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Edited by
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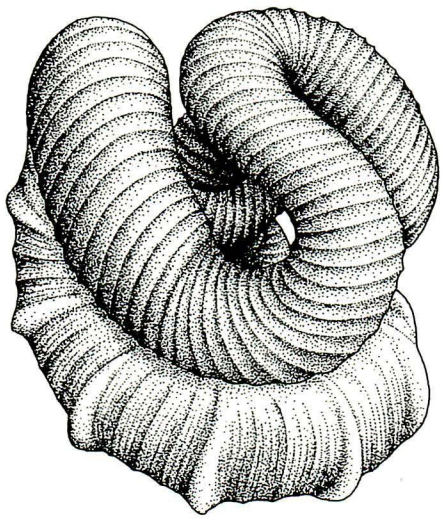
Hiromichi Hirano
and
Kenshiro Ogasawara



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Contents

Preface

The present publication is the final one on the database of fossil type specimens, which has been published in the last 4 years in the Special Papers of the Palaeontological Society of Japan (Nos. 39, 40, 41). This volume includes about 700 type specimens of remaining taxa such as Calcareous algae, Mesozoic planktic foraminifers, Paleozoic Cephalopoda, Bivalvia, and some supplemental data.

The first volume of the publication entitled "The database of Japanese fossil type specimens described during the 20th Century" appeared in May, 2001 and catalogued about 5,000 type specimens of fossils belonging to 20 plant and animal groups that were described mainly by Japanese workers before the turn of the 21st Century and were reported to be deposited at institutions in Japan. The second volume includes about 5,800 type specimens belonging to plants (leaves, spore and pollen), foraminifers, corals, ammonoids, nautiloids, gastropods and others. The third volume includes some 3,500 type specimens of fossils belonging to 10 plant and animal groups. Thus, the total number of type specimens archived in Japan during that time period is estimated to exceed more than 15,000.

Readers are referred to the Introduction to the first volume for the history and details of the CPS Committee work that led to the production and publication of the present database volume.

In a manner similar to the first, second and third volumes, each taxonomic entry in the present catalogue has appended such data as:

1) Scientific name of the taxon, with its author and date of publication.
2) Bibliographic reference in which the taxon was first proposed, including such data as volume, page, plate and figure numbers.
3) Category of type specimens such as Holotype, Paratype, Syntype and so on, with their registered repository numbers. An asterisk is appended to those specimens whose physical presence was ascertained at the given repository.
4) Type localities: Names of cities, towns and villages both as they appeared in the original publication and as they are known at present. As much as possible, the latitude and longitude are indicated for each locality.
5) Stratigraphic unit, such as formation, member and group, from which the fossil taxa were recovered.
6) Age of fossil taxa as expressed either in geologic age terms (Epoch and Age) or chronostratigraphic terms (Series and Stage).
7) Whenever deemed necessary from a systematic viewpoint, comments are added to denote the scientific name currently applied to a particular taxon by contemporary workers and also any appropriate remarks. In addition, remarks and corrections by the authors of the present database are printed in brackets.

The taxa compiled in the first volume include: Calcareous nannofossils, dinoflagellates, Radiolaria, Cenozoic smaller benthic Foraminifera, planktic Foraminifera, Fusulinoidea, Pteropoda and Heteropoda, Cenozoic Bivalvia, Paleozoic and Mesozoic Gastropoda, Monoplacophora and Hyolitha, non-marine Mollusca, Conchostraca, barnacles, Decapoda, Isopoda and Stomatopoda, Cenozoic Brachiopoda, Bryozoa, Crinoidea, Echinoidea and Holothuroidea, Conodonta, and trace fossils.

The second volume includes: Cenozoic plants, Paleozoic smaller benthic Foramninifera, Mesozoic and Cenozoic larger Foraminifera, Mesozoic and Paleozoic corals, Triassic Ammonoidea, Cretaceous Ammonoidea, Mesozoic and Cenozoic Nautiloidea, Cenozoic Gastropoda, Cenozoic Scaphopoda, and Cenozoic Bivalvia (Supplementary data).

The third volume includes: diatoms, Ostracoda, Bivalvia of Triassic, Jurassic and Cretaceous ages, Polyplacophora and allied taxa, Jurassic Ammonoidea, Mesozoic Brachiopoda, Trilobita, Insecta, and Vertebrata such as whales, deer, elephants, frogs and so on.

