

Table 1. Comparison in karyotypes of 32 species and one natural hybrid of *Drosera*, *Aldrovanda vesiculosa*, *Dionaea muscipula* and *Drosophyllum lusitanicum* investigated

Species	Chromosome number	Total chromosome area ( $\mu\text{m}^2$ ) (mean $\pm$ SD)	Chromosome area from the largest to the smallest chromosomes ( $\mu\text{m}^2$ )	Average area of chromosome complement ( $\mu\text{m}^2$ ) (mean $\pm$ SD)	Largest / smallest chromosome	inter-chromosomal asymmetry index	Karyotype formula <sup>a</sup>	Number of CMA- positive or DAPI- negative sat-chromosomes in metaphase complements
Genus <i>Drosera</i>								
Subgenus <i>Roella</i>								
Section <i>Thelocalyx</i>								
<i>D. burmanni</i>	20	15.36 $\pm$ 3.12	1.02 - 0.57	0.77 $\pm$ 0.12	1.84	0.16	20S	2
<i>D. sessilifolia</i>	80	48.15 $\pm$ 6.94	0.92 - 0.35	0.62 $\pm$ 0.14	2.67	0.24	80S	2
Section <i>Arachnopus</i>								
<i>D. adelae</i>	30	16.59 $\pm$ 2.92	0.95 - 0.22	0.55 $\pm$ 0.17	4.87	0.32	30S	2
<i>D. indica</i>	28	47.18 $\pm$ 9.04	2.36 - 0.45	1.69 $\pm$ 0.44	5.97	0.26	22M + 6S	4
<i>D. prolifera</i>	30	19.94 $\pm$ 5.02	1.04 - 0.24	0.66 $\pm$ 0.18	4.72	0.27	30S	2
Section <i>Rosolis</i>								
Series <i>Eurosolis</i>								
<i>D. aliciae</i>	80	75.96 $\pm$ 10.26						
<i>D. anglica</i>	40	93.59 $\pm$ 29.56	1.49 - 0.41	0.95 $\pm$ 0.23	4.02	0.25	80S	2
<i>D. brevifolia</i>	20	38.15 $\pm$ 5.09	3.19 - 1.71	2.34 $\pm$ 0.34	1.95	0.15	40M	0
<i>D. capensis</i>	40	21.50 $\pm$ 5.73	2.48 - 1.52	1.91 $\pm$ 0.25	1.65	0.14	20M	2
<i>D. capillaris</i>	20	68.50 $\pm$ 12.90	0.82 - 0.34	0.53 $\pm$ 0.10	2.56	0.20	40S	2
<i>D. collinsiae</i>	40	38.11 $\pm$ 7.01	4.80 - 2.33	3.43 $\pm$ 0.66	2.08	0.20	20M	0
<i>D. dielsiana</i>	40	37.52 $\pm$ 10.10	1.06 - 0.43	0.70 $\pm$ 0.14	2.52	0.21	40S	0
<i>D. filiformis</i>	20	88.03 $\pm$ 19.07	1.35 - 0.59	0.94 $\pm$ 0.19	2.38	0.21	40S	4
<i>D. hilaris</i>	40	28.91 $\pm$ 8.95	5.87 - 2.97	4.40 $\pm$ 0.82	2.01	0.19	20M	2
<i>D. intermedia</i>	20	47.33 $\pm$ 13.82	1.13-0.39	0.72 $\pm$ 0.16	3.04	0.23	40S	2
<i>D. madagascariensis</i>	40	20.60 $\pm$ 5.72	3.26-1.63	2.37 $\pm$ 0.44	2.02	0.19	20M	2
<i>D. montana</i>	40	50.01 $\pm$ 11.99	0.80 - 0.29	0.51 $\pm$ 0.12	2.93	0.25	40S	2
<i>D. rotundifolia</i>	20	46.28 $\pm$ 9.19	1.95 - 0.59	1.25 $\pm$ 0.34	3.37	0.27	10M + 30S	2
