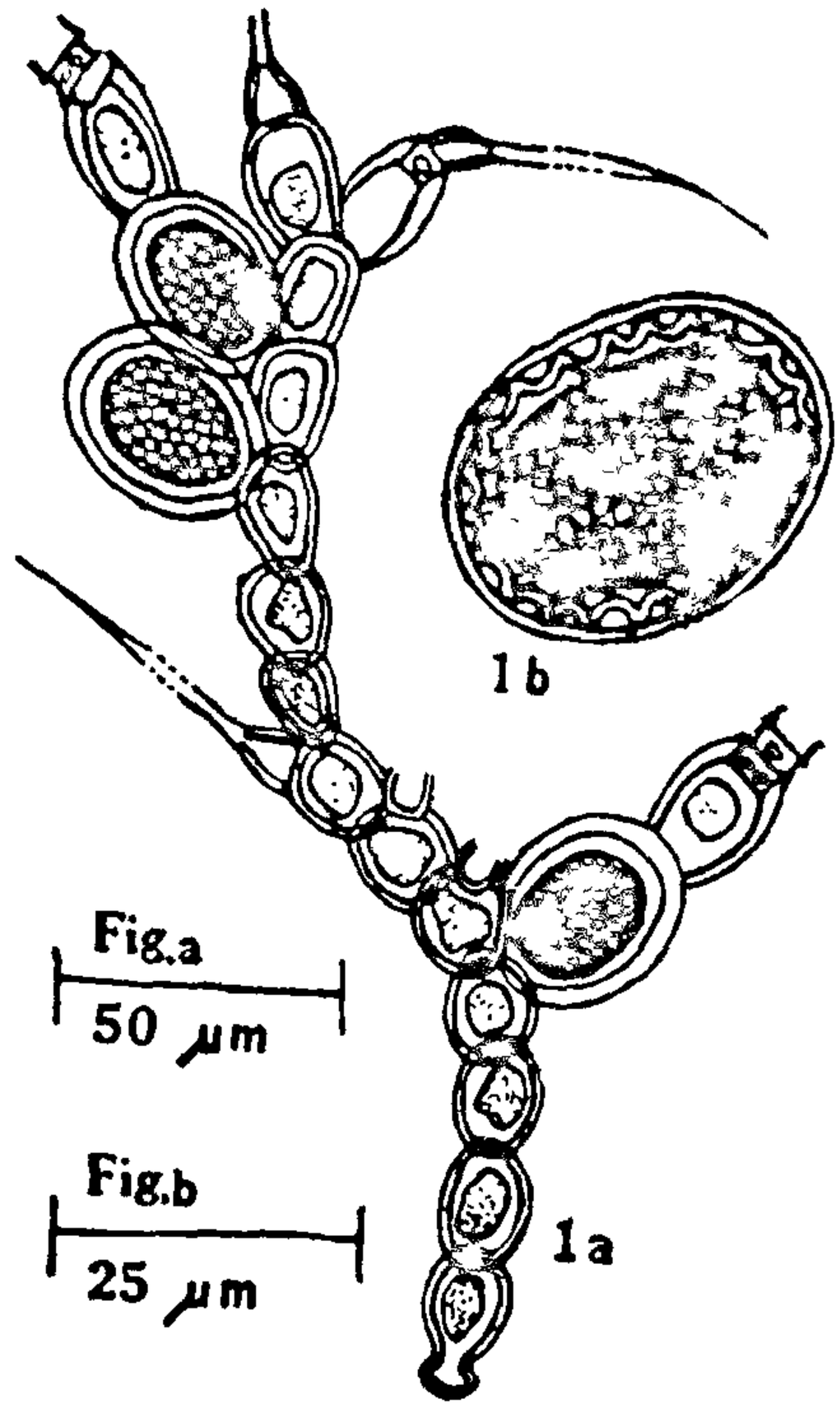

FIG. 1. *Bulbochaete ivorensis* Gauthier Lievre. Fig. 1 *a*. Mature plant with sex organs. Fig. 1 *b*. Mature oospore showing ornamentations.

of *Hydrilla* sp. The filaments are short with subspherical moniliform cells. Many of the cells bear long setae with bulbous bases. The cells are slightly broader at their distal end having two faces, one bearing a seta and the other a vegetative cell or oogonium. The basal cell forms a knob-like hold fast (Fig. 1 *a*). The apical cell supports one or two setae. The cells are uninucleate and each contains a single chloroplast having many pyrenoids.