The fourth volume includes: Calcareous algae, Paleozoic and Mesozoic Stromatoporoidea, Triassic and Jurassic Foraminifera, Mesozoic planktic foraminifers, Paleozoic Ammonoidea, Paleozoic non-ammonoid cephalopods, Paleozoic Bivalvia, and some supplements such as Crinoidea, Paleozoic and Mesozoic corals, and non-marine Mollusca.

Readers are referred the previous publication (Palaeont. Soc. Japan Spec. Pap., no. 41, p. 3-8) for the abbreviations for repositories of type specimens.

The editors wish to express their sincere thanks to the Science Council of Japan for their assistance towards the production of this publication and also to the Council members of the Palaeontological Society of Japan for their invaluable assistance given during the editorial work on the manuscript as well as bringing it to the present published form. Sincere thanks are also extended to Dr. Tunemasa SAITO, previous member of the Science Council of Japan for his valuable suggestions in the editorial work and rephrasing the early draft.

Noriyuki Ikeya*, Hiromichi Hirano** and Kenshiro Ogasawara***

** Emeritus Professor of Shizuoka University, Sakabe1523-1, Haibara-cho, Shizuoka, 421-0412 Japan ** Institute of Earth Science, Waseda University, Shinjuku, Tokyo 169-8050, Japan *** Graduate School of Life and Environmental Sciences, the University of Tsukuba, Tsukuba 305-88572, Japan*

Calcareous algae

Yasufumi Iryu

Institute of Geology and Paleontology, Graduate School of Science, Tohoku University, Aobayama, Sendai 980-8578, Japan

Class CHLOROPHYCEAE Wille in Warming, 1984
Order Siphonocladales (Blackman and Tansley) Oltmanns, 1904

***Pycnoporidium* Yabe and Toyama, 1928 n. gen.**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 12, no. 1, p. 146, Type-species: *Pycnoporidium lobatum* Yabe and Toyama, described from the Jurassic Torinosu and Torinosu-type Limestones in Japan

***Pycnoporidium dilatum* Endo, 1968**
Geol. Palaeontol. Southeast Asia, vol. 4, p. 212, pl. 33, fig. 4
Holotype: TKD no. 30445
Vicinity of Agbahag Point, 500 m east of Barrio Manaul, Mansalay Municipality, Mindoro Oriental Province
Permian rocks in the Jurassic Mansalay Formation
Permian

***Pycnoporidium elongatum* Endo and Horiguchi, 1967**
Bull. Tokyo Coll. Dom. Sci., no. 7, p. 3, pl. 3, figs. 3-4, pl. 4, fig. 5
Holotype: GKL no. Gk. S8, (Paratypes: GKL nos. GK. S9-11 (pl. 4, fig. 5))
Koguchi, Ashikita-cho, Ashikita-gun, Kumamoto Prefecture
Koguchi Formation
Jurassic

***Pycnoporidium lobatum* Yabe and Toyama, 1928**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 12, no. 1, p. 146, pl. 20, fig. 3, pl. 21, figs. 1-5, pl. 22, fig. 1
Holotype: ?
Kitazawa, Tomizawa and Zusahara, Soma-gun, province of Iwaki (Fukushima Prefecture); Mitoda, Kamo-mura, Takaoka-gun, province of Tosa (Kochi Prefecture); near Cape Noma, Noma Peninsula, Kawabe-gun (Kawanabe-gun), province of Satsuma (Kagoshima Prefecture)
Torinosu Limestone
Jurassic

***Pycnoporidium ortonelloides* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 83, pl. 1, fig. 2, pl. 3, fig. 1
Holotype: GSJ no. 510529-12 (pl. 3, fig. 1), (Paratype: GSJ no. 510604-1 (pl. 1, fig. 2))
Hill, east of Onogi (GSJ no. 510529-12) and Manganji quarry (GSJ no. 510604-1), Santo-machi, Sakata-gun, Shiga prefecture
Onogi (GSJ no. 510529-12) and Samegai (GSJ no. 510604-1) Formations
(Early to) Middle Permian
(The holotype specimen was collected from the middle Permian Onogi Formation)

***Pycnoporidium saitamense* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 104, pl. 2, figs. 4-5
Holotype: NSM no. P1-18110b, (Paratype: NSM no. P1-18109e)
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Lower Permian

***Pycnoporidium toyamai* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 226, pl. 27, fig. 1, pl. 28, fig. 3
Holotype: IW slide no. 227, Paratype: IW slide no. 299 (pl. 27, fig. 1)
Near Showadenko factory, Kamikagemori, Kagemori-mura, Chichibu-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

