



The Amatitan paleolake, Jalisco; stratigraphy, sedimentology and paleontology of the type locality of *Tapatia occidentalis* Osteichthyes, Goodeidae.

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*Tapatia occidentalis* is the oldest member of the family Goodeidae. This species of fossil fish was described by Alvarez and Arriola-Longoria in 1972 from a locality north of Amatitan, Jalisco. In the present paper, the type locality is redefined and the fossiliferous sediments are tentatively assigned to a Miocene age. The stratigraphic column of the site shows eight lithological units in an exposed cut of more than 20 m of depth. *Tapatia occidentalis* is present in tuffaceous lutites with millimetric horizontal lamination, indicating a low-energy paleolake environment. The laminae were interpreted as annual varves, and it is estimated that the lake existed at least 666 years. Besides *Tapatia occidentalis*, the fauna includes a second fish form, isopods, plant remains, coprolites, and ichnofossils. The site is important because it represents an exceptional opportunity for studying a well-preserved and abundant fish population, its ecological and morphological variation, as well as features that show evolutionary changes in the fishes throughout an interval of several centuries.