Vegetative cells are 13–17 μm in breadth and are 15–22 μm long. The basal cell is 14 μm in width and 27 μm in length. Oogonia and antheridia are found on the same plant showing a monoecious macrandrous condition. Oogonia are solitary, lateral, ovate to oblong, 25–29 μm in breadth and are 34–38 μm long. Oospores are oval, 25 μm in width and are 33–34 μm long. Epispore is very thin, colourless and smooth; mesospore is thick and provided with 22–23 teeth-like projections in surface view (Fig. 1 *b*); it is at first orange, finally turning brown after full maturation. Antheridia are found singly or in pairs, generally epigynous, more rarely situated laterally with a supra-lateral opening. Antherozoids two per antheridium, laterally placed in the antheridium. Antheridia 9–11 μm broad and 4–5 μm long.

The present alga resembles *B. ivorensis* in vegetative morphology, sex organs, size of oospores, ornamentations of mesospore and supra-lateral opening for escape of antherozoids from the antheridium. It, however, differs from it slightly in having somewhat larger vegetative cells and smaller antheridia. This species is being recorded for the first time from India.

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1. Gauthier-Lievre, L., *Nova Hedwigia*, 1963–64, VI et VII, p. 209.

INHERITANCE OF GLOSSY STEM CHARACTER IN *BRASSICA JUNCEA* L. CZERN AND COSS

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REPORTS of glossy stemmed spontaneous mutants in *Brassica* spp. are not uncommon[1,2]. However, in these cases primary species like *B. campestris*, *B. rapa* and *B. oleracea* were involved. Occurrence of such a glossy stemmed spontaneous mutant in *B. juncea*, an amphidiploid, was reported earlier[3] and it was stated that the glossy stemmed character will be advantageous to a plant breeder pursuing aphid resistance work since colonization of aphids on glossy stem was found to be slow. In further tests the observation appeared to be correct. Inheritance of this glossy stemmed character was studied.

Glossy stemmed plants, found to breed true, were crossed both ways with non-glossy B-85, the parent material from which it was isolated. F_1 characters and the segregation pattern in F_2 and F_3 generation were noted. In F_2 generation, all the glossy stemmed plants were bulked, since initially genetical study in the material was not the objective. F_3 generation was studied out of the seeds of the glossy stemmed plants derived from F_2 bulk.

Results presented in Table I showed that F_1 plants were all glossy stemmed, indicating dominant nature of the character. In F_2 a clear segregation ratio of 3 glossy : 1 non-glossy was obtained having a probability of 0·95 to 0·90. Thus, a diallelic locus was assumed which was further confirmed by 5 : 1 ratio in the F_3 generation as theoretically expected (Fig. 1),

TABLE I

Stem characters of the parents and F_1 and segregation pattern of F_2 and F_3

Generation	Stem character	No. of plants		Observed ratio	'p'
		Glossy	Non-glossy		
B–85	Non-glossy	..	..	..	..
Glossy plants	Glossy	..	..	..	..
F_1	Glossy	..	..	..	..
F_2	..	339	112	3 : 1	0·95–0·90
F_3	..	1648	331	5 : 1	0·95–0·90

