

# On the phylogenetic position of the genus *Birulatus* Vachon, 1973 (Scorpiones, Buthidae) and redescription of *Birulatus haasi*

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**Abstract:** The phylogenetic position of the genus *Birulatus* Vachon, 1973 is revised. VACHON (1973) did not express any precise opinion about the phylogenetic position of the new genus. The present analysis shows that the genus *Birulatus* can be associated to some extent with genera such as *Compsobuthus* Vachon, *Cicileus* Vachon and *Buthiscus* Birula, but it undoubtedly represents an older lineage, and stands in an isolated phylogenetic position. *Birulatus* should therefore, be classified among the *incertae sedis* genera within the family Buthidae.

**Kurzfassung:** Die phylogenetische Position der Skorpionsgattung *Birulatus* Vachon, 1973 wird revidiert. VACHON (1973) hatte keine präzise Meinung über die phylogenetischen Beziehungen der Gattung mitgeteilt. Die hier vorgenommene Analyse zeigt, daß die Gattung in einem gewissen Grade mit den Gattungen *Compsobuthus* Vachon, *Cicileus* Vachon and *Buthiscus* Birula in verwandschaftlicher Beziehung steht, daß sie aber zeifelsohne einer älteren Abstammungslinie angehört, und phylogenetisch isoliert dasteht. *Birulatus* sollte daher innerhalb der Familie der Buthidae als *incertae sedis*-Gattung eingestuft werden.

**Key words:** Scorpiones, phylogenesis, taxonomy, Jordan, Middle East.

## Introduction

When he published his analysis of the trichobothrial patterns of scorpions, VACHON (1973) described several genera and subgenera in a short addendum. Among these was the new genus *Birulatus*, based on a single female specimen collected in the south of Tafila, near to Schauback in Jordan.

Both the diagnosis of the new genus and the description of the type species *Birulatus haasi* are very limited. Several important characters were neither described nor commented on. Furthermore, the description of certain characters such as the presence of lateral eyes is incorrect. On page 949 VACHON mentioned a female holotype. Verification of the type collection reveals a single specimen. One aspect, however, remains obscure: is this female specimen an adult? The presence of characters such as a sternum with a triangular shape and the presence of fulcra suggests that the specimen could be an adult, but in fact it may only be a pre-adult immature.

In the course of this study, a second female specimen was found in the Paris collections with the following data: Israel, Massada near to Dgania (or Deganya), Lake Tiberias, PALMONI coll. (pectines = 9–10 teeth). Uncertain locality according to LEVY and VACHON (pers. comm.).