Order Caulerpales Feldmann, 1946

***Anchicodium densum* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 133, pl. 5, fig. 8
Holotype: GKD no. 843
Along the steep uphill path runs along the ridge between No. 3 quarry and Ubekosan's huge quarry, Isa, Mine-shi, Yamaguchi Prefecture
Akiyoshi Limestone Group
(Early Permian)

***Anchicodium flexuosum* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 108, pl. 19, fig. 5
Holotype ?: (GSJ no. 520418-12)
North of Odaniyama hill, Kohoku-machi, Higashi-Asai-gun, Shiga Prefecture
Odaniyama Formation
Middle Permian

***Anchicodium fukujiemse* Endo and Horiguchi, 1957**
Jap. Jour. Geol. Geogr., vol. 28, no. 4, p. 175, pl. 15, figs. 1-2
Syntypes: IW slide no. 598
Ichinotani stream, west of Fukuji village, Gifu Prefecture
Mizuyagadani Formation

Permian

***Anchicodium japonicum* Endo, 1953**
Jap. Jour. Geol. Geogr., vol. 23, p. 123, pl. 11, fig. 5, pl. 12, figs. 5-7
Syntypes: IW slide nos. 126 (pl. 11, fig. 5), 127 (pl. 12, fig. 5), 141 (pl. 12, figs. 6-7), specimens 10849, 10847, 10851
Iwaizaki, Hajikami-mura, about 10 km south of Kesennuma-machi, Motoyoshi-gun (Kesennuma City), Miyagi Prefecture; 38°49' N, 141°36' E
Iwaizaki Limestone
Early Permian

***Anchicodium magnum* Endo, 1951**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 4, p. 125, pl. 11, figs. 3-5
Syntypes: IW ? slide nos. 2 (pl. 11, fig. 5), 18 (pl. 11, fig. 4), 20 (pl. 11, fig. 3), specimen 10768
Sashizawa Stage, Sakamotozawa, Hikoroichi-mura, Kasen-gun (Ofunato City), Iwate Prefeture
(Sakamotozawa Formation)
Early Permian

***Bouenina pacifica* Ishijima, 1978**
Geol. Palaeont. Southeast Asia, vol. 19, p. 188, pl. 32, fig. 2
Holotype: ?
Seberuang, Kalimantan Barat, Indonesia
(Geologic horizon was not described)
Early Cretaceous

***Consinocodium* Endo, 1961 n. gen.**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 63, Type-species; *Consinocodium japonicum* Endo, described from the upper Jurassic Torinosu Limestone, Kochi Prefecture

***Consinocodium japonicum* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 63, pl. 11, figs. 1-4, pl. 12, fig. 5
Holotype: IW slide no. 660 (pl. 11, fig. 3), (Paratypes: IW slide nos. 657, 658, 662 (pl. 12, fig. 5))
Otani valley, 2.3 km northeast of Sakawa-machi, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Late Jurassic

***Garwoodia filistriata* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 242, pl. 28, figs. 1-2
Holotype: IW slide no. 392 (pl. 28, fig. 1), Paratype: IW slide no. 337 (pl. 28, fig. 2)
Sakaishi, Agano-mura, Iruma-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

***Hikorocodium* Endo, 1951 n. gen.**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 4, p. 126, Type-species; *Hikorocodium elegantae* Endo, described from the lower Permian rocks in Sakamotozawa, Ofunato City, Iwate Prefecture

***Hikorocodium elegantae* Endo, 1951**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 4, p. 127, pl. 10, figs. 1-3
Syntypes ?: IW ? slide nos. 41 (pl. 10, fig. 3), 59, 60, specimen 10769
Sashizawa Stage, Sakamotozawa, Hikoroichi-mura, Kasen-gun (Ofunato City), Iwate Prefecture
(Geologic horizon was not described)
Early Carboniferous and early Permian

***Hikorocodium fertilis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 66, pl. 10, fig. 1, pl. 14, fig. 5, pl. 17, fig. 5
Holotype: IW slide no. 684 (pl. 10, fig. 1, pl. 17, fig. 5), (Paratype: IW slide no. 670 (pl. 14, fig. 5))
Doganaro, Susaki-shi, Kochi Prefecture (IW slide no. 684); Shiraishi quarry in the Nakanosawa, Tomi-sawa, Soma-shi, Fukushima Prefecture (IW slide no. 670)
Torinosu Limestone
Late Jurassic

***Hikorocodium transversum* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 298, pl. 42, fig. 7, pl. 43, figs. 1-3
Syntypes: IW slide nos. 538 (pl. 43, figs. 2-3), 539 (pl. 42, fig. 7, pl. 43, fig. 1)
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Kitakamiania* Ishijima, 1943 n. gen.**
Trans. Nat. Hist. Taiwan, vol. 33, nos. 242-243, p. 639, Type-species; *Kitakamiania eguchii* Ishijima, described from the lower Cretaceous Miyako Group, Iwate Prefecture

