

The Torinosu Group in the southern Chichibu belt and its potential for defining the Jurassic-Cretaceous boundary

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The Torinosu Group is a shallow marine terrigenous clastic sequence with reef limestone called the Torinosu Limestone. The type area of the group is located in the Sakawa area, Kochi Prefecture. The Torinosu Group and its equivalent successions with the Torinosu-type limestone are distributed sporadically in the Southern Chichibu belt from the Kanto Mountains in the east to western Kyushu in the west over a distance of 800 km. They were originally deposited around the Jurassic-Cretaceous boundary (JKB) on a Jurassic accretionary complex with unconformity in the eastern margin of Asian continent. The group yields a wide variety of marine biota composed of mega- and microfossils. Mega fossils include ammonoids, bivalves, gastropods, brachiopods, echinoids, corals and so on. Microfossils include radiolarians and calcareous nannofossils.

The Global Boundary Stratotype Section and Point (GSSP) for the JKB has not been determined yet. Research on the JKB related issues has been extensively carried out all over the world. The Torinosu Group and its equivalents have a high potential to provide critical data on the JKB definition because they contain a transitional interval from the Jurassic to the Cretaceous and yield rich faunas with the Tethyan affinity mentioned above. In terms of radiolarian biostratigraphy, the *Pseudodictyomitra carpatica* zone, which encompasses the JKB, are widely recognized in the Torinosu Group.

A new Berriasian Working Group (BWG) was organized within the International Subcommittee on Cretaceous Stratigraphy in 2021. The author is one of BGM members and is expected to produce data from the Asian and Pacific regions. In addition, the author is counted on reviewing radiolarian biostratigraphy. Almost monthly BWG meetings on line and in person have been held since then. Progress in BWG activities will be reported in the 4th International Congress on Stratigraphy (STRATI 2023) in Lille, France.

Keywords: Jurassic-Cretaceous boundary, GSSP, radiolaria, STRATI 2023, Torinosu Group