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ON *CERVUS PUNJABIENSIS* BROWN FROM THE SIWALIK HILLS OF PAKISTAN AND AZAD KASHMIR*

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Abstract: A well preserved right molar is described from Dhok Pathan, Chakwal district, the Punjab province, Pakistan and a basal part of left antler from Jari Kas, Mirpur district, Azad Kashmir, Pakistan. A comparison of the specimens under study with the known material of the genus *Cervus* has shown that they are referable to the species *Cervus punjabiensis* Brown. The material studied gives additional information on the known species.

Key words: *Cervus*, Dhokpathan, Antler and Jarikas.

INTRODUCTION

Cervids are a group of mammals which belong to the class Mammalia, family Cervidae and order Artiodactyla. They are characterized by antlers and prominent lacrymal depressions anterior to the eyes. According to Colbert (1935) the Siwalik cervids may be placed in four species i.e., *Cervus triplidens* Lydekker, *C. simplicidens* Lydekker, *C. sivalensis* Lydekker, *C. punjabiensis* Brown. Arif and Shah (1991) erected the new species of cervids from the Upper Siwaliks of Pakistan by describing a right mandibular ramus having P_3-M_3. The distinct features of *C. rewati* are the small size of the teeth, the presence of accessory columns and pronounced anterior folds on the molars.

Recently, several cervid remains comprising dental, partial skulls and antler fragments have been found by Arif and Shah (1991) from the Upper Siwaliks of Mirpur, Azad Kashmir. The comparative studies of these specimens have shown common occurrence of *Cervus punjabiensis* and *C. triplidens*. Sarwar and Farooq (1991) have also indicated the presence of *C. punjabiensis* from the Middle Siwaliks of Lehri, Jhelum district. The comparative anatomical studies of the specimens under study have shown that they belong to the species *C. punjabiensis*. These specimens have been given the number with a prefix P.U.P.C. (Punjab University Palaeontological Collection). The classification is based on Simpson (1945).

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Systematics

Order	Artiodactyla Owen
Suborder	Ruminantia Scopoli
Infraorder	Pecora Linnaeus
Superfamily	Cervoidea Simpson
Family	Cervidae Gray
Subfamily	Cervinae Baird
Genus	*Cervus* Linnaeus
Species	*Cervus punjabiensis* Brown (Figs.1-2).

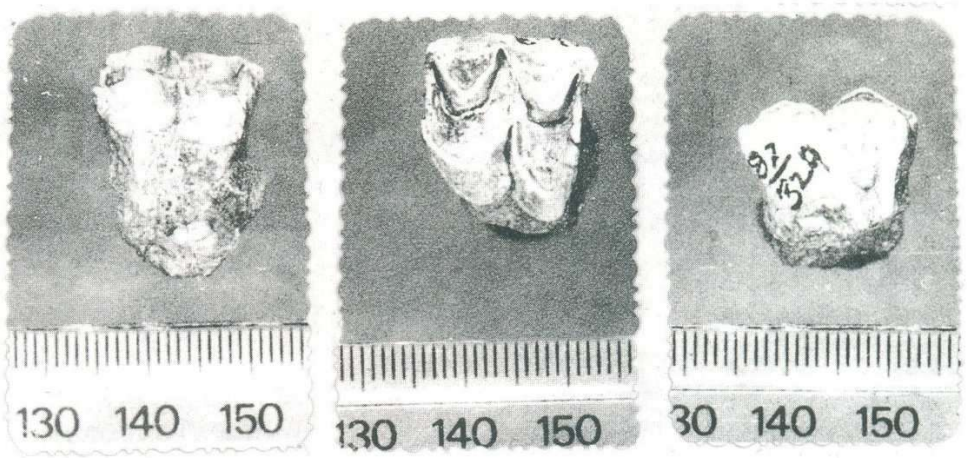

Fig. 1: ***Cervus punjabiensis*** **Brown (P.U.P.C. No. 87/329), an isolated right first upper molar, collected from Dhok Pathan, Chakwal district, the Punjab province, Pakistan. i) Inner view, ii) Crown view, iii) Outer view.**

Holotype

Amer. Mus. No. 19911, an incomplete skull with antlers.

