

A new early Silurian prioniodontid conodont with three P elements from Iran and associated species

Peep Männik, C. Giles Miller, and Vachik Hairapetian

Acta Palaeontologica Polonica 60 (3), 2015: 733–746 doi:<http://dx.doi.org/10.4202/app.00003.2013>

A prioniodontid conodont *Arianagnathus jafari* gen. et sp. nov. from the late Llandovery part of the Niur Formation of the Derenjal Mountains, East Central Iran had an apparatus bearing 3 pairs of P elements. Pa elements of its apparatus are closest to those of *Icriodella sandersi* (Llandovery–Wenlock boundary interval, Wales, Great Britain) in the weak development of an icrion. Due to the small sample size not all S-elements have been identified but those present are similar to those described in the *Icriodella* and *Icriognathus* apparatuses. Based on similarities with previously described apparatus *Notiodella* we suggest that *Arianagnathus jafari* gen. et sp. nov. probably had an apparatus of 17 elements. *Arianagnathus* is therefore an important additional example that has potential for aiding the future revision of the palaeobiological arrangement of elements within and the phylogeny of conodont apparatuses with 3 P elements, one of which is icrion bearing. The completely known apparatus of associated *Ozarkodina derenjalensis* sp. nov. shows similarity to some unnamed *Ozarkodina* from Wales, Great Britain. Many of the conodonts found in the Llandovery part of the studied section are cosmopolitan; the new conodont species seem to have their possible closest relatives in Avalonia.

Key words: Conodonta, taxonomy, Llandovery, Silurian, Iran.

Peep Männik [peep.mannik@ttu.ee], Institute of Geology at Tallinn University of Technology, Ehitajate tee 5, 19086 Tallinn, Estonia; C. Giles Miller [G.Miller@nhm.ac.uk], Department of Earth Science, Natural History Museum, London SW7 5BD, UK; Vachik Hairapetian [vachik@khuif.ac.ir], Department of Geology, Khorasgan branch, Islamic Azad University, PO Box 81595–158, Esfahan, Iran.

distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(824.1 kB\)](#)