Geology and paleontology of the Tetori Group distributed in the Shokawa area, Gifu prefecture

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The Tetori Group, consisting of the Jurassic to Cretaceous terrigeneous and shallow-sea sedimentary rocks, is widely distributed in Fukui, Gifu, and Toyama prefectures, central Japan. The group in the Shokawa area, Gifu prefecture, are investigated geologically and paleontologically in this study. On the basis of lithology, the Tetori Group outcropping along the Matsuyamadani valley in the Shokawa area is divided into the Akahoke, Mitarai, and Otaniyama formations in ascending order. The Akahoke Formation is mainly made up of sandstone, black shale, and alternations of sandstone and mudstone. The Mitarai Formation, overlying the Akahoke Formation comformably, comprises black mudstone. The Otaniyama Formation, which overlies the Mitarai Formation in alignment, mainly comprises medium sandstone and includes mudstone and alternations of sandstone and mudstone. Sedimentary facies analysis reveals that the Akahoke Formation is considered to have been formed between an outer shelf and shorefaces, the Mitarai Formation on an outer shelf to inner shelf, and the Otaniyama Formation in a shallower sea than inner shelf. Ammonites occurred from the Mitarai Formation indicate that the depositional age of this formation is Berriasian, early Cretaceous.

Keywords: Cretaceous, Shokawa, Tetori Group

