

Speleothems in some caves of the Beskidy Mts., Poland

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Abstract

Speleothems are not frequent in the caves formed in the flysch sandstones of the Beskidy Mts. and practically have not been a subject of interest until 2006. For the last a few years speleothems have been found and studied in some caves located in the Beskid Śląski Mts. and in the Beskid Niski Mts. In the caves of the Beskid Śląski, the following types of the speleothems have been distinguished: (1) small stalactites, formed of amorphous material, silica at various stages of crystallisation and organic material, (2) flowstone sheetings and tooth-like forms built of clay minerals and amorphous material, (3) blankets of calcite moonmilk, (4) crusts of calcite aggregates, (5) coatings and crust of gypsum and gypsum-calcite aggregates, (6) assemblages of small gypsum crystals, and (7) small calcite stalactites, flowstones and helictites. Stalactites and tooth-like forms (1, 2, 7) are genetically connected with water flow, so the source material could have been carried in solution, colloids or as suspended matter from the host rock or soil and ground surface. Also moonmilk (3) is connected with superficial water film occurrence. Calcite and gypsum crusts and coatings precipitated from water seeping through the porous rocks. As radiocarbon datings suggest, the stalactites were formed in wet climatic phases of the Holocene. The occurrence and mineralogical character of the speleothems seem to be controlled by the lithology of the sandstones.

Key words

Pseudokarst, caves, speleothems, Quaternary, Carpathians, South Poland.