

# BIOMETRIC AND GENETIC STUDY OF THE SUBGENUS *PARAPHOLEUON*

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After a brief summing up of the findings revealed by the statistical analysis both by means of numerical analysis and by principal components analysis of some biometric data referring to 19 samples of *Parapholeuon* from Padurea Craiului Mountains, the paper presents the phyletic and phylogeographic relationships between the taxa from this subgenus, deduced by studying the variability of two genic sequences of mitochondrial DNA. We conclude that the results of the multifactorial analyses applied to some morphologic characters are in agreement with those of genetic investigations, both confirming the validity of the present taxonomy of the subgenus.

## 1. INTRODUCTION

Subterranean *Leptodirine* from the Apuseni Mountains belong to the *Drimeotus* phyletic series, endemic for this biospeleological province and which comprise the majority of the bioindicator forms. The subfamily *Leptodirine* is divided into three genera: *Drimeotus*, *Protopholeuon* and *Pholeuon*; from these, the third genus has two subgenera, each of them being endemic for the main regions of the province: *Pholeuon* (s. str.) is endemic for the Bihor Mountains and *Parapholeuon* for the Pădurea Craiului Mountains (DECU and NEGREA, 1969).

Based on the revision and on the faunistic investigations undertaken by JEANNEL (1924, 1930), a long period of time it was considered that *Parapholeuon* subgenus is represented by only two species: *P. moczaryi* Csiki, 1911 and *P. gracile* Frivaldski, 1861. The first of the mentioned species was known from three caves located in the Crişul Repede basin (Bătrânelui, Izbândiş and Vadu Crişului). In what concerns the second species that populates the caves in the Crişul Negru basin, three subspecies were described: *P. g. gracile*, present in Peştera de la Cugliş, *P. g. bokorianum* Csiki, 1911, identified in Vizu I and Vizu II caves, and *P. g. chappuisi* Jeannel, 1930, described from Peştera de la Întorsuri (DECU, 1964).

Recently, a third species was described, *P. angustiventre* Racovita, 1996, found in Ponoraş and Stanu Ciuţii caves (Fig. 1).

Extensive biospeleological researches undertaken in the last decade showed that speleal populations of *Parapholeuon* are much more numerous, at the moment their list comprising not less than 25 caves and potholes. In order to establish the taxonomic

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