

New systematic insights about Plio-Pleistocene moles from Poland

Gabriele Sansalone, Tassos Kotsakis, and Paolo Piras

Acta Palaeontologica Polonica 61 (1), 2016: 221-229 doi:<http://dx.doi.org/10.4202/app.00116.2014>

The generic attribution of the Plio-Pleistocene Polish moles *?Neurotrichus polonicus* and *?Neurotrichus skoczni* has been questioned several times in the past. The fossil material belonging to *?Neurotrichus polonicus* and *?Neurotrichus skoczni* is re-evaluated here and a new diagnosis is provided on the basis of qualitative considerations. In addition, a Geometric Morphometric analysis of the humerus has been performed including both extant and extinct Neurotrichini and Urotrichini taxa for comparison. Our results proved the unique morphology of the Polish material suggesting a distinct taxonomic state. The morphological variations evidenced by the humeral shape analysis agree with the observed qualitative differences and support a new generic allocation. The new genus *Rzebikia* gen. nov. is proposed for all the material previously ascribed to *?Neurotrichus polonicus* and *?Neurotrichus skoczni*.

Key words: Mammalia, Talpidae, *Neurotrichus*, Geometric Morphometrics, humerus, systematics, taxonomy, Pliocene, Pleistocene, Poland.

Gabriele Sansalone [gsansalone@uniroma3.it] and Tassos Kotsakis [kotsakis@uniroma3.it], Dipartimento di Scienze, Università di Roma Tre, L.S. Murialdo, 1-00146 Roma, Italy; Center of Evolutionary Ecology, C. da Fonte Lappone, Pesche, Italy; Paolo Piras [paolo.piras@uniroma3.it], Dipartimento di Scienze, Università di Roma Tre, L.S. Murialdo, 1-00146 Roma, Italy; Center of Evolutionary Ecology, C. da Fonte Lappone, Pesche, Italy; Dipartimento di Scienze Cardiovascolari, Respiratorie, Nefrologiche, Anestesiologiche e Geriatriche and Dipartimento di Ingegneria Strutturale e Geotecnica Sapienza, Sapienza-Università di Roma, Via del Policlinico 155, 00186, Rome, Italy.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(365.9 kB\)](#) |

 [Supplementary file \(77.8 kB\)](#)