

First report on the occurrence of *Neseuretinus* and *Ovalocephalus* trilobites in the Middle Ordovician of Iran

Mansoureh Ghobadi Pour and Leonid E. Popov *Acta Palaeontologica Polonica* 54 (1), 2009: 125-133 doi:http://dx.doi.org/10.4202/app.2009.0113

In the Derenjal Mountains of east Central Iran, the upper part of the Shirgesht Formation (uppermost Darriwilian) contains a distinct trilobite assemblage that includes *Neseuretinus birmanicus* and *Ovalocephalus* aff. *obsoletus* among others. Both genera were previously unknown in Iran. The occurrence of *Ovalocephalus* represents the earliest sign of westward taxon migration from China towards higher latitudes along the West Gondwanan margin, which may be related to global warming, after a short episode of cooler climate in the early to mid Darriwilian. Patterns of biogeographical distribution of *Ovalocephalus* and *Neseuretinus* suggest that Central Iran was part of an "overlap zone" where tropical and high latitude benthic taxa mingled.

Key words: Trilobites, palaeobiogeography, taxonomy, Ordovician, Darriwilian, Iran

Mansoureh Ghobadi Pour [mghobadipour@yahoo.co.uk] Department of Geology, Faculty of Sciences, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, 419138-15739, Iran; Leonid Popov [leonid.popov@museumwales.ac.uk] Department of Geology, National Museum of Wales, Cathays Park, Cardiff CF10 3NP, United Kingdom.

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