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Cyprinoids form a bulk of the superorder Ostariophysi - one of the most clearly defined major groups of recent teleosts (Greenwood, Rosen, Weitzman and Myers, 1966). These fishes have undergone a number of interesting morphological modifications in various directions in commensurate with the change in environment. The taxonomic study of the cyprinids was initiated by Hamilton (1822), McClelland (1839), Günther (1868) and Day (1876), and gained momentum around the turn of this century. Subsequent workers like Weber and de Beaufort (1916), Nichols (1936), Wu (1964), Bănărescu (1968) and Manon (1974) divided the family Cyprinidae into different subfamilies. However,
these divisions are based on external morphological characters and the exact systematic position of some genera and species still remains in a confused state.

Attempts have, therefore, been made by various workers to supplement more suitable characters for justification of divisions of the family into groups and tribes on the basis of osteology (Gouan, 1770; Weber, 1820; Stannius, 1854; Huxley, 1864; and Sage-Mehl, 1891). Regan (1911) is also of the opinion that the external morphological characters are not sufficient enough in the taxonomy of cyprinids. He, therefore, gives a phylogenetic key to different subfamilies, based on the characters of the skull, Weberian apparatus and the pectoral girdle. Hence, the osteological studies are important tools in the hands of fish taxonomists.

Sorescu (1975) and Howes (1978) have tried to assess the phylogenetic positions of some subfamilies like Danioninae, Cultrinae, Leuciscinae, Gobioninae, Barbinae and Cyprininae. But their work is restricted mainly to the foreign genera. Although Ramaswamy (1948, 1952a,b,c,d, 1953, 1955a,b) has carried out considerable work on the osteology of the Indian cyprinoids, a perusal of the literature reveals that there is still enough scope to undertake such studies, especially on the species which inhabit the high altitude areas. Further, Ramaswamy's
work does not clearly indicate phylogenetic relationships of the species, the genera and the higher taxa.

It can safely be stated that no serious comparative osteological studies have been carried out on the Indian cyprinids and there is no critical evaluation on the usefulness of osteological characters in order to determine phylogenetic relationships of the constituent genera. It has also been rightly pointed out by Greenwood et al. (1966) that at this stage, it is, therefore, very necessary to work out the osteological aspects in long series of closely related species and genera to fill in the lacunae in our knowledge of relationships of this group of fishes.

Amongst the twelve species of cyprinoids studied during the present investigation, the osteology of six species has not been attempted so far and the data available on the rest seem to be insufficient for explaining the phylogenetic relationships. The present work is undertaken to study the osteological characters of various cyprinid genera. An attempt has been made to determine the osteological modifications in relation to ecological niches and to trace the phylogenetic position of each group. A key to the identification of the subfamilies and genera of the Indian cyprinoids included in this work, based on the present osteological studies, has also been erected.