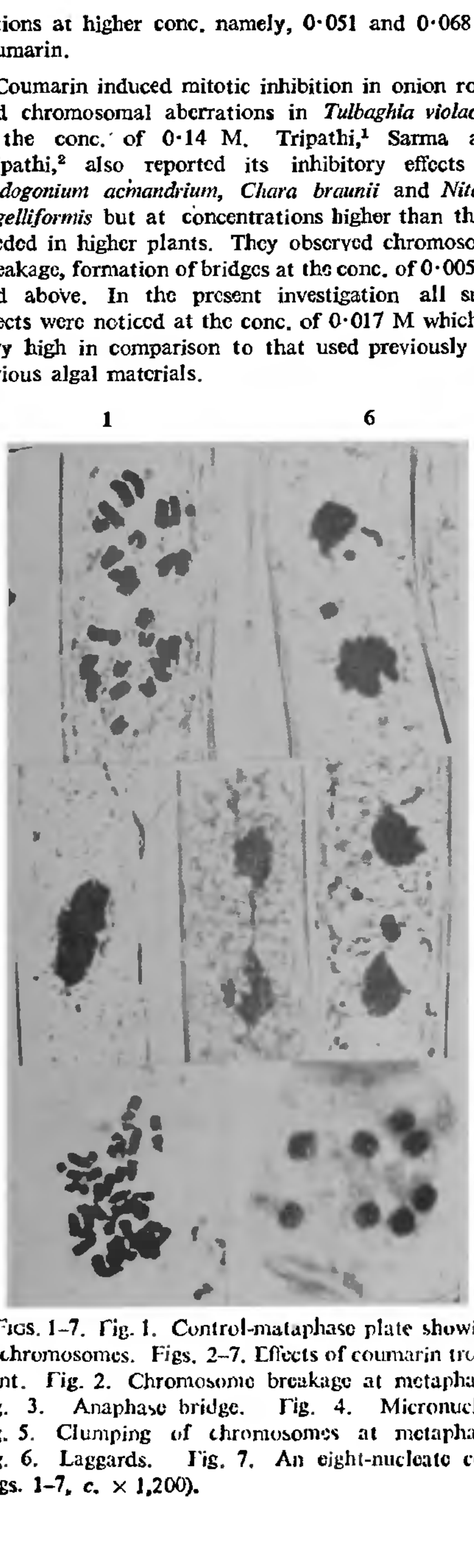
gations at higher conc. namely, 0·051 and 0·068 M coumarin.

Coumarin induced mitotic inhibition in onion roots and chromosomal aberrations in *Tulbaghia violacea*[5] at the conc. of 0·14 M. Tripathi,[1] Sarma and Tripathi,[2] also reported its inhibitory effects on *Oedogonium acmandrium*, *Chara braunii* and *Nitella flagelliformis* but at concentrations higher than those needed in higher plants. They observed chromosome breakage, formation of bridges at the conc. of 0·005 M and above. In the present investigation all such effects were noticed at the conc. of 0·017 M which is very high in comparison to that used previously on various algal materials.



Figs. 1–7. Fig. 1. Control-mataphase plate showing 24 chromosomes. Figs. 2–7. Effects of coumarin treatment. Fig. 2. Chromosome breakage at metaphase. Fig. 3. Anaphase bridge. Fig. 4. Micronuclei. Fig. 5. Clumping of chromosomes at metaphase. Fig. 6. Laggards. Fig. 7. An eight-nucleate cell. (Figs. 1–7, *c.* × 1,200).

On the basis of present investigation, it may be concluded that *R. hieroglyphycum* is more resistant to coumarin in comparison to other algae so far studied.

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INTERFERTILITY STUDY OF *DAEDALEA FLAVIDA* LÉV.

Nobles[1] pointed out the importance of interfertility studies in the taxonomy of fungi and she advanced a hypothesis that in Polyporaceae species which possess tetrapolar type of interfertility are associated with white rots and positive oxidase reactions, while species with bipolar interfertility cause brown rots and give negative oxidase reactions. Banerjee and Samadder[4] reported previously that *Daedalea flavida* Lév. possesses bipolar type of interfertility. But this fungus was found to cause white rot[5] and show positive oxidase reaction[6]. So a reinvestigation was made on the interfertility of *D. flavida* and the results are reported in this paper.

