初始全颌鱼

最早的“人脸古鱼”

初始全颌鱼生活于约4.25亿年前的志留纪晚期，化石发现于云南曲靖关底组，估计全长超过20厘米。它的头部和躯干前部覆盖着坚硬的骨甲，整体形态具有典型盾皮鱼类特征；但其口缘却具有前上颌骨、上颌骨和齿骨等边缘颌骨，与硬骨鱼类及四足动物的颌部骨片排列相似。这一独特的特征组合表明，现代有颌脊椎动物面部骨骼的基本构型，在有颌类演化早期已经出现。初始全颌鱼的发现改变了人们对盾皮鱼类、软骨鱼类和硬骨鱼类早期演化关系的认识，为研究现代有颌脊椎动物颌与面部骨骼的起源提供了关键证据。

Entelognathus primordialis

The Earliest “Human-Faced Fish”

Entelognathus primordialis is a placoderm popularly known as the “human-faced fish.” Its fossils were discovered in Late Silurian rocks of Qujing, Yunnan, dating to about 425 million years ago. It is about 20 cm long, with a short, stout body and a large mouth capable of swallowing smaller animals. Like most placoderms, the front half of its body was covered with dermal bone. Its jaws, however, resemble those of more derived bony fishes, bearing osteichthyan-like dermal marginal jaw bones, including the premaxilla, maxilla, and dentary. *Entelognathus primordialis* documents a key transitional morphology between placoderms and bony fishes and fills an important gap in the early evolution of jawed vertebrates.