

New serpulid polychaetes from the Permian of western Sicily

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Two new tubeworms, "Serpula" calannai sp. nov. and "Serpula" prisca sp. nov. are described from the Permian limestone of the Sosio Valley, western Sicily. Both species possess large tubes with long free anterior portions circular in cross-section. All morphological characters, such as tube shape and ornamentation, as well as inner structure of the wall, even if barely visible due to diagenesis, are still preserved. These two new species increase the previously known diversity of the Permian serpulid community, which flourished at the shelf edge of the western sector of the Palaeotethys and disappeared thereafter. The likely Wordian age of these serpulids, and their presumed absence in younger rocks up to the Middle–Late Triassic, suggests reduction, or even extinction, of these reef-related serpulid taxa during the end-Guadalupian biotic crisis, before the end-Permian extinction.

Key words: Polychaeta, Serpulidae, tube morphology, reef community, extinction events, Palaeozoic, Permian, Italy.

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