<i>D. spathulata</i>	20	17.79 $\pm$ 4.79	3.18-1.52	2.31 $\pm$ 0.42	2.19	0.19	20M	0
	40	36.74 $\pm$ 6.71	1.25 - 0.59	0.89 $\pm$ 0.16	2.17	0.19	20S	2
	60	92.49 $\pm$ 13.68	1.40 - 0.52	0.92 $\pm$ 0.21	2.78	0.23	40S	0
<i>D. trinervia</i>	40	35.39 $\pm$ 8.71	3.73-0.52	1.54 $\pm$ 1.05	7.64	0.68	20M + 40S	0
<i>D. villosa</i>	40	27.99 $\pm$ 6.14	1.90 - 0.48	0.88 $\pm$ 0.27	4.60	0.32	2M + 38S	2
<i>D. x hybrida</i>	20	62.88 $\pm$ 8.59	1.14 - 0.33	0.70 $\pm$ 0.19	3.60	0.27	40S	2
			5.50 - 1.50	3.14 $\pm$ 1.27	3.70	0.41	20M	2
Series <i>Lasiocephala</i>								
<i>D. dilatato-petiolaris</i>	12	98.07 $\pm$ 18.65						
<i>D. falconeri</i>	12	89.12 $\pm$ 19.33	9.77 - 6.24	8.17 $\pm$ 0.98	1.57	0.12	12L	0
	13	95.12 $\pm$ 12.34	8.87 - 6.34	7.43 $\pm$ 0.70	1.40	0.10	12L	0
<i>D. lanata</i>	12	89.63 $\pm$ 15.62	9.13 - 3.02	7.32 $\pm$ 1.52	3.22	0.21	12L + 1M	0
	14	100.80 $\pm$ 14.88	8.94 - 6.10	7.47 $\pm$ 0.83	1.48	0.12	12L	0
<i>D. ordensis</i>	24	181.79 $\pm$ 35.24	9.15 - 3.05	7.20 $\pm$ 1.81	3.06	0.25	12L + 2M	0
<i>D. petiolaris</i>	12	90.52 $\pm$ 19.42	9.86 - 6.06	7.57 $\pm$ 1.04	1.64	0.14	24L	0
	13	93.34 $\pm$ 17.62	9.01 - 6.00	7.54 $\pm$ 0.89	1.52	0.12	12L	0
	14	102.66 $\pm$ 15.08	9.04 - 2.96	7.18 $\pm$ 1.45	3.22	0.21	12L + 1M	0
			9.34 - 3.09	7.33 $\pm$ 1.88	3.14	0.26	12L + 2M	0
Section <i>Stelogyne</i>								
<i>D. hamiltonii</i>	28	18.88 $\pm$ 5.19						
			1.00 - 0.42	0.67 $\pm$ 0.14	2.42	0.21	28S	2
Section								
<i>D. binata</i>	32	41.06 $\pm$ 10.02						
			1.89 - 0.75	1.28 $\pm$ 0.28	2.67	0.22	8M + 24S	2
Subgenus <i>Ptycnostigma</i>								
Section <i>Ptycnostigma</i>								
<i>D. cistiflora</i>	60	34.10 $\pm$ 6.63						
<i>D. pauciflora</i>	40	23.42 $\pm$ 5.33	0.83 - 0.28	0.57 $\pm$ 0.11	5.63	0.21	60S	4
Subgenus <i>Ergaleium</i>								
Section <i>Polypeltes</i>								
<i>D. auriculata</i>	32	30.24 $\pm$ 5.56						
<i>D. peltata</i>	32	28.03 $\pm$ 9.68	1.49 - 0.48	0.95 $\pm$ 0.26	4.28	0.30	32S	0
Genus <i>Aldrovanda</i>								
<i>Aldrovanda vesiculosa</i>	48	43.25 $\pm$ 7.50	1.40 - 0.39	0.88 $\pm$ 0.27	4.39	0.32	32S	4
Genus <i>Dionaea</i>								
<i>Dionaea muscipula</i>	33	96.96 $\pm$ 19.03	1.48 - 0.33	0.90 $\pm$ 0.26	6.37	0.30	48S	2
Genus <i>Drosophyllum</i>								
<i>Drosophyllum lusitanicum</i>	12	377.28 $\pm$ 29.15	3.82 - 0.53	2.94 $\pm$ 0.53	9.20	0.20	32M + 1S	0
			40.02 - 26.28	31.44 $\pm$ 5.20	1.32	0.18	12LL	0

