

## SCIENTIFIC NOTE

**PERUSTIGMUS AND PERUSTIGMINAE VERHOEFF, 1941,  
INVALID GENUS- AND FAMILY-GROUP NAMES  
IN THE CENTIPEDE FAMILY SCOLOPENDRIDAE  
(SCOLOPENDROMORPHA)<sup>1</sup>**Rowland M. Shelley<sup>2</sup> and Amazonas Chagas, Jr.<sup>3</sup>

Verhoeff (1941) proposed the new scolopendromorph centipede genus *Perustigmus* for two new species in south Peru, *P. rapax* and *P. alticolus*, erecting the monotypic subfamily Perustigminae (family Scolopendridae) to accommodate them. He did not designate either as the type species, so according to Article 13.3 of the International Code of Zoological Nomenclature, *Perustigmus* is an unavailable genus-group name because it was published after 1930 without fixation of a type; Perustigminae is likewise unavailable because it was established for a genus that was invalidly proposed. The species, however, were validly proposed with anatomical characterizations and illustrations, and are available names even though the genus is not valid or available (Art. 11.9.3.1). Kraus (1957) placed both species in synonymy under *Cormocephalus andinus* (Kraepelin, 1903) without comment, and they were cited as synonyms of the nominate subspecies of the latter by Bücherl (1974), also without comment. To our knowledge the only other citations of any of these taxa were by Schileyko (1992) and Schileyko and Pavlinov (1997), who included *Perustigmus* in the subfamily Otostigminae (Scolopendridae) in their cladistic analyses of the Scolopendromorpha. The basis for this assignment is unknown as it also lacked comment, but it may have been based on the shape of the spiracles that Verhoeff (1941) characterized as “rund bis oval,” rounded, non-valvular openings being characteristic of the Otostigminae. Their assignments of the genus conflict with Kraus’ placements of the species because *Cormocephalus* belongs to the subfamily Scolopendrinae, which has narrow, “slit-like,” valvular spiracles.

In this situation, the Code does not state whether unavailable names like *Perustigmus* and Perustigminae should be regarded as subjective synonyms of the valid names in which their components properly belong, and one could reasonably argue that the matter is moot since, as unavailable names, they technically do not exist in the first place. The type specimens of *P. rapax* and *P. alticolus* are cited by Weidner (1960) as (translated from German) “burned out in the

<sup>1</sup> Received on March 19, 2004. Accepted on July 2, 2004.

<sup>2</sup> Research Lab., North Carolina State Museum of Natural Sciences, 4301 Reedy Creek Rd., Raleigh, NC 27607, U.S.A. E-mail: rowland.shelley@ncmail.net.

<sup>3</sup> Departamento de Invertebrados, Laboratório de Aracnologia, Museu Nacional/UFRJ, Quinta da Boa Vista, s/número, São Cristóvão, CEP-20940-040, Rio de Janeiro, Brazil. E-mail: amazonaschagas@mn.ufrj.br.

Zoological Museum Hamburg in 1943." According to Dr. H. Dastych, the present chief curator (pers. comm. to RMS), the whole museum and most of Hamburg were destroyed during an air raid with incendiary bombs in 1943; the specimens that had been previously transferred to underground tunnels survived, but the types of the two species of *Perustigmus* were not among this material. Consequently, it is not possible to examine them to resolve the conflict of whether the species are properly referable to the Otostigminae or the Scolopendrinae/*Cormocephalus*, but Verhoeff (1941:61, figs. 80-81) provided figures of the caudal legs of *P. rapax* that enable a decision. In general, the caudal legs of Neotropical species of *Cormocephalus* are wide and robust; the prefemur is at most only slightly wider than long and possesses spines on the dorsolateral, medial, and ventral surfaces; and the claw is longer than the first tarsus. In contrast, the caudal legs of Neotropical representatives of the Otostigminae are slender; the prefemur is considerably longer than wide and may (*Rhysida*) or may not [*Otostigmus* (*Parotostigmus*)] possess spines; and the claw is shorter than the first tarsus. As Verhoeff's drawings conform to the former arrangement, we accept Kraus' placement of both species as synonyms of, now, the nominate subspecies of *C. andinus*. Consequently, in the interests of resolving and simplifying the nomenclature, we formally place *Perustigmus* and the Perustigminae in synonymy under *Cormocephalus* Newport, 1844, and the Scolopendrinae, respectively, with the rejoinder that they are **permanently** unavailable names.

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