



A fossil lizard (*Iguanoidea*) from the upper Pliocene of northwestern Argentina

D. GARCÍA LÓPEZ^{1,2}, J. DAZA^{1,3}, V. ABDALA^{1,3}, S. ARIAS^{1,4} and P. ORTIZ^{1,2}

The Uquia Formation (middle Pliocene-lower Pleistocene) crops out in Quebrada de Humahuaca (Jujuy Province, northwestern Argentina) and contains an important record of fossil vertebrates that documents the event known as the Great American Biotic Interchange (GABI). We present a new fossil lizard from San Roque locality, near Humahuaca town, recovered in levels referred to late Pliocene. The material consists of one premaxilla, one maxilla, and several dentaries bearing teeth belonging to at least three individuals. The remains were part of a microvertebrate fossil assemblage that also includes amphibians, birds, rodents, and marsupials. Corrosion signals on the enamel of rodent teeth indicate that this assemblage was formed by the trophic activities of predatory birds. The phylogenetic analysis performed with 396 morphological characters places this new lizard as the sister taxon of a clade composed by Liolaemidae, Leiocephalidae, and Tropiduridae. Its uncertain position and substantial morphological differences justify its placement in a new genus. The results of this analysis support the monophyletic status of Iguanoidea and support other groups within Iguania. This is the first record of a Squamata for the Uquia Formation levels, which mainly contain medium to large sized mammals. The presence of extant rodent genera in the assemblage indicates arid paleoenvironmental conditions, similar to that currently found in the area.

1 Consejo Nacional de Investigaciones Científicas y Técnicas, Argentina (CONICET).

2 Cátedra de Paleontología, Facultad de Ciencias Naturales e Instituto Miguel Lillo, Miguel Lillo 205 (4000), San Miguel de Tucumán, Argentina. dagl19@yahoo.com.ar, peotiz@uolsinectis.com.ar

3 Instituto de Herpetología, Instituto Miguel Lillo, Miguel Lillo 205, (4000) San Miguel de Tucumán, Argentina.

4 Instituto Superior de Entomología (INSUE), Miguel Lillo 205 (4000) San Miguel de Tucumán, Argentina.