

## A new freshwater basal eucryptodiran turtle from the Lower Cretaceous of Spain

Adán Pérez-García, Marcelo S. de la Fuente, and Francisco Ortega

*Acta Palaeontologica Polonica* 57 (2), 2012: 285-298 doi: <http://dx.doi.org/10.4202/app.2011.0031>

A freshwater turtle from the lithographic limestone of Las Hoyas (Barremian of Cuenca, Spain) is described as a new genus and species of Eucryptodira, *Hoyasemys jimenezi*. The holotype consists of the skull, lower jaw, carapace, plastron, vertebral column, pectoral and pelvic girdle remains, and fore- and hindlimbs. *Hoyasemys jimenezi* gen. et sp. nov. is characterized by three pairs of blind oblique depressions on the ventral surface of the basisphenoid, and a character combination composed, among others, of the articulation between the fourth and fifth cervical vertebrae through a cotyle in the fourth and a condyle in the fifth, amphicoelous caudal centra, and most digits of manus and pes with three elongated phalanges. This study allows clarification of the systematic position of a species of uncertain affinity often identified as “chelydroid” in appearance. A phylogenetic analysis shows *Hoyasemys jimenezi* gen. et sp. nov. forms a monophyletic group with *Judithemys sukhanovi*, *Dracochelys bicuspis*, *Sinemys lens*, and *Ordosemys leios*, collectively the sister group of crown Cryptodira.

**Key words:** Testudines, Eucryptodira, freshwater turtle, Barremian, Cretaceous, Las Hoyas, Spain.

Adán Pérez-García [[paleontologo@gmail.com](mailto:paleontologo@gmail.com)], Departamento de Paleontología, Facultad de Ciencias Geológicas, Universidad Complutense de Madrid, José Antonio Novais 2, 28040 Ciudad Universitaria, Madrid, Spain; Marcelo S. de la Fuente [[mdelafu@gmail.com](mailto:mdelafu@gmail.com)], Departamento de Paleontología, Museo de Historia Natural de San Rafael, Parque Mariano Moreno S/N° (5600), San Rafael, Provincia de Mendoza, Argentina; Francisco Ortega [[fortega@ccia.uned.es](mailto:fortega@ccia.uned.es)], Grupo de Biología, Facultad de Ciencias, UNED, Senda del Rey 9, 28040 Madrid, Spain.

distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(684.0 kB\)](#)