***Kitakamiania concentrica* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 65, pl. 14, figs. 3-4, pl. 15, figs. 5-6
Holotype: IW slide no. 673 (pl. 14, figs. 3-4), (Paratypes: IW slide nos. 644 (pl. 15, fig. 5), 676 (pl. 15, fig. 6))
Usuga-tani, Miyahama-mura, Naka-gun, Tokushima Prefecture (IW slide nos. 644, 676); Erinono, 1.4 km south-southeast of Sakawa-machi, Takaoka-gun, Kochi Prefecture (IW slide no. 673)
Torinosu Limestone
Late Jurassic

***Kitakamiania eguchii* Ishijima, 1943**
Trans. Nat. Hist. Soc. Taiwan, vol. 33, nos. 242-243, p. 639, figs. 1-2
Holotype: ?
Haipe, north of Miyako, Shimohei-gun, Iwate Prefecture (Miyako Group)
Lower Cretaceous

***Lithocodium japonicum* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 64, pl. 5, figs. 1-3, pl. 15, fig. 2
Holotype: IW slide no. 630 (pl. 5, fig. 1), (Paratypes: IW slide nos. 624, 675, 620 (pl. 15, fig. 2)
Slope of Arado hill, Minamino-sawa, Tomi-sawa (IW slide no. 630) and quarry in the Nakano-sawa, (IW slide no. 620), Tomi-sawa, Soma-shi, Fukushima Prefecture; Kayano-saka, Hayama, Kashima-machi, Soma-gun, Fukushima Prefecture (IW slide nos. 624, 675)
Torinosu Limestone
Late Jurassic
(*Lithocodium* is currently identified as a loftusiid foraminifera (Order Lituolida, Superfamily Loftusiacea))

***Lithocodium morikawai* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 64, pl. 12, figs. 1-4, pl. 13, figs. 3-4
Holotype: IW slide no. 661a (pl. 12, fig. 1), (Paratypes: 634 (pl. 12, fig. 4), 654, 661b, 663 (pl. 13, fig. 3), 664 (pl. 13, fig. 4))
Hachigamori (IW slide no. 634) and Otani valley (IW slide nos. 654, 661a), 1.5 km southeast and 2.3 km northeast of Sakawa-machi, respectively, Takaoka-gun, Kochi Prefecture; near Umanohara, 3 km north of Sakawa-machi, Takaoka-gun, Kochi Prefecture (IW slide nos. 663, 664); Doganaro, Susaki-shi, Kochi Prefecture
Torinosu Limestone
Late Jurassic
(*Lithocodium* is currently identified as a loftusiid foraminifera (Order Lituolida, Superfamily Loftusiacea))

***Neoanchicodium* Endo, 1954 in Endo and Kanuma, 1954 n. gen.**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 202,
Type-species; *Neoanchicodium catenoides* Endo, described from the lower Permian Akuda Formation, Gifu Prefecture.

***Neoanchicodium catenoides* Endo, 1954 in Endo and Kanuma, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 203, pl. 15, figs. 7-10
Syntypes: IW slide nos. 196-200
Vicinities of Akuda, southeast of Hachiman-machi, Gujo-gun, Gifu Prefecture; Iritsu, Nishiwara-mura, Gujo-gun, Gifu Prefecture; Akuda, Aioi-mura, Gujo-gun, Gifu Prefecture
Akuda Formation
Early Permian

***Ortonella akasakensis* Endo, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 215, pl. 18, figs. 10-11
Syntypes: IW slide nos. 265, 271
Kinsho-zan, Akasaka-machi, Gifu Prefecture
(Akasaka Limestone)
Middle and late Permian

***Ortonella intermedia* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 241, pl. 27, fig. 3, pl. 29, fig. 4
Holotype: IW slide no. 336 (pl. 29, fig. 4), Paratype: IW slide no. 380 (pl. 27, fig. 3)
Sakaishi, Agano-mura, Iruma-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

***Ortonella latifibrosa* Endo, 1954 in Endo and Kanuma, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 202, pl. 13, figs. 6-7
Holotype: IW slide no. 178 (pl. 13, fig. 6), Paratype: slide no. 179 (pl. 13, fig. 7)
Neighbourhood of Akiyama, Okumyogata-mura, Gujo-gun, Gifu Prefecture
Oppara Formation
Late Carboniferous (?)

