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New reticulosan sponges from the middle Cambrian of Sonora, Mexico

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A small assemblage of extremely well-preserved fragments of new sponges has been discovered in calcipelites of the middle Cambrian El Mogallón Formation in the Cerro El Mogallón section, near Arivechi in eastern Sonora, Mexico. The assemblage includes two new reticulosan species referred to *Ratcliffespongia arivechensis* sp. nov. and *Valospongia sonorensis* sp. nov., combined with disarticulated remains assigned to *Kiwetinokia* and additional, currently unidentifiable taxa. The new species represent the first records of these Cambrian genera from Mexico, although they are widely distributed at low latitudes, being previously best known from Utah but extending through Laurentia and South China. This middle Cambrian fauna indicates that there was considerable continuity of the deeper-water hexactinellid sponges between the warm peri-platform of Laurentia and the peri-continental Cambrian platform of Sonora. The new material supports the impression of extremely wide distribution of Cambrian sponge genera, with local diversification at species level within regions, in contrast to much greater generic-level endemism during the Ordovician Period.

Key words: Porifera, Hexactinellida, Reticulosa, Burgess Shale-type fauna, biogeography, Cambrian, Mexico.

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