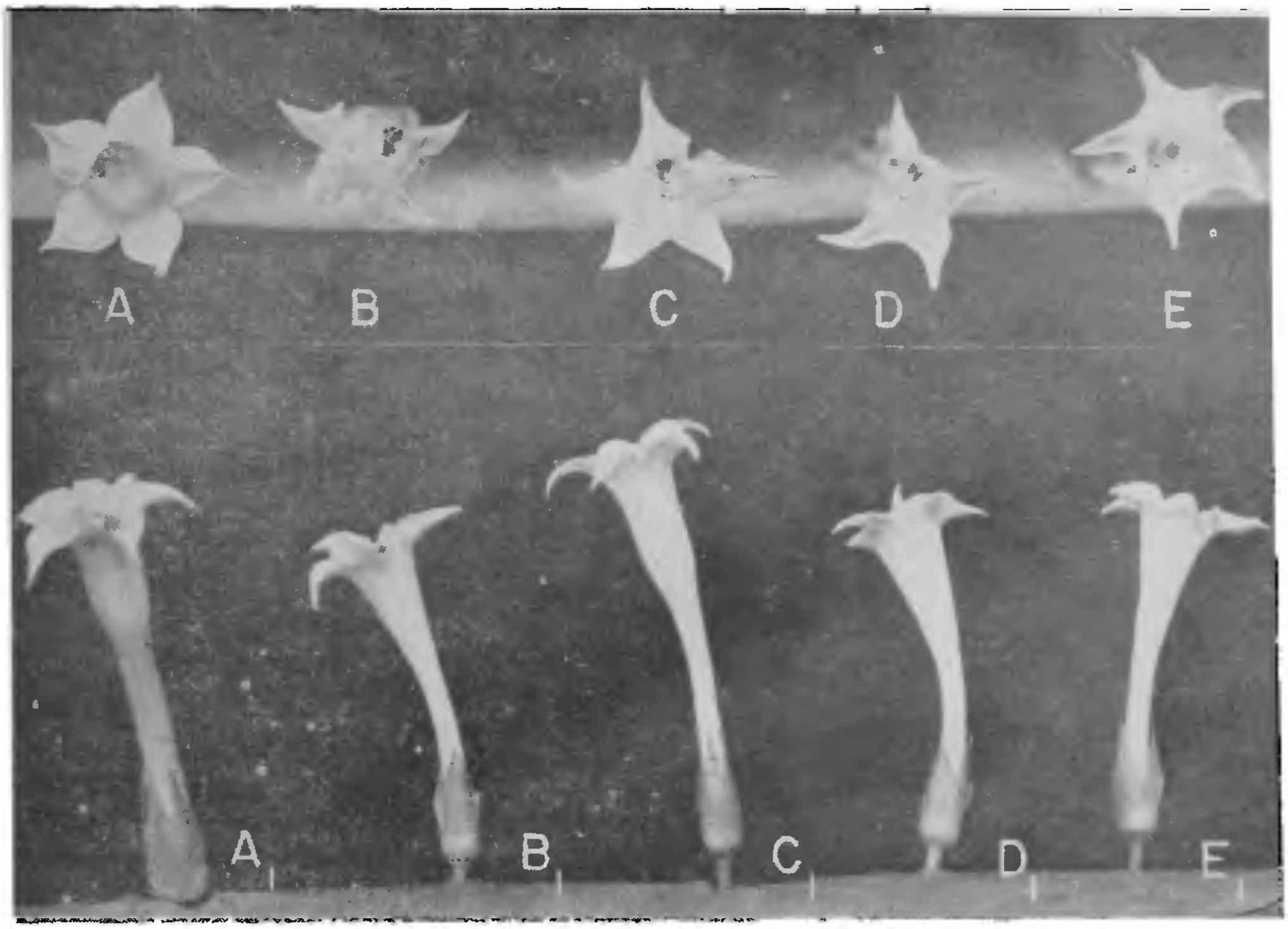

FIG. 1. (Top row) A—Face view of the corolla of diploid (parent). B—of 'vegetative' plant C—of 'generative' plant. D—of vegetative sector of chimeral plant. E—of generative sector of chimera' plant. (Bottom row) A_1 to E_1—side views of flowers corresponding to upper row (actual size).

the 't' value of 0·076 obtained for the flower length of the diploid (parent) and the pure 'generative' plant falls below the significant value, thereby purporting a similarity between them.

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PRELIMINARY STUDIES ON JAMUN LEAF MINER (*ANTISPILA ANNA* MEYR.) WITH TWO NEW PARASITE RECORDS

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DURING the period from June-August, 1979 jamun trees, *Syzygium jambolana* Lam. at Hyderabad were severely damaged by a leaf miner, *Antispila anna* Meyr (Heliozeldae : Lepidoptera) to the tune of 40·8%. Nayar[1] mentioned *A. anna* feed on leaves of jamun in Bengal and no further details of the pest are available.

The milky white larva mines in between the two epidermal layers of the leaf resulting in oval to linear blisters (Fig. 1), measuring about 3 cm in length and 1 cm in breadth; and turn reddish and drop off resulting in holes in each leaf. The full grown larva measures 3·85 mm in length. The head capsule is slightly reddish and measures 0·31 mm and 0·38 mm in length and breadth respectively. The prepupating larva hangs down by a sliken thread and attaches to leaves, stems or other surfaces, without showing any particular preference for pupation. The pupa is enclosed in a peculiar silken laterally compressed subrectangular greenish cocoon (Fig. 2) measuring about 4 mm in length and attached firmly to the leaves with a short stalk. The pupa measures 1·9 mm in length and pupal period lasts for 13 days. The adult is a dark brown moth, 3·0 mm in size, showing a characteristic white glistening patch across the forewing.