***Ortonella morikawai* Endo, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 219, pl. 19, figs. 8-9
Syntypes: IW slide nos. 253 (pl. 19, fig. 8), 256 (pl. 19, fig. 9)
Yayamadake, Yatsushiro-gun, Kumamoto Prefecture
Yayamadake Limestone
Middle to late Carboniferous

***Ortonella pervituba* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 241, pl. 29, figs. 1-3
Holotype: IW slide no. 320, Paratypes: IW slide nos. 231 (pl. 29, fig. 3), 332
Near Showadenko factory, Kamikagemori, Kagemori-mura, Chichibu-gun, Saitama Prefecture (IW slide no. 231); Sakaishi, Agano-mura, Iruma-gun, Saitama Prefecture (IW slide nos. 320, 332)
(Geologic horizon was not described)
Artinskian, Permian

***Ortonella pervituba* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 297, pl. 43,

fig. 7
Holotype: IW slide no. 554
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Ortonella ramosa* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 240, pl. 27, fig. 6, pl. 30, fig. 1
Holotype: IW slide no. 276 (pl. 30, fig. 1), Paratype: IW slide no. 229 (pl. 27, fig. 6)
Shomaru-toge Pass, Iruma-gun, Saitama Prefecture; Shimokuzu, Agano-mura, Iruma-gun, Saitama Prefecture (IW slide no. 276); near Showadenko factory, Kamikagemori, Kagemori-mura, Chichibu-gun, Saitama Prefecture (IW slide no. 229)
(Geologic horizon was not described)
Artinskian, Permian

***Ortonella takagamiensis* Nakamura and Chisaka, 1984**
Bull. Nat. Sci. Mus., vol. 10, no. 3, p. 118, pl. 11, figs. 6-7
Holotype: NSM no. PP7927d (pl. 11, fig. 7), (Paratype: NSM no. PP7936b (pl. 11, fig. 6))
Atagoyama, Choshi-shi, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

***Permocalculs piai* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 295, pl. 41, figs. 5-6
Syntypes: IW slide no. 557
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Succodium* Konishi, 1954 n. gen.**
Jour. Fac. Sci. Univ. Tokyo, sect. 2, vol. 4, p. 230,
Type-species; *Succodium multipilularum* Konishi, described from the upper Permian Kuma Formation, Kumamoto Prefecture

***Succodium hikoroconoides* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 295, pl. 42, fig. 4
Holotype: IW slide no. 537
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Succodium multipilularum* Konishi, 1954**
Jour. Fac. Sci. Univ. Tokyo, sect. 2, vol. 4, p. 233, text-fig. 1, pl. 1, figs. 1, 11
Holotype: GK no. Q1001 (Ku499-17)
About 1.5 km north of Somi, Kawamata-mura, Yatsushiro-gun, Kumamoto Prefecture
Kuma Formaion
Late Permian

***Succodium* (?) *undulatum* Konishi, 1954**
Jour. Fac. Sci. Univ. Tokyo, sect. 2, vol. 4, p. 234, pl. 1, figs. 6-8
Syntypes: GK no. Q1002 (Ku499-16, Ku499-22), (Parartypes: GK nos. Ku499-8, Ku499-27, Ku499-126)
About 1.5 km north of Somi, Kawamata-mura, Yatsushiro-gun, Kumamoto Prefecture
Kuma Formaion
Late Permian

Order Dasycladales Pascher, 1931

***Amicus orientalis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 106, pl. 18, fig. 6
Holotype: GSJ no. 510529-12
East of Onogi, Santo-machi, Sakata-gun, Shiga Prefecture
Onogi Formation
Middle Permian

***Anatolipora* Konishi, 1956 n. gen.**
Quat. Colorado School Mines, vol. 51, no. 4, p. 117,
Type-species; *Anatolipora carbonica* Konishi, described from the lower Carboniferous Katauchi, Kotakigawa, and Kakisako Formations in Kumamoto, Niigata, and Kumamoto Prefectures