Locality

Chandigarh, Indian Punjab, India.

Horizon

Upper Siwaliks.

Diagnosis

The teeth hypsodont, with open crescents and enfolded enamel, lacking accessory inner columns, surface smooth, Brown (1926).

Material Studied

P.U.P.C. No. 87/329, a right M^1 and P.U.P.C. No. 83/815, a basal part of left antler.

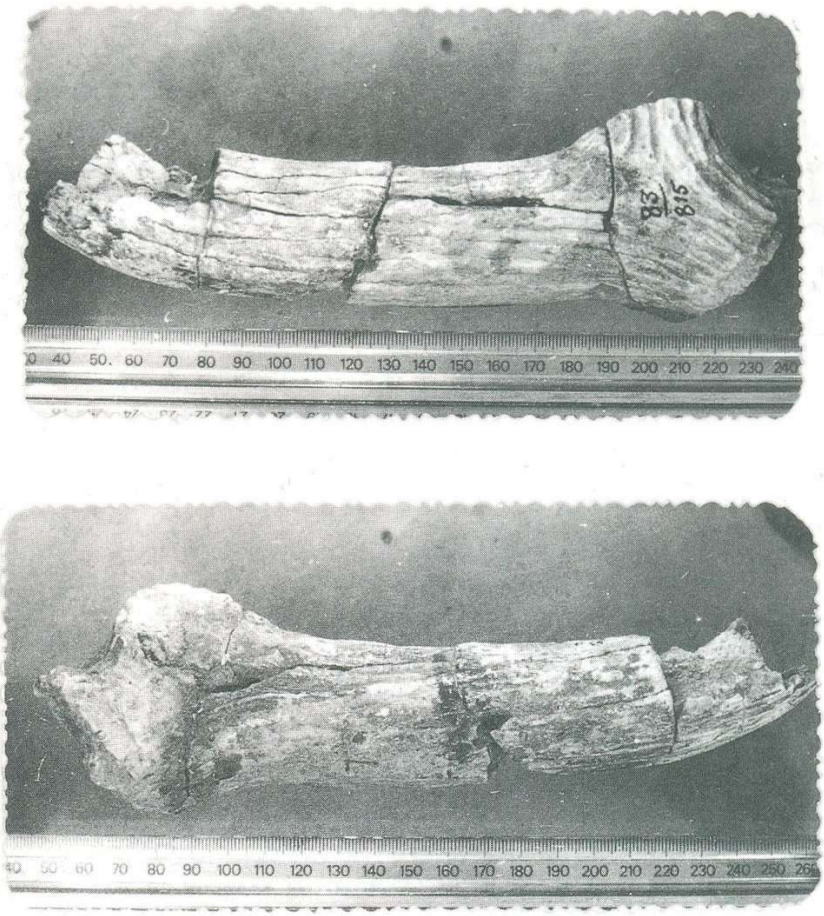

Fig. 2: *Cervus punjabiensis* **Brown (P.U.P.C. No. 83/815), a basal part of left antler, collected from Jari Kas, Mirpur district, Azad Jammu & Kashmir, Pakistan. i) Outer view, ii) Inner view.**

Locality

Dhok Pathan for P.U.P.C. No. 83/329, Chakwal district, the Punjab province, Pakistan. Jari Kas for P.U.P.C. No. 83/815, Mirpur district, Azad Kashmir, Pakistan.

Discussion

As stated by Brown (1926), the antler, though incomplete, appears to be long and is circular in outline. Its surface is smooth with faint longitudinal grooves.

The terminal part of the antler under study is completely missing but in the basal part the brow tine is represented by its basis only. In size and structure the antler compares favourably with the type described by Brown (1926). It appears to be quite long.

In size and structure the tooth compares favourably with the right M^1 of the type specimen. There is no accessory inner column and the enamel surface is perfectly smooth. The anterior half of the tooth under study is wider than the posterior one as in the type specimen, though this feature is not mentioned by Brown (1926). However, this character is quite evident from his diagram. Externally, the posterior part of the tooth is slightly damaged but it shows the basic features perfectly well. The maximum length x width of the tooth is 17 mm x 19 mm respectively. The same figures in the type specimen, as taken from the diagram, are 19 mm x 19 mm.

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