CHROMOSOME NUMBERS IN SOME INDIAN ANGIOSPERMS—I

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DURING the course of a cytotaxonomic investigation on North Indian angiosperms, the chromosome number was determined in several species. Each taxon was sampled as widely as possible, which led to the discovery of some cases of natural interspecific hybridization and polypoid complexes.

The chromosome determinations were made from the meiosis in pollen mother-cells, which were supplemented in some cases with the data from root-tips.

The voucher herbarium specimens have been kept for all the investigated species and hybrids. In most cases even the living plants are being maintained in the garden.

The present results are tabulated below:

Sl. No.	Name of the species	Chromosome number	
		n	*2n*
I	ACANTHACEAE		
*1.	*Aphelandra fulgens* Decne.	28	..
*2.	*Barleria lupulina* Lindl.	20	..
†3.	*Dianthera coccinea* Salis.	18	..
4.	*Justicia simplex* Don.	9	..
5.	*Justicia ventricosa* Wall.	15	..
6.	*Petalidium barlerioides* Nees.	16	..
II	AMARANTHACEAE		
7.	*Achyranthes aspera* Linn.	21, 42	..
8.	*Achyranthes bidentata* Blume Bijd.	21	..

Sl. No.	Name of the species	Chromosome number	
		n	2*n*
	9. *Aerua lanata* Juss.	8	..
	*10. *Aerua scandens* Wall.	26	..
	*11. *Aerua javanica* (Burm f.) Spreng	18	..
	*12. *Aerua* sp.	..	44
	*13. *Alternanthera sessilis* Br.	17	34
	*14. *Alternanthera polygonoides* (L.) R. Br.	17	..
	*15. *Alternanthera echinata* Smith	34	..
	*16. *Alternanthera* sp.	68	..
	17. *Amaranthus viridis* Linn.	17	..
	18. *Amaranthus dubius* Mart.	32	..
	19. *Amaranthus spinosus* Linn.	17	..
	20. *Amaranthus spinosus* × *A. dubius*	..	49
	21. *Amaranthus leucocarpus* S. Wats	16	..
	*22. *Bosia amhertiana* Hook.	18	..
	23. *Celosia argentea* Linn.	36	..
	24. *Celosia cristata* Linn.	18	..
	†25. *Cyathula prostrata*, Blume Bijd.	24	..
	*26. *Cyathula tomentosa* Moq.	17	34
	†27. *Deeringia amaranthoides* (Lamk)-Merill.	9	..
	28. *Digera muricata* (Linn.) Mart.	9	..
	*29. *Gomphrena celosioides* Jacq.	13	..
	†30. *Nothosaerua brachiata* Wight.	9	..
	31. *Pupalia lappacea* Juss.	25, 50	..
	†32. *Telanthera ficoidea* Moq.	34	..
III	BORAGINACEAE		
	‡33. *Trichodesma indicum* R.Br. (*Sensu lata*)	11, 22	..
IV	CONVOLVULACEAE		
	34. *Jacquemontia violacea* Choisy.	9	..
V	EUPHORBIACEAE		
	35. *Croton bonplandianum* Baill.	10	..

Sl. No.	Name of the species	Chromosome number	
		n	*2n*
VI	FICOIDEAE		
	‡36. *Gisekia pharnaceoides* Linn.	18, 36, 54	..
VII	LABIATEAE		
	37. *Leonotis nepetaefolia* Br.	14	..
VIII	LEGUMINOSEAE		
	†38. *Brya ebenus* DC.	10	..
	39. *Sophora tomentosa* Linn.	9	..
IX	MALPIGHIACEAE		
	*40. *Banisteria laevifolia* A. Juss.	20	..
	†41. *Hiptage madablota* Goertn.	29	..
	42. *Malpighia coccigera* Linn.	10	..
	*43. *Malpighia glabra* Linn.	20	..
	44. *Stigmaphyllon ciliatum* A. Juss.	10	..
	*45. *Stigmaphyllon lacunosum* A. Juss.	10	..
	*46. *Stigmaphyllon periplocaefolium* A. Juss.	10	..
	47. *Thryallis glauda* Kuntze	12	..
X	STERCULIACEAE		
	48. *Eriolaena hookeriana* W. and A.	60	..

* Species investigated for the first time.

† Genera investigated for the first time.

‡ New Polyploid complexes.

A perusal of the above table and the earlier work (Darlington and Wylie, 1955; Cave *et al.*, 1955–62) shows that out of the 48 species investigated, 23 are being reported for the first time which include seven unworked genera. Four species contain polyploid complexes. One natural interspecific hybrid has been discovered. Details of this investigation will appear in a series of papers covering the cytogenetic, taxonomic and geographic implications of the results,

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