***Anatolipora carbonica* Konishi, 1956**
Quat. Colorado School Mines, vol. 51, no. 4, p. 117, text-fig. 1, pl. 1, figs. 1-8, pl. 2, figs. 1-4
Holotype (syntypes): GIUT nos. PP7244a (slide no. 349-16; pl. 1, fig. 2), PP7244b (slide no. 349-7; pl. 1, fig. 4),
Paratypes: GKD nos. Q 1010 (slide no. Ktc-6; pl. 1, figs. 1, (6, 8)), Q1011 (slide no. Ktc-11; pl. 1, fig. 3), (10027 (slide no. Km 2501b-22 (pl. 2, fig. 2)), slide nos. Ktc-050207-6 (pl. 1. fig. 5), Ktc-7 (pl. 1, fig. 9), Km2501b-9 (pl. 2, fig. 1)); GIUT no. PP7245 (slide no. 349-21; pl. 1, fig. 7), (slide nos. 349-3 (pl. 2, fig. 3), 349-16 (pl. 2, fig. 4))
Katauchi, Yamabu, Imbi-mura, Minami-amabe-gun, Oita Prefecture (GKD nos. Q1010, Q1011, slide nos. Ktc-50207-6, Ktc-6, Ktc-7); Kakisako-mura, Yatsushiro-gun, Kumamoto Prefecture (GKD no. 10027, slide no. Km2501b-9); Kotakigawa, Kotaki, Itoigawa City, Niigata Prefecture (GIUT nos. 7244a, 7244b, 7245; slide nos. 349-3, 349-16)
Katauchi (GKD nos. Q1010, Q1011, slide nos. Ktc-50207-6, Ktc-6, Ktc-7) Kotakigawa (GIUT nos. 7244a, 7244b, 7245, slide nos. 349-3, 349-16), and Kakisako (GKD no. 10027,

slide no. Km2501b-9) Formations
Visean, Early Carboniferous
(The syntype specimens were collected from the lower Carboniferous Katauchi Formation)

***Anthracoporella magnipora* Endo, 1951**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 4, p. 124, pl. 10, fig. 5 (figs. 4-5)
Syntypes: IW ? slide nos. 14, 32, 62, specimen 10760
Sashizawa Stage, Sakamotozawa, Hikoroichi-mura, Kasen-gun (Ofunato City, Iwate Prefecture)
(Sakamotozawa Formation)
Early Permian

***Anthracoporella torinosensis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 60, pl. 17, fig. 6
Holotype: IW slide no. 693
Hachigamori, 1.5 km southeast of Sakawa-machi, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Late Jurassic

***Archaeocladus* Endo, 1956 n. gen.**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 237,
Type-species; *Archaeocladus seriatus* Endo, described from the Permian limestone at Sakaishi, Agano-mura, Iruma-gun, Saitama Prefecture

***Archaeocladus seriatus* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 238, text-fig . 2, pl. 26, figs. 3-4
Syntypes: IW slide no. 333
Sakaishi, Agano-mura, Iruma-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

***Atractyliopsis quadratus* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 230, pl. 23, fig. 1
Holotype: IW slide no. 216
Nishihara, Tonara, Tanuma-machi, Aso-gun, Tochigi Prefecture
(Geologic horizon was not described)
Permian

***Atractyliopsis* sp. Endo, 1961** (species name was not given)
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 86, pl. 18, fig. 5
Holotype ?: (GSJ no. 510529-3 (M))
East of Onogi, Santo-machi, Sakata-gun, Shiga Prefecture
Onogi Formation
Middle Permian

***Clavaphysoporella conforma* Endo, 1958**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 31, p. 268, pl. 39, figs. 6-7
Holotype: TKD ? no. 21048
Haradani-valley, Otani, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu Formation
Permian

***Clavaphysoporella faceta* Endo, 1958**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 31, p. 266, pl. 39, figs. 1-5
Holotype (syntypes): IW slide nos. 606 (pl. 39, fig. 1), 607 (pl. 39, fig. 5), Paratypes: TKD ? nos. 21049 (pl. 38, fig. 4), 21055 (pl. 39, fig. 3), IW slide no. 609 (pl. 39, fig. 2?)
Horadani valley, Choushidani (IW slide no. 609, TKD ? no. 21055) and Sote (IW slide nos. 606-607, TKD ? no. 21049), Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu and Gonbo Formations
Permian

***Clavaphysoporella fluctuosa* Endo, 1958**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 31, p. 267, pl. 39, figs. 8-9
Holotype: TKD ? no. 21044
Hatahoko, Nyugawa-mura, Yoshiki-gun (Ono-gun), Gifu Prefecture
Gonbo Formation
Permian

***Clavaphysoporella gigas* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 100, pl. 15, figs. 2-4, pl. 16, fig. 2
Holotype (syntypes): GSJ nos. 0529-12, 510606-D (pl. 15, fig. 4), (Paratypes: GSJ no. 510529-12 (pl. 16, fig. 2))
Northeast of Onogi (GSJ nos. 0529-12, 510529-12) and west of Nagaoka (GSJ no. 510606-D), Santo-machi, Sakata-gun, Shiga Prefecture
Onogi (GSJ nos. 0529-12, 510529-12) and Samegai (GSJ no. 510606-D) Formations
Middle Permian