<sup>a</sup>S = small-size chromosome ( $< 1.49 \mu\text{m}^2$ ), M = middle-size chromosome ( $1.50 - 5.99 \mu\text{m}^2$ ), L = large-size chromosome ( $6.00 - 14.99 \mu\text{m}^2$ ), LL = super large-size chromosome ( $> 15.00 \mu\text{m}^2$ )  
SD = standard deviation of the mean

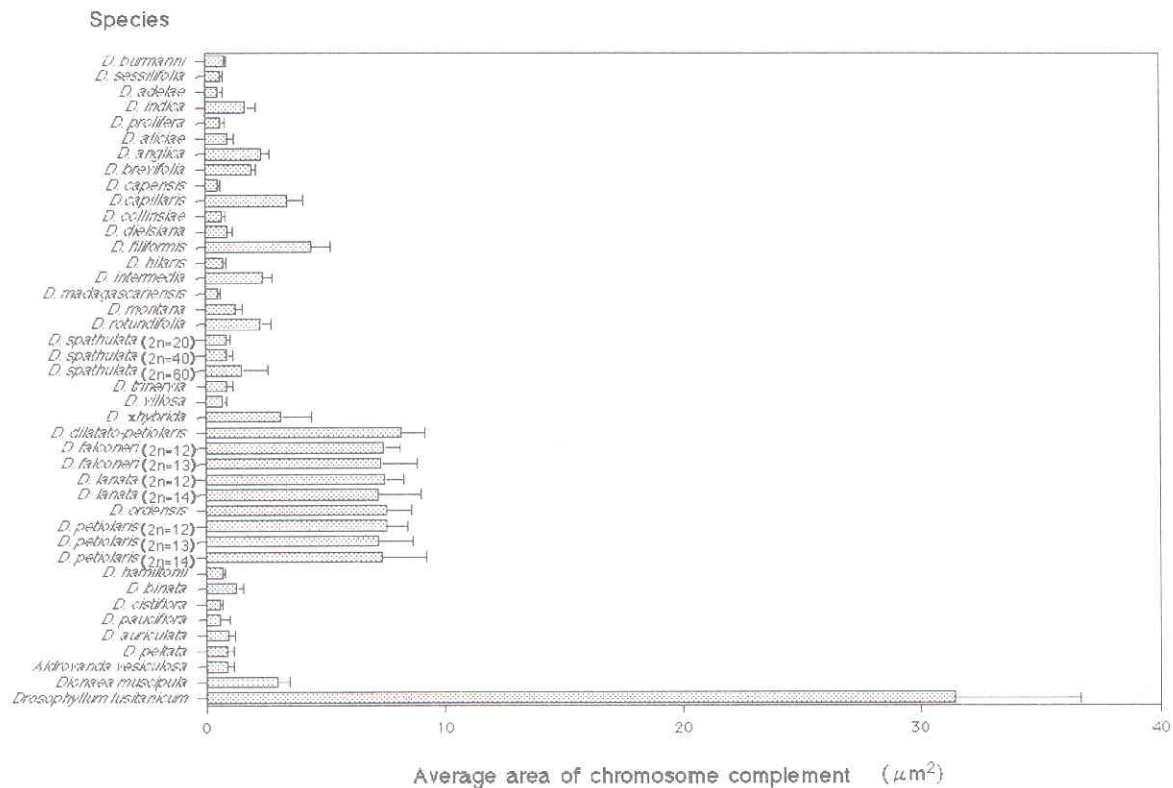


Figure 1. Histograms of average chromosome size measured in the members of the Droseraceae studied. Average chromosome size made it possible to divide the members to sect. *Rossolis*, ser. *Eurossolis* into two major groups: One group, which was characterized by middle-size chromosomes, consisted of *D. anglica*, *D. brevifolia*, *D. capillaris*, *D. filiformis*, *D. intermedia*, *D. rotundifolia* and *D. x hybrida*, distributed in the Northern Hemisphere. The other group, which was characterized by small-size chromosomes, consisted of *D. aliciae*, *D. capensis*, *D. dielsiana*, *D. hilaris*, *D. madagascariensis*, *D. montana*, the diploid and the tetraploid *D. trinervia* and *D. villosa*, distributed mainly in the Southern Hemisphere. In the species of *Drosera* studied, *D. petiolaris* complex had more than  $7.00 \mu\text{m}^2$  of large-size chromosomes.