ABSTRACT

The Siwaliks has great importance because of abundance of fossil vertebrates and it traverses a large part of the Neogene period. There are total seven (7) collected specimens under study belong to the order Perrisodactyla. All these collections are made from the type locality of Nagri and Dhok Pathan Formation, District Chakwal, of Late Miocene Siwaliks of Pakistan. All these specimens were collected from the type localities by surface collection method. The collection includes in study are maxillary and mandibular fragments and isolated upper and lower teeth. All the extra sandstones and cementations are carefully removed from the specimens and are brought to the Palaeontology & Ecology laboratory at Government College University Lahore for taxonomic and morphological study. Where the specimens are washed and morphometric analysis of the specimens is done by using a hand lens. After that, the measurements are made using Vernier Caliper and are compared with already present literature. There are three species of Sivalhippus are identified from the dental remains by taking measurements. The species belongs to the family Equidae and genus Sivalhippus. Three species of this genus are identified in the specimens which are: Sivalhippus cf. theobaldi, Cremohipparion cf. antelopinum, Sivalhippus perimensis. Some features of the specimens under study are descided next. The dental structure of Sivalhippus cf. theobaldi showed adaptations for browsing on soft leaves and vegetation. Molar contains elongated and broader hypocone and protocone with complicated enamel plications. Cremohipparion cf. antelopinum dental structure featured hypsodont teeth with high crowns suitable for grinding down plant material. There is a prominent size difference in the dental characteristics of H. antilopinum and S. theobaldi. It has a round shape protocone. But it is also noted that the specimens of this species under study show a little bit of variation in length and width as compared to the literature present. The characteristics of Sivalhippus perimense are somehow similar to S. theobaldi and H. antilopinum. As far as the specimen's measurements are concerned, it is clear posterior and transverse diameter of the teeth under study is different from the other type of specimens. This is because of different stage wear.