Five sporophores of *Daedalea flavida* were collected and several monosporous cultures were isolated from each of them following the usual dilution method. The monosporous cultures obtained from a single sporophore were paired among themselves in all possible combinations on 2·5% malt agar slants and in this way polarity of each of the isolates were determined. The distribution of mating types among the monosporous cultures is shown following the methods of Nobles[2] and Nobles, Macrae and Tomlin[3]. To designate the alleles governing interfertility conventional symbols such as $A_1A_2B_1B_2$ were used. The sporophores were dried and deposited in the Mycological Herbarium of the Visva-Bharati University (VBMH). Names of the hosts and isolate numbers of the voucher herbarium specimens are listed.

VBMH 79101 : monosporous cultures isolated from a sporophore on *Shorea robusta* Gaertn.

A_1B_1 : 1,2,5,7,12; A_1B_2 : 3,6,8,10,17,18;
A_2B_2 : 4,9,11,15,16; A_2B_1 : 14,19,20,22.

VBMH 79102 : monosporous cultures isolated from a sporophore on *Mangifera indica* L.

A_1B_1 : 4,8,9; A_1B_2 : 3,5,7,19;
A_2B_2 : 1,2,13,17,20; A_2B_1 : 6,10,11,12,14,15, 16,18.

VBMH 79104 : monosporous cultures isolated from a sporophore on *Cocos nucifera* L.

A_1B_1 : 3,8,10,15,19,20; A_1B_2 : 1,2,7,9,18;
A_2B_2 : 4,11,12,16,17; A_2B_1 : 5,6,14,23.

VBMH 79105 : monosporous cultures isolated from a sporophore on *Casuarina equisetifolia* L.

A_1B_1 : 21,22,25; A_1B_2: 1,2,3,4,16,17,18;
A_2B_2 : 5,6,7,8,9,10,12; A_2B_1 : 19,20,23.

VBMH 79107 : monosporous cultures isolated from a sporophore on *Ficus bengalensis* L.

A_1B_1 : 5,8,9,12,14,17, 18; A_1B_2 : 6,10,11,13,16;
A_2B_2 : 1,2,7,15; A_2B_1 : 19,20,21,24.

The results of pairings showed that the single spore cultures of each of the 5 sporophores fall into four groups on the basis of their ability to form clamp connections. Therefore, *Daedalea flavida* possesses tetrapolar type of interfertility and not bipolar as was reported previously[4]. The data obtained from the present investigation are therefore compatible with the taxonomic scheme proposed by Nobles[1] in Polyporaceae.

