Finger Prints of the Boro Kacharis of Assam

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ABSTRACT Finger dermatoglyphic patterns have been analyzed in 100 Boro Kachari (50 males, 50 females) individuals living in the Kamrup distric to Assam, India.

INTRODUCTION

The Boro Kachari, an endogamous group of Kachari tribe is a populous plain scheduled tribal population of Assam. At present, the major bulk of the population is concentrated in the district of Kokrajhar, however, a sizeable number of them are also found to inhabit in Goalpara, Kamrup and Darrang districts of Assam. They belong to the Bodo section of Tibeto-Chinese linguistic family and contemporary Assam is inhabited by a number of Kachari tribes, such as Dimasa, Burman, Semsa, Hojai, Mech, Thengal, Sonowal etc. The present study deals with the finger dermatoglyphics of the Boro Kachari.

MATERIAL AND METHODS

Bilateral rolled finger prints of 100 unrelated Boro individuals (50 males, and 50 females) were collected from three villages namely Bahupara, Rangapara and Andhirijuli of Rani Development Block, Kamrup district, Assam. The method of anaylsis were those of Cummins and Midlo (1961). In case of ridge-counting, general rules adopted by Holt (1949) followed.

RESULTS AND DISCUSSION

Whorls occur more frequently on digits I, II and IV while loops are found to be more frequent on the digits III and V. Radial loop as well as arch occur very scarcely, and the highest frequecncy tend to be on digit II. In both the sexes the right hand shows a comparatively higher occurrence of whorls and lesser in the manifestation of loops (Table 1). In Boro Kachari, whorls and loops occur in the ratio 51 : 49 in males and 47 : 53 in the females. Sarkar (1954) has shown that the whorl and loop occur in the ratio 50 : 50 among the Mongoloid people. As a result, the whorl-loop index (Furuhata, 1927) of the right hand is comparatively higher. The characteristic comparative frequent occurrence of arches in left hand is also reflected in the increase of arch-whorl index (Dankmeijer,

Table 1 : Digital patterns in Boro Kachari

Sex	*Hand*	*Digital Patterns*					*Digital Indices*		
		Whorls	*Loops*			*Arches*	*Dankmeijer's*	*Furuhata's*	*Pattern*
			Ulnar	*Radial*	*Total*		*Index*	*Index*	*Intensity*
Male	Rt.	25.4	22.6	1.0	23.6	1.0	3.9	107.6	7.4
	Lt.	24.0	23.6	1.2	24.8	1.2	5.0	96.8	7.3
	R+L	49.4	46.2	2.2	48.4	2.2	4.5	102.1	14.7
Female	Rt.	23.4	25.2	0.2	25.4	1.2	5.1	92.1	7.2
	Lt.	21.8	24.6	1.0	25.6	2.6	11.9	85.2	6.9
	R+L	45.2	49.8	1.2	51.0	3.8	8.4	88.6	14.1

Table 2 : Mean value of Total Finger Ridge Counts (TRC) in Boro Kachari

Sex	*Hand*	*No.*	*Mean ± S. E.*
Male	R	50	74.10 ± 2.77
	L	50	72.10 ± 3.03
	R + L	50	145.90 ± 3.04
Female	R	50	64.30 ± 2.78
	L	50	63.10 ± 2.77
	R + L	50	127.60 ± 3.49

1938) in the left hand. Due to higher occurrence of arches, the value of Dankmeijer index among female is comparatively higher than males. Similarly, because of high incidence of loops and arches in females, the pattern intensity index in them are low than their male counter parts. In the present series, thus, the male display the pattern of dermatoglyphic features, which is not similar with that of the females.

It is seen (Table 2) that the male Kachari show slightly higher mean values of total finger ridge count than their female counterparts and the sex heterogeneity is also found to be singificant.

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