

OF THE FLORA

STATISTICAL DATA ON THE FLORA

A total of <u>483</u> angiosperms belonging to <u>349</u> genera and <u>109</u> families have been collected from the region. The genera to species ratio is <u>1: 1.38</u>.

The ratio between Monocots and Dicots species is 1: 6.31; between Monocots and Dicots families is 1: 4.73 and between Monocots and Dicots genera is 1: 5.98. Out of the total 109 families, 45 families are represented by one species each. Monocotyledons are represented by 66 species out of which Poaceae and Cyperaceae are dominant, representing 22 and 12 species respectively. This result is against general pattern where Cyperaceae dominates after Poaceae. Here Cyperaceae is poorly represented only by 12 species.

TABLE 7 (A): STATISTICAL SYNOPSIS OF FLORA OF CHHOTA-UDEPUR
FOREST DIVISION

Group	Dic	ots	Mond	Totals		
	Number	Percent	Number	Percent	*	
Families	90	82.56	19	17.43	109	
Genera	299	85.67	50	14.32	349	
Species	417	86.33	66	13.66	483	

It is interesting to note here that the proportion of genera to species in the entire country is 1:7 (Bedi, 1968). The ratio of genera to species in the selected area is 1:1.38. This confirms or rather supports the general rule that within the same floral region the smaller the area, the smaller is the genera to species ratio.

A comparative list of dominant families of the study area and of the adjacent areas has been prepared.

The table # 7B shows the position of different families in the study area and their respective positions in order of dominance in other areas.

The table # 7B indicates that the dominant families in the Chhota-udepur forest division, Ratanmahal and Pavagadh are same with some minor exceptions. The position of family Cyperaceae is the most varying. Cypercaeae is very poorly represented in the study area as well as in the Pavagadh flora (Chavan and Oza, 1966); whereas it occupies 4th position in flora of Ratanmahal (Bedi, 1968). Cyperaceae is not among the first ten dominant families in the Pavagadh flora, whereas it occupies 9th position in the present study area. With reference to Cooke's

flora of the Bombay Presidency (1958. Repr. ed.) and Gamble and Fischer's flora of Madras Presidency (1915), family Leguminosae and Poaceae occupy the first and second position in the present area and the adjacent forest ranges viz., Pavagadh, Ratanmahal and Kawant. The number of Leguminosae species includes those given for family Fabaceae, Caesalpiniaceae and Mimosaceae. From the statistical data (table # 7A) it can be concluded that the Monocotyledonous species, on the whole are poorly represented in the area (13.66 %). Among monocots Poaceae occupy highest position (22 species), followed by Cyperaceae species (12).

Largest family in Dicotyledons is Leguminosae (73 species; 49 of Fabaceae + 13 of Caesalpiniaceae + 11 of Mimosaceae) that is followed by Asteraceae (22 species), Malvaceae (18 species), Cucurbitaceae (16 species), Rubiaceae (15 species), Convolvulaceae and Euphorbiaceae (14 species each), Schrophulariaceae (12 species); Solanaceae; Amaranthaceae and Asclepiadaceae (11 species each) and lastly Lamiaceae (10 species).

TABLE 7 (B): COMPARATIVE ANALYSIS FOR ORDER OF DOMINANCE OF PLANT FAMILIES

	Hook, F.	Cooke	Gamble	Chavan	Bed	Karatela,	Thaker	Menon.	Joshi,	Present
	FI. Brit India (1872-97)	(1958 (Repr ed).)	and Fishcer (1915)	and Oza, (1966)	(1968)	(1973)	(1974)	(1979)	(1983)	study (1998: 2001)
<i>3</i> () <i>1</i>	Orchida-	Legumin-	Legumi-	Legumi-	Legum-	Legumi-	Fabaceae	Fabaceae	Poaceae	Legumino
	Legumino-	Poaceae	Poaceae	Poaceae	Poaceae	Poaceae	Роасеае	Poaceae	Fabaceae	Poaceae
	Poaceae	Euphorbi- aceae	Rubia- ceae	Composi- tae	Compos- itae	Cypera- ceae	Composi- tae	Astera- ceae	Cypera- ceae	Astera- ceae
	Rubiaceae	Acantha-	Acantha-	Convolvu-	Cypera-	Composi-	Cypera-	Malva-	Astera-	Malva-
		9 9 9 9	Cease	aceae	e S C C C C	D B	o a a	a a C C C	D 0 0 0 0	Ceae and Acantha- ceae
	Euphorbia	Compo-	Euphorbia	Euphorbia	Acantha-	Euphorbia	Acantha-	Acantha-	Euphorbia	Cucurbitac
	-ceae	sitae	ceae	ceae	ceae	ceae	сеае	сеае	сеае	eae
	Acantha-	Cyperace	Orchida-	Acantha-	Euphorbia	Convolvul	Euphorbia	Convolvul	Acantha-	Rubia-
	Astera-	25	Composi-	Malva-	Convolvul-	Acantha-	Convolvul	Euphorbi-	Scrophula	Convolvul
	ceae		tae	ceae	aceae	ceae	aceae	aceae	riaceae	aceae
	Cypera-		Cypera-	Cucurbitac	Malva-	Malva-	Malva-	Cypera-	Malva-	Euphorbia
	ceae		сеае	eae	ceae	ceae	ceae	ceae	сеае	ceae and
									•	Scrophula
					4, 4, 6, 6	2014	4. 4	() d	10,000	riaceae
	משש-	Malva-	ָם בּ	רמו ומ	Cucuinitae	Cucui Dilac	Cucu Dila-	רשומש- 1900	COLIVOINAL	30la la-
	Сеае	Сеае	ceae	ceae	626	eae and	ceae	ceae	aceae	Ceae,
						במוומ-				
						ceae				aceae and

Cyperace ae	Labiatae		Apocyna-	ceae	Verbena-	ceae	Combreta	ceae	Liliaceae		Orchida-	ceae
	Lamia-	сеае			i		ı		ı		1	
	Cucurbitac Lamia-	eae	1		ı				ı		ı	
	Lamia-	ceae	Scrophula	riaceae	Amaranth	aceae	Rubia-	ceae	ı		ı	
	Scrophu-	lariaceae	ı				ı		ı		ŧ	
	Lamia-	ceae	Amaranth-	aceae	Rubia-	ceae	Asclepiad-	aceae	Scrophula	riaceae	Orchida-	ceae
	Scrophul-	ariaceae	ı		,		ı		ŀ		1	
	•		1		Į.		1		I		1	
	Convolvu-	laceae	Lamia-	ceae	Scrophul-	ariaceae	ı		ı		ı	
	Urticaceae		ı		ŧ		ı		I		1	
	9		-		12		13		4		15	