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Ferns of the Indo-Nepal border

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The ferns of the Valmikinagar area of virgin forest have been studied morphologically and cytologically. The area lies on the Nepal frontier at latitude 27°31', and has a monsoon type of climate. Twenty-five species belonging to 15 genera are recorded and further studies are in progress. Cytological results thus far are summarised in Table 1.

Table 1. Chromosome numbers of ferns of the Indo-Nepal border

Species	Chromosome number Mitotic (somatic)	Meiotic	Range of chromosome length in µm	Ploidy
1. <i>Ophioglossum vulgatum</i> L.	240	120	2·4–5	Tetraploid
2. <i>Lygodium scandens</i> (L.) Sw.	60	30	3·0–7·2	Diploid
3. <i>Adiantum capillus-veneris</i> L.	60	30	3·1–6·5	Diploid
4. <i>A. caudatum</i> L.	60	30	3·1–6·5	Diploid
5. <i>Onychium auratum</i> (L.) Kaulf.	60	30	3·2–7·2	Diploid
6. <i>Cheilanthes farinosa</i> (Forsk.) Kaulf.	60	30	3·2–5·5	Diploid
7. <i>C. tenuifolia</i> (Burm.) Sw.	120	60	2·7–4·7	Tetraploid
8. <i>C. albomarginata</i> Clarke	60	30	3·0–7·0	Diploid
9. <i>Pteris cretica</i> L.	58	58	3·2–6·8	Diploid (apogamous)
10. <i>P. cretica</i> L.	87	87	2·4–5·5	Tripliod (apogamous)
11. <i>P. biausita</i> Retz (s.l.)	58	29	4·0–8·0	Diploid
12. <i>P. vittata</i> L.	116	58	3·6–7·2	Tetraploid
13. <i>Nephrolepis exaltata</i> (L.) Schott.	82	41	2·8–5·5	Diploid
14. <i>N. cordifolia</i> (L.) Presel.	82	41	8·4–6·8	Diploid
15. <i>Dryopteris cochleata</i> (Don) Ch. Chr.	82	41	2·8–6·0	Diploid
16. <i>D. mollis</i> Desv.	164	82	4·2–8·4	Tetraploid
17. <i>Athyrium pectinatum</i> (L.) Bernh.	82	41	2·8–6·0	Diploid
18. <i>Diplazium esculentum</i> Presl.	82	41	2·4–4·4	Diploid
19. <i>Goniopteris multilineata</i> (Wall.) Beddome.	72	36	3·1–5·7	Diploid
20. <i>Pleopeltis punctata</i> (L.) Copel.	72	36	3·6–7·2	Diploid
21. <i>P. longissima</i> Moore	74	37	3·1–8·0	Diploid
22. <i>Marsilea quadrifolia</i> L.	40	20	2·8–4·8	Diploid
23. <i>M. minuta</i> L.	40	20	2·9–4·6	Diploid
24. <i>Salvinia natans</i> (Cult.) L.	36	18	2·8–5·3	Tetraploid
25. <i>Azolla pinnata</i> L.	44	22	1·6–2·4	Tetraploid