***Clavaphysoporella kittakai* Nakamura and Chisaka, 1984**
Bull. Nat. Sci. Mus., vol. 10, no. 3, p. 104, pl. 9, figs. 1-12
Syntypes: NSM nos. PP7903g (pl. 9, fig. 2), PP7904b (pl. 9, fig. 1), PP7906a (pl. 9, fig. 12), (Paratypes: PP7901g (pl. 9, fig. 5), PP7902c (pl. 9, fig. 8), PP7915f (pl. 9, fig. 3), PP7915g (pl. 9, fig. 10), P7918b (pl. 9, fig. 9), 7922a (pl. 9, fig. 6), 7922b (pl. 9, fig. 7), 7923b (pl. 9, fig. 4), 7930a (pl. 9, fig. 11))
Atagoyama, Choshi-shi, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

***Clavaphysoporella nanus* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 201, pl. 38, figs. 14-15
Holotype (syntypes): TKD ? nos. 21048 (pl. 38, fig. 15), 21128 (pl. 38, fig. 14)
Horadani valley, Otani, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu Formation
Permian

***Clavaphysoporella pteroides* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 103, pl. 13, fig. 4, pl. 14, figs. 6-8, pl. 18, fig. 3
Holotype: GSJ no. 510529-12 (pl. 14, fig. 8, pl. 18, fig. 3), (Paratypes: GSJ no. 510530-4 (pl. 13, fig. 4, pl. 14, figs. 6-7)
Northeast of Onogi (GSJ no. 510529-12) and Sukawa (GSJ no. 510530-4), Santo-machi, Sakata-gun, Shiga Prefecture
Onogi (GSJ no. 510529-12) and Samegai (GSJ no. 510530-4) Formations
Early to middle Permian
(The holotype specimen was collected from the middle Permian Onogi Formation)

***Clavaphysoporella shigensis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 102, pl. 15, figs. 6, pl. 16, fig. 3
Holotype: GSJ no. 510606-B (or 510529-12 (pl. 15, fig. 6)), (Paratype: GSJ no. 510610-14 (pl. 16, fig. 3))
North of Manganji (GSJ no. 510606-B) and Sukawa (GSJ no. 510610-14), Santo-machi, Sakata-gun, Shiga Prefecture
Samegai Formation
Early Permian
(Holotype specimen numbers were described as 510606-B in the protolog and as 510529-12 in the figure caption.)

***Clavaphysoporella similis* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 201, pl. 38, figs. 4-7
Holotype (syntypes): TKD ? no. 21135a (pl. 38, figs. 4-5), (Paratypes: TKD ? nos. 21135b, 21147 (pl. 38, fig. 6), L2 1st (pl. 38, fig. 7))
Sotedani (TKD ? no. 21147) and Hatahokodani (TKD ? nos. 21135a, 21135b, L2 1st) valleys, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu (TKD ? no. 21147) and Gonbo (TKD ? nos. 21135a, 21135b, L2 1st) Formations
Permian
(The holotype specimen was collected from the Permian Gonbo Formation)

***Clypeina hanabataensis* Yabe and Toyama, 1949**
Proc. Japan Acad., vol. 25, no. 5, p. 161, figs. 1-4
Holotype: ?
Hanabata, Togano-mura in Sakawa basin, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Late Jurassic

***Diplopora alta* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 105, pl. 16, fig. 5, pl. 17, fig. 4
Holotype: GSJ no. 510605-2 (pl. 16, fig. 5), (Paratype: GSJ no. 510606-B (pl. 17, fig. 4))
West of Nagaoka (GSJ no. 510605-2) and northeast of Manganji (GSJ no. 510606-B), Santo-machi, Sakata-gun, Shiga Prefecture
Samegai Formation
Early Permian

***Diplopora* (?) *latissima* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 236, pl. 26, figs. 5-6, pl. 27, fig. 2
Holotype: IW slide no. 392 (pl. 26, fig. 6), Paratypes: IW slide nos. 333 (pl. 26, fig. 5), 337 (pl. 27, fig. 2)
Sakaishi, Agano-mura, Iruma-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

