Vol. 2, Nos. 3 \& 4: p. 305, 1960

## NEW CHROMOSOME REPORT

The paper relates to chromosome numbers of 15 species of Angiosperms belonging to different families (Table 1). The study was carried by making smears of pollen mother cells, or by preparing leaf or root-tip
squashes as in the case of Mentha rotundifolia, Lantana wightiana and L. montevidensis. Acetocarmine and propiono-carmine stains were employed.

TABLE I

| No. | Names of the taxa. | Family | Chromosome <br> n | No. $2 \mathrm{n}$ | Locality |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mahonia leschenaultii Tak. | Berberidaceac | 14 | $\begin{aligned} & 36 \\ & 72 \\ & 36 \end{aligned}$ | Ooty. <br> Bangalore. -do- -do- <br> Sibpur garden, Calcutta. |
|  | Memecylon capitellatum L. | Melastomaceae | 14 |  |  |
|  | Pterocarpus echinatus Pers. | Papilionaceae | 11 |  |  |
|  | Cassia spectabilis DC. | Caesalpinaceae | 14 |  |  |
|  | Sindora siamensis Teysm. ex Mia. | -do- | 12 |  |  |
| 6. | Trema orientalis Blume | Urticaceae | 18 |  | Bangalore. |
|  | Ligustrum ovalifolium Hassk. | Oleaceae | 23 24 |  | Japan. |
| 9. | Datura bertolonii Parl. | -do- | 12 |  | Japa. ${ }_{\text {do- }}$ |
| 10. | Justicia simplex D. Don | Acanthaceae | 9 |  | Lucknow. |
| 11. | Lantana montevidensis Briq. | Verbenaccae |  |  | Coimbatore. |
| 12. | Lantana wightiana Wall. | ${ }_{\text {Labiatae }}{ }^{\text {- }}$ |  |  | $\xrightarrow{\text {-do- }}$ Poona. |
| 14. | Asphodelus tenuifolius Cav. |  | 14 |  | Lucknow. |
| 15. | Calanthe veratrifolia R. Br. | Orchidaceae | 20 |  | Coimbatore. |

Certain interesting features are noticed in the chromosome numbers of the taxa cited in the table. The chromosome number for the genus Trema is reported here for the first time (fig. 1). The somatic chromosome number for Sindora supa is recorded as 16 (Darlington and Wylie, 1955) but in the present species viz., S. siamensis, the haploid number is 12 (fig. 2). A new basic number ( $\mathrm{x}=9$ ) is established for the genus Justicia (fig. 3), the other basic numbers reported being 14 and 16 (Darlington and Wylie, loc. cit.; Narayanan, 1951).


Fig. 1. Trema orientalis MII $\times 2300$; Fig. 2. Sindora siamensis MI $\times 2100$; Fig. 3. Justicia simplex Diakinensis $\times 1250$.

The previous chromosome counts for Mentha rotundifolia are $2 \mathrm{n}=18,24$, and 54 (Darlington and Wylie, loc.
cit.) and in the present investigation a fourth chromosomal race with $2 n=36$ was met with. On the basis of the chromosome number reported for Memecylon aylmeri ( $2 \mathrm{n}=14$, Darlington and Wylie, loc. cit.), M. capitellatum with $\mathrm{n}=14$, should be considered as a polyploid. Datura inermis with $n=24$ is a naturally occurring polyploid; the previous record for all the investigated species has been $2 \mathrm{n}=24$ except the induced tetraploid of D. stramonium (Darlington and Wylie, loc. cit.).
Grateful thanks arée due to Dr. E. K. Janaki Ammal, previous Director, Central Botanical Laboratory and Dr. R. P. Patil for encouragement and guidance. I am also very thankful to Dr. G. S. Puri, Director, Central Botanical Laboratory for looking through this paper.

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## LITERATURE CITED

1. Darlington, C. D. and Wylie, A. P.-Chromosome Atlas of flowering plants, London, 1955.
2. Narayanan, C. R.-Somatic chromosomes in the Acanthaceae J. Madras Univ., 21B, (2): 220-231, 1951.
