## The relationship between body shape of chinensis carp with niche (food and biology) in pond

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## **Abstract**

This study aimed to compare of chinensis carp in pond by geometric morphometric parameters. A total of 120 samples from Gonbad qabus ponds were sampled. A total of 15 homologous morphological landmarks were defined and digitized using TPSDig2 software and tps files were extracted. All statistical analyses were done using PAST and MorphoJ software. Carp body have for efficient mobility of water and take advantage of being within the context of food and nutrition as well as maintaining stability in the context of swimming, which provides. Big head and silver carp in terms of the size of the head (gill area) have evolved in such a way that high-performance volumes required to filter water to feed the caudal fin, and the caudal agreeableness with the specific situation has been completed. Grass carp have relatively elongate, almost cylindrical body shape and muscle is stretched snouts filled to the desired shape has been adapted for the movement among higher plants and dense It can be concluded that the observed morphological differences can be morphological plasticity in response of their ecological niches during their last long evolutional history resulting the present species with measurable differences.

**Keywords:** Fish biodiversity, chinensis carp, Geometric Morphometric.