

## An interesting case of homonymy: *Notopus* de Haan, 1841 (Crustacea, Raninidae; Recent) and *Notopus* Leonardi, 1983 (ichnofossil; Devonian)

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### Abstract

Upper Cretaceous strata in the type area of the Maastrichtian Stage (SE Netherlands, NE Belgium) have yielded comparatively abundant and diverse raninid assemblages (Collins et al., 1995; Fraaye & van Bakel, 1998). To date, seven species are known: *Eumorphocystes sculptus*, *Pseudoraninella muelleri*, *Lyreidina pyriformis*, *Raninoides? quadrispinosus*, *Raniliformis chevrona*, *Raniliformis prebaltica* and *Raniliformis occlusa*. These occur mainly from the upper portion of the Maastricht Formation [Emael, Nekum and Meerssen members, *Belemnitella junior* and *Belemnella (Neobelemnella) kazimiroviensis* bio-zones].

### Introduction

The status of two of these species, *Eumorphocystes sculptus* and *Pseudoraninella muelleri*, both assigned to the Notopodinae as now defined (Tucker, 1998), is currently the subject of a study by van Bakel, Jagt & Fraaije. For this ongoing project, we have recently conducted a literature search and come across an interesting case of homonymy, involving the generic name *Notopus*.

### Systematics

De Haan (1841) erected the genus *Notopus*, type species *N. dorsipes* de Haan, for an extant raninid from Japanese waters, which Serène & Umali (1972) subsequently designated type genus of the subfamily Notopinae [sic] (= Notopodinae). The second introduction of the name *Notopus*, type ichnospecies

*N. petri*, involves an ichnofossil from the Devonian of Paraná, Brazil (Leonardi, 1983: 236). Leonardi interpreted this as the imprint of the left front limb of an amphibian. Roek & Rage (1994), who restudied Leonardi's original material, were of the opinion that this ichnofossil taxon did not represent part of an amphibian trackway, but rather was similar to traces of an asteroid or ophiuroid, comparable to the ichnofossil genus *Asteriacites* von Schlotheim.

Irrespective of the correct assignment of this ichnotaxon, *Notopus* Leonardi, 1983 (non de Haan, 1841) is in need of a substitute name, the more so since ichnotaxon names compete with (palaeo)zoological taxa (A.K. Rindsberg, pers. comm., June 2001). We here suggest:

*Allophylichnus ichnogen.* nov. (type ichnospecies: *Notopus petri*)

Etymology: from the Latin allophylus, meaning "strange" or "foreign", in reference to the taxonomic, stratigraphic as well as geographic distance between an extant crab genus and a Devonian ichnogenus.

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## References

- Collins JSH, Fraaye RHB & Jagt JWM.** 1995. Late Cretaceous anomurans and brachyurans from the Maastrichtian type area. *Acta palaeont. pol.* **40:** 165-210.
- de Haan W.** 1833-1850. Crustacea. In: Siebold PF von (ed.). *Fauna Japonica, sive descriptio animalium, quae in itinere per Japoniam, jussu et auspiciis superiorum, qui sumnum in India Batava Imperium tenent, suscepit, annis 1823-1830 collegit, notis, observationibus et adumbrationibus illustravit:* ix-xvi, vii-xvii, i-xxxi, xii-xvii + 243 pp. Lugdunum Batavorum†: A. Arnz.
- Fraaye RHB, Bakel BWM van.** 1998. New raninid crabs (Crustacea, Decapoda, Brachyura) from the late Maastrichtian of the Netherlands. *Geol. Mijnbouw* **76:** 293-299.
- Leonardi G.** 1983. *Notopus petri* nov. gen., nov. sp.: une empreinte diamphibien du Dévonien au Paran (Brésil). *Geobios* **16:** 233-239.
- Roek Z, Rage J-C.** 1994. The presumed amphibian footprint *Notopus petri* from the Devonian: a probable starfish trace fossil. *Lethaia* **27:** 241-244.
- Serène R, Umali AF.** 1972. The family Raninidae and other new and rare species of brachyuran decapods from the Philippines and adjacent regions. *Philippine J. Sci.* **99** (1970): 21-105.
- Tucker AB.** 1998. Systematics of the Raninidae (Crustacea: Decapoda: Brachyura), with accounts of three new genera and two new species. *Proc. biol. Soc. Wash.* **111:** 320-371.

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