

A new, morphologically diverse Permian trilobite fauna from Oman

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A newly discovered trilobite fauna from the early to middle Permian Qarari Unit of northeastern Sultanate of Oman is described. It comprises exceptionally complete and well-preserved examples of five proetoid species, belonging to genera typical of an eastern Tethyan region extending through southern Asia to Timor. The shallow shelf fauna compares closely with one of Artinskian age from Afghanistan. Permian species previously assigned to Paladin are here considered unrelated to this predominantly Carboniferous clade, and are placed in a new ditomopygine genus, *Simulopaladin*, type species *Simulopaladin tridentifer* sp. nov. Three other ditomopygine species are described: *Hentigia ornata* sp. nov., *Iranaspidion elephas* sp. nov., and *Acanthophillipsia felicitae* sp. nov. The proetid *Triproetus bonbon* sp. nov. is the most complete material known of a more widespread genus.

Key words: Trilobita, palaeogeography, Permian, Oman.

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