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Chromosome numbers of some Dicotyledons

Haploid chromosome numbers of a few dicotyledonous plants, most of them attracting our attention either as ornamentals or as weeds, are reported herein for the first time. A few of these have been introduced into this country and as such do not occur here in the wild state. The anthers of these plants were fixed in a mixture of 3 parts of ethyl alcohol; 4 parts of chloroform; 1 part of glacial acetic acid, which had been previously saturated with carmine and ferric acetate and then squashed in iron aceto-carmine. The counts are tabulated below:—

Name of the species	Family	Haploid chromosome number (n)
1. *Capparis grandis* Linn.	Capparidaceae	21
2. *Pavonia procumbens* Boiss.	Malvaceae	
a. without pink petal spot	..	14
b. with pink petal spot	..	14
3. *Galphimia nitida* Cult.	Malpighiaceae	12
4. *Tristellateia australis* A. Rich.	,,	9
5. *Chrozophora rottleri* Klotzsch.	Euphorbiaceae	11
6. *Wrightia tinctoria* R.Br.	Apocynaceae	10
7. *Catharanthus pusillus* G. Don.	,,	8
8. *Catesbaea spinosa* Linn.	Rubiaceae	12
9. *Chiococca racemosa* Linn.	,,	12
10. *Gmelina arborea* Roxb.	Verbenaceae	19
11. *G. asiatica* Linn.	,,	19

In *Capparis* the basic numbers $x = 9$, 10 and $x_2 = 19$ have been deduced from the records of species with 18, 30, 38, and 40 chromosomes[1]. Panikkar[2] has reported $n = 22$ for *C. decidua* and with the present finding of $n = 21$ for *C. grandis*, it is possible to conceive of two other basic numbers as $x = 11$ and 12 for this genus. The basic number of $x = 21$ is of secondary origin and could have arisen as a result of the combination of $x = 11$ and 10 or alternatively $x = 12$ and 9. The hybridization between two forms, one with $x = 12$, and the other with $x = 10$ or two $x = 11$ forms with divergent genomes could have resulted in the secondary number $x = 22$. It is apparent from the chromosome number for *C. grandis* now reported that Kuhn's (cited in Darlington and Wylie) *C. acutifolia* with c.84 chromosomes is a tetraploid species. Thus *Capparis* constitutes an interesting genus for further investigation as both aneuploidy and polyploidy appear to have been simultaneously operating as evolutionary tools.

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[1] C. D. Darlington and A. P. Wylie. Chromosome Atlas of Flowering Plants, George Allen and Unwin and Co., London, 36, 1955.
[2] A. O. N. Panikkar, *Curr. Sci.*, **31**, 32, 1962.