

## ABSTRACT

The collection of material under study consist of 10 specimens which belong to order Artiodactyla and perissodactyla. One of the genera in this collection belongs to Equidae family i.e., *Hipparion* which includes two species, first one is *Hipparion theobaldi* and other is *Hipparion antelopinum*. One family of Giraffidae, which includes the species *Giraffokeryx punjabiensis*, and one family of Bovidae of the genus *Selenoportax vexillarius*, one family of Suidae which include two species *Propotamochoerus hysudricus* and *Conohyus sindiensis* which are discussed in this project. The specimens are collected from Nagri formation, Dist. Chakwal. It includes the mandibular fragments and mostly isolated teeth.

In Pliocene epoch, the genus *Hipparion* became extinct and it is characterized by large size molars. *Hipparion* belong to family Equidae. The two distinct members of this family are *Hipparion antelopinum* and *Hipparion theobaldi*. The *Hipparion* first appeared in North America, migrated to Asia in the lower and middle Siwaliks during Nagri Formation. *Hipparion antelopinum* is smaller and mostly squared in shape as compared to *Hipparion theobaldi* which is oblong and high crown teeth. The protocone is compressed present as an isolated pillar like structure. Enamel boarder and fossettes are relatively simple in molar of *H.theobaldi* as compared to *H.antelopinum*. The molar and premolar are moralized having highly complicated molar structure.

The family suidae belongs to order Artiodactyla, it is endemic to siwalik region especially found in the chinji, Nagri and Dhokpathan, Dist. Chakwal, Punjab, Pakistan. The two genera include in the study are *Conohyus sindiensis* and *Propotamochoerus hysudricus*. The molar of *Conohyus sindiensis* is narrow crowned and covered with smooth and shiny enamel with few dentinal islets exposed on the submit of crown. Conules are present, supported by cingulum and Cingular ridges all around the tooth. The genus *Propotamochoerus* has four species in the Siwaliks. *Propotamochoerus hysudricus* is a gigantic suid species having complex molars provided with vertical ridges and grooves. It is a bunodont teeth and quadrangular in shape with rugose enamel surface.

The *girrafokeryx punjabiensis* is one of the largest giraffids found in Siwaliks of Pakistan. The cheek teeth are Brachydont to Sub-Hypsodont having Selenodont type of dentition. The cusps are elevated and the crown is surrounded by corrugated enamel layer.

*Selenoportax vexillarius* is known to be the most primitive species of the genus, originated in the Siwaliks. *S. vexillarius* are moderate sized Bovids with crescentic cusps. rugose and shiny enamel, broad crown teeth with strong median basal pillar, the teeth are hypsodont, and quadrangular in shape, lower molars are compressed. The teeth have selenodont dentition and the cusps are crescentic in shape.