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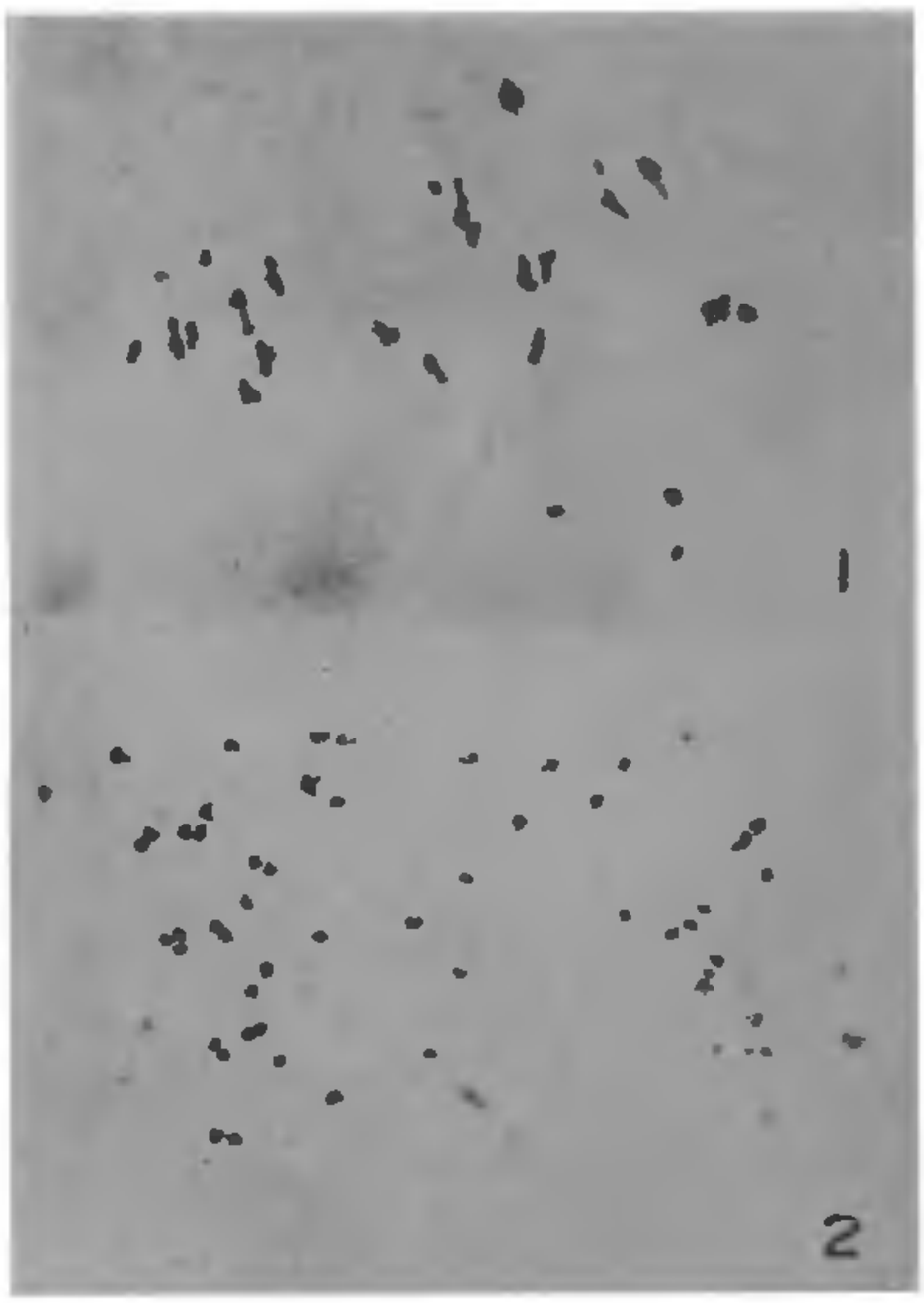
CYTOLOGY OF A TRIPLOID *SANSEVIERIA*

THE genus *Sansevieria* Thunb. (Family-Agavaceae) consists of nearly 60 species[1]. During the course of cytological investigation of nearly 20 species of *Sansevieria*, a clone of *S. gracilis* N. E. Brown was found to be a triploid. Natural triploidy in this genus is not reported before and the salient features of meiosis of the triploid taxon is described in the present communication.

Meiotic analysis of PMC's was made following the usual technique of iron-acetocarmine squashes. The basic chromosome number in the genus *Sansevieria* is X = 20 and the present material showed $2n = 60$.



FIGS. 1–2. Fig. 1. Metaphase I in *S. gracilis* showing $13_{III} + 7_{II} + 7_{I}$. Fig. 2. Anaphase I showing lagging chromosomes. (All × 1,500)

Thirty cells were analysed for metaphase I and various chromosome configurations such as trivalents, bivalents and univalents were observed (Fig. 1). The number of trivalents ranged from 11 to 20 with an average of 14·26. At diakinesis one trivalent was found to be attached to the nucleolus. The trivalents showed a tendency to disjoin at metaphase I ensuing in bivalents and univalents. The number of bivalents and univalents ranged from 0 to 11 and 0 to 9 with a mean of 6·63 and 3·96 respectively. Anaphase I was highly irregular with unequal distribution of chromosomes such as 28 : 32, 29 : 31, etc. Laggards were also observed (Fig. 2) of which some of the univalents