Newly collected Ammonites from the Jurassic-Cretaceous Somanakamura Group

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Abstract. The knowledge on the Jurassic-Cretaceous ammonite fauna from the Somanakamura Group has considerably increased by the recent discoveries. The new collections include both new forms hitherto unknown and well preserved specimens of already described species. The newly collected species are briefly described and their localities and stratigraphical horizons are listed in this paper.

The Jurassic to earliest Cretaceous formations of the group from which these collections were discovered are distributed on the eastern flank of the Abukuma Mountains, and the general stratigraphy has already been established. The formations contain rather rich fossils, including ammonites, corals, stromatopores, bivalves and gastropods. Up to now, 14 species of ammonites were described and illustrated, besides 12 others simply cited without description nor figures. Almost all the species hitherto described are poorly preserved. Moreover, the composition of the cited fauna is sometimes not thoroughly consistent, presumably comprising of species of different stratigraphic horizons.

Recently some 300 ammonite specimens have been collected from the Nakanosawa and Koyamada formations by some of the co-authors (C.S., Y.Y., M.T., Y.A.). Thanks to well preserved specimens, more advanced paleontological study is made possible. At least three new species (Dalmasiceras, Aulacosphinctoides and Subdichotomoceras) and two new forms hitherto unknown (Hybonoticeras and Haploceras) are included. Others belonging to the already known species are also quite useful for confirming past identifications.
Explanation of Plates

Plate 1. Ammonite fossils from the Nakanosawa Formation, no. 1

1a, b. *Aulacosphinctoides* sp. nov. macroconch, \( \times \) 0.8. Specimen #349. North side cliff of the Kamimanogawa River, Koike. M. Taira coll.
   a: Lateral view, b: Ventral view

2. *Aulacosphinctoides* ? sp. Senile fragment, \( \times \) 0.8. Specimen #112. 50m upstream from the Tachimi-ishibashi Bridge of the Kamimanogawa River, Jisabara. M. Taira coll.

3a, b. *Aulacosphinctoides* sp., \( \times \) 1. Specimen #61. A limestone quarry, Tomizawa. Y. Ara coll.
   a: Lateral view, b: Ventral view


Plate 2. Ammonite fossils from the Nakanosawa Formation, no. 2

1a, b. *Subdichotomoceras* sp. nov., \( \times \) 0.8. Specimen #138. South side slope of the Manogawa River, Oyama. C. Suzuki coll.
   a: Inner mold, b: Outer cast

2a, b. *Subdichotomoceras* sp. nov. microconch, \( \times \) 1. Specimen #71. Fukono-Nakayama Forest Road, Fukono. Y. Yamaki coll.
   a: Ventral view, b: Lateral view


Plate 3. Ammonite fossils from the Nakanosawa Formation, no. 3

1. *Subdichotomoceras* sp., \( \times \) 1. Specimen #69. Fukono-Nakayama Forest Road, Fukono. Y. Yamaki coll.


Plate 4. Ammonite fossils from the Nakanosawa Formation, no. 4

1. *Haploceras* sp., \( \times \) 1.5. Specimen #134. A limestone quarry, Tomizawa. Y. Ara coll.


3. *Haploceras* sp., \( \times \) 1. Specimen #133. Tatenosawa Forest Road, Koike. Y. Ara coll.


5. *Taramelliceras* sp., \( \times \) 1.5. Specimen #135. Tatenosawa Forest Road, Koike. C. Suzuki coll.

10. *Pseudowaagenia*? or *Pachypictonia*? sp., ×0.8. Specimen #140. South side slope of the Manogawa River, Oyama. C. Suzuki coll.
13a, b. *Hybonoticeras* sp., ×1.5. Specimen #156. Tatenosawa Forest Road, Koike. M. Sasaki coll.

図版 5 小山田層産アンモナイト化石 1
産地はすべて鹿島町小山田ウマ沢
Plate 5. Ammonite fossils from the Koyamada Formation, no. 1
All specimens are from the Umasawa River, Koyamada.
2a, b. *Berriasella akiyamae* Sato, ×0.8. Specimen #115. M. Taira coll.
   a: Outer cast, b: Inner mold
3a, b. *Berriasella akiyamae* Sato, ×0.8. Specimen #116. M. Taira coll.
   a: Outer cast, b: Inner mold

図版 6 小山田層産アンモナイト化石 2
産地はすべて鹿島町小山田ウマ沢
Plate 6. Ammonite fossils from the Koyamada Formation, no. 2
All specimens are from the Umasawa River, Koyamada.
   a: Lateral view, b: Ventral view
   a: Inner mold, b: Outer cast

図版 7 小山田層産アンモナイト化石 3
産地はすべて鹿島町小山田ウマ沢
Plate 7. Ammonite fossils from the Koyamada Formation, no. 3
All specimens are from the Umasawa River, Koyamada.
1a, b. *Dalmassiceras* sp. nov., ×0.8. Specimen #113. M. Taira coll.
   a: Outer cast, b: Inner mold
   a: Outer cast, b: Inner mold
図版7

相馬中村層群から新たに採集されたアンモナイト

Plate 7