

Geology and mollusks of the Early Cretaceous Koyamada Formation, Somanakamura Group, Fukushima Prefecture, Northeast Japan

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The Somanakamura Group is distributed in the hilly areas of Minamisoma City and Soma City, Pacific Ocean coast north of Fukushima Prefecture. The group belongs to the Southern Kitakami Terrane, and is characterized by alternating occurrence of river sediments and shallow-water sediments (Mori, 1963). This group is known as a fossiliferous geologic unit that produces Middle Jurassic to earliest Cretaceous plants (Takimoto et al., 2008) and mollusks (Sato et al., 2008). In recent years, new cephalopod specimens have been found (Sato et al., 2011). However, detailed studies on the bivalve from the Koyamada Formation have not been done yet.

The Somanakamura Group crops out in a narrow zone along the Futaba Fault, forming a north-south trending anticlinorium. The Koyamada Formation occupies the uppermost part of this group, distributed in both limbs of the anticlinal structure. Fossils from the Koyamada Formation have been found only in the east limb of the anticline, but have not been found in the west limb.

This study is aimed at bivalve fossils from the Koyamada Formation. Several hundreds of bivalve fossils were found during road construction at Miyamae, located in the east limb of the anticline. These specimens are kept in the Minamisoma City Museum. During our field research, some mollusks fossils were newly found from the Koyamada Formation in the west limb of the anticline. We will discuss the paleoenvironment of the Early Cretaceous on the basis of these fossils.

References

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