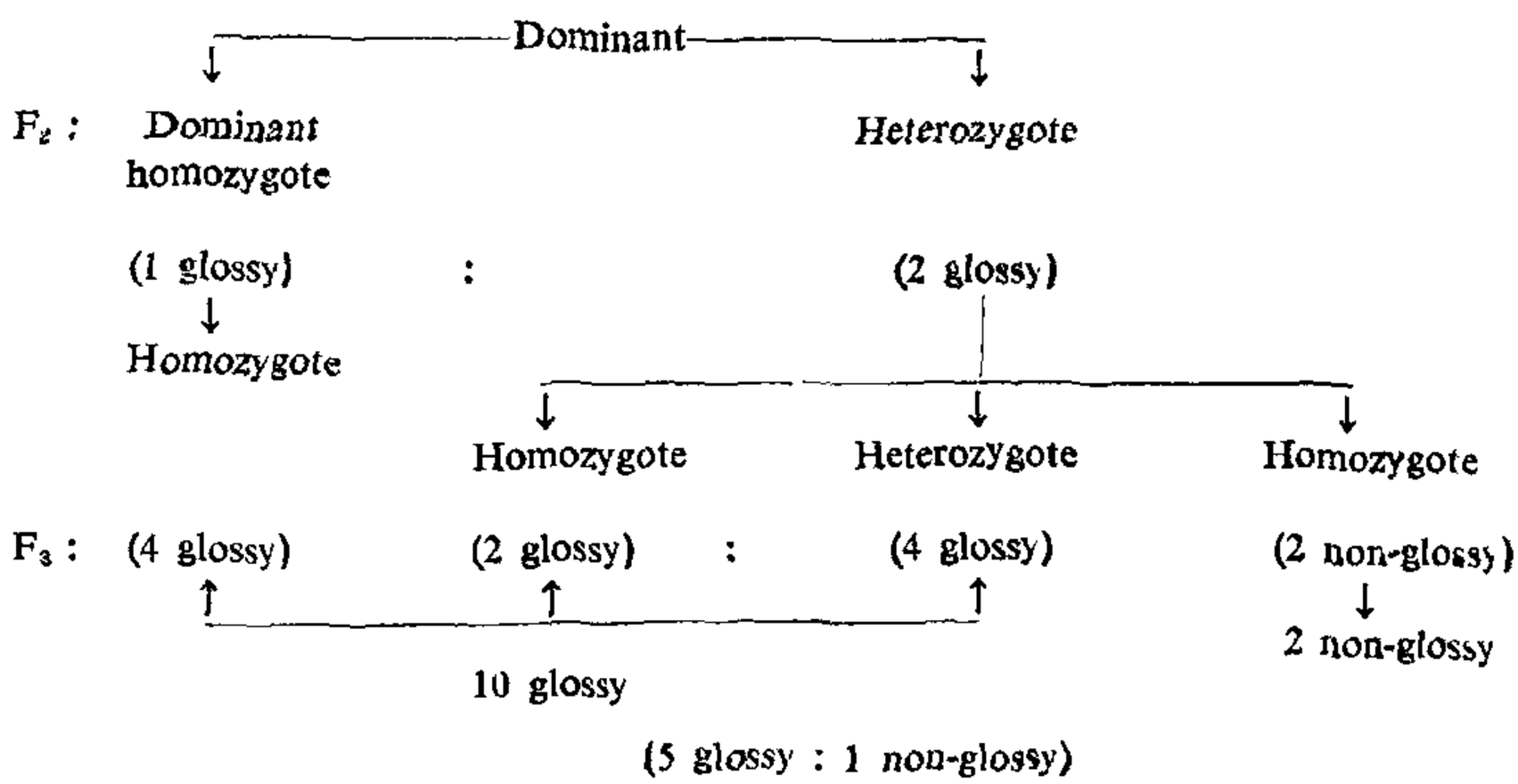

FIG. 1

Hybridization work with other genotypes has been undertaken to symbolise the gene so detected.

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2. Srinivaschar, D. and Malik, R. S., *Curr. Sci.*, 1972, **41**, 820.
3. Nath, D. K. and Mukhopadhyay, S., *Ibid.*, 1976, **45**, 33.

OUTBREAK OF COLLAR ROT OF SUNFLOWER CAUSED BY *BOTRYTIS CINEREA* IN RAJASTHAN, INDIA

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DURING 1978, sunflower plants, about 3½ months old, were found to be dying at the Agronomy Farm, Rajasthan College of Agriculture, University of Udaipur, Udaipur. The incidence of the disease was 5–10% in different plots. Drooping of leaves and heads resulting in death of the plants was first observed in the fields,