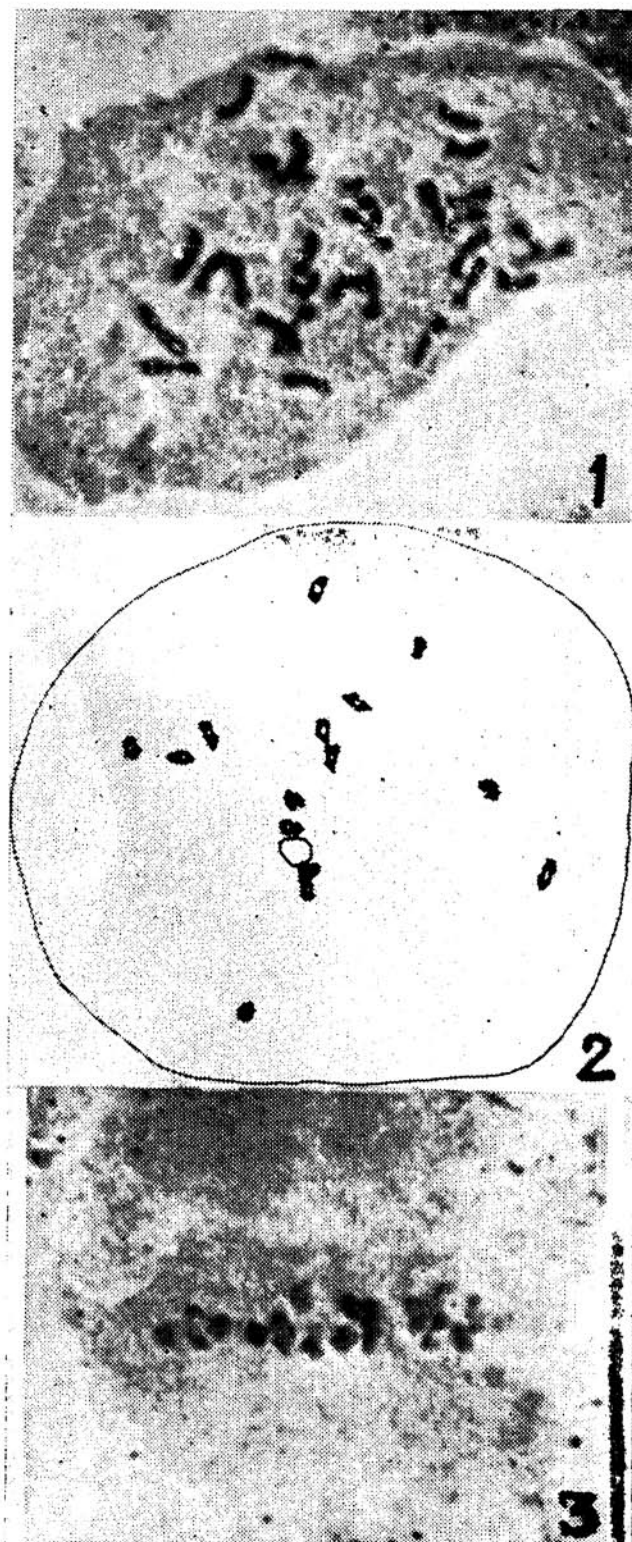


centromere arm ratios were calculated according to Adhikary¹. Relative length of the chromosomes was calculated following Kapoor and Love³.

The chromosome numbers determined for the species are $2n = 32$ (Fig. 1) and $n = 16$ (Fig. 2). The karyotype shows 9 pairs of chromosomes with nearly median and 7 pairs with nearly sub-median centro-



A NOTE ON THE CYTOLOGY OF *HIBISCUS PUNCTATUS* DALZ. (MALVACEAE)

THERE has been no report on the Cytology of *Hibiscus punctatus*. The present note deals with chromosome number, Karyomorphology and meiosis of the same.

The seeds and flower buds were collected from different localities in Gujarat. For somatic preparations, excised healthy root tips from germinated seedlings were pretreated with saturated solution of paradichlorobenzene for 2 hours at 12° C. Treated root tips were fixed in acetic-alcohol mixture (1:3) and squashed following Tjio and Leavan's method⁴. Meiotic studies were made by fixing the flower buds of suitable size in 1:3 acetic-alcohol mixture. Anther smears were made in 2% aceto-carmin. Slides were made permanent using tertiary butyl alcohol series as given by Celarier². To decide the position of

FIGS. 1-3, Fig. 1. Photomicrograph of somatic metaphase. Fig. 2. Camera lucida drawing of diakinesis showing 16 bivalents. 3. Photomicrograph of metaphase I. Figs. 1-3, $\times 1,200$.

TABLE I
Measurements of somatic chromosomes of H. punctatus Dalz.

Chromosome pair	Length in μ			Relative length	Arm Ratio		Centromere
	Long arm	Short arm	Total		R1	R2	
1, 2	2.46	+ 1.36	= 3.82	100.00	0.55	1.80	nsm
3, 4	2.38	+ 1.36	= 3.74	97.90	0.57	1.75	nsm
5, 6	2.29	+ 1.36	= 3.65	95.54	0.59	1.68	nsm
7, 8	2.12	+ 1.53	= 3.65	95.54	0.72	1.38	nm
9, 10	2.38	+ 1.02	= 3.40	89.00	0.40	2.33	nsm
11, 12*	0.68	+ 1.36 + 1.27	= 3.31	86.64	0.62	1.60	nm
13, 14	2.21	+ 1.10	= 3.31	86.64	0.50	2.00	nsm
15, 16	2.12	+ 1.10	= 3.22	84.29	0.51	1.92	nsm
17, 18	1.53	+ 1.36	= 2.89	75.65	0.88	1.13	nm
19, 20	1.70	+ 0.93	= 2.63	68.84	0.54	1.93	nsm
21, 22	1.53	+ 1.10	= 2.63	68.84	0.72	1.39	nm
23, 24	1.36	+ 1.19	= 2.55	66.75	0.87	1.14	nm
25, 26	1.23	+ 1.02	= 2.25	58.90	0.82	1.20	nm
27, 28	1.36	+ 0.85	= 2.21	57.85	0.62	1.60	nm
29, 30	1.02	+ 0.76	= 1.78	46.59	0.74	1.34	nm
31, 32	0.85	+ 0.59	= 1.44	37.69	0.69	1.60	nm

nsm = Nearly submedian; nm = Nearly median; * Par with secondary constrictions.

meres. One pair with nearly median chromosomes are with secondary constriction on short arms (Table I). The length of the chromosomes in the complement range from 1.44 μ to 3.82 μ with a mean length of 2.90 μ . The absolute length is 46.48 μ .

During meiosis 16 bivalents were observed at diakinesis and metaphase I (Figs. 2, 3). The subsequent divisions were found to be normal indicating the regularity of meiosis.

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