***Diplopora orientalis* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 291, pl. 41, figs. 2-3
(Syntypes): IW slide nos. 563 (pl. 41, fig. 3), 571 (pl. 41, fig. 2)
Arito (IW slide no. 571) and eastern part of Zenbutsuji-dani (IW slide no. 563), Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Diplopora yoshinobensis* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 128, pl. 13, fig. 1, pl. 15, figs. 1-2
Holotype: NSM no. P1-18072a
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Eogoniolina* Endo, 1953 n. gen.**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 2, p. 101,
Type-species; *Eogoniolina johnsoni* Endo, described from the Permian Akasaka Limestone, Gifu Prefecture

***Eogoniolina endoi* Nakamura and Chisaka, 1984**
Bull. Nat. Sci. Mus., vol. 10, no. 3, p. 95, pl. 6, figs. 8-9
Holotype: NSM no. PP7910c (pl. 6, fig. 8), (Paratype: NSM no. PP7953c (pl. 6, fig. 9))

Atagoyama, Choshi-shi, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

***Eogoniolina johnsoni* Endo, 1953**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 2, p. 101, pl. 9, figs. 5-10
Syntypes: IW ? slide no. 173 (pl. 9, figs. 8-9), specimen 10864, (Paratypes: IW slide nos. 174 (pl. 9, fig. 10))
Kinshozan-hill, Akasaka-machi, Gifu Prefecture (Akasaka Limestone)
Late Permian

***Eogoniolina undulata* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 284, pl. 37, figs. 6-7
Syntypes: IW slide nos. 544 (pl. 37, fig. 6), 552 (pl. 37, fig. 7)
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Eomizzia* Endo and Horiguchi, 1957 n. gen.**
Jap. Jour. Geol. Geogr., vol. 28, no. 4, p. 170, Type-species; *Eomizzia igoi* Endo, described from the Carboniferous Ichinotani Formation, Gifu Prefecture

***Eomizzia igoi* Endo and Horiguchi, 1957**
Jap. Jour. Geol. Geogr., vol. 28, no. 4, p. 171, pl. 13, figs. 2-4
Syntypes: IW slide nos. 600-601, 602 (pl. 13, fig. 4)
Ichinotani stream, west of Fukuji village, Gifu Prefecture
Ichinotani Formation
Carboniferous
("Erratum" written by Endo and Horiguchi, date of which is uncertain: New name for ***Eomizzia igoi*** . In this paper (pp. 170-171, pl. 13, figs. 2-4) we proposed the name ***Eomizzia igoi*** for several algal specimens of Dasyclaceae. No. 160 of the report of Institute of Geology, Academy of Science, USSR (1956) written by U. P. Maslov, showed that the name of ***Dvinella comota*** Chvor had been previously given to the exactly same species with our ***Eomizzia igoi***. This prior use of the name makes it necessary to rename our specimens as ***Dvinella comota.***)

***Epimastopora choshiensis* Nakamura and Chisaka, 1984**
Bull. Nat. Sci. Mus., vol. 10, no. 3, p. 95, pl. 7, figs. 12-14
Holotype: NSM no. PP7919a (pl. 7, fig. 12), (Paratypes; NSM nos. PP7916c, PP7949b)
Atagoyama, Choshi-shi, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

***Epimastopora hexagona* Ishijima, 1975b**
St. Paul's Rev. Sci., vol. 3, no. 4, p. 123, pl. 2, figs. 1-3
Holotype: ?
Choshi Peninsula, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

***Epimastopora hinomatensis* Horiguchi, 1958**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 1, p. 136, pl. 28, figs. 1-3.
Holotype: IW slide no. 11069
Ohazama mati, Iwate Prefecture
Hinoyama Formation
Early Permian

***Epimastopora iwaizakienis* Endo, 1953**
Jap. Jour. Geol. Geogr., vol. 23, p. 120, pl. 11, figs. 7-9
Syntypes: IW slide nos. 129, 133, specimens 10845, 10850, (Paratypes: IW slide nos. 125, 146 (pl. 11, fig. 7))
Iwaizaki, Hajikami-mura, about 10 km south of Kesennuma-machi, Motoyoshi-gun (Kesennuma City), Miyagi Prefecture; 38°49' N, 141°36' E
Iwaizaki Limestone
Late Permian

***Epimastopora japonica* Endo, 1951**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 4, p. 124, pl. 11, figs. 1-2
Syntypes: IW ? slide nos. 14, 81, specimen 10763
Sashizawa Stage, Sakamotozawa, Hikoroichi-mura, Kasen-gun (Ofunato City), Iwate Prefecture (Sakamotozawa Formation)
Early Permian

***Epimastopora kanumai* Endo, 1954 in Endo and Kanuma, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 195, pl. 13, figs. 8-10
Syntypes: IW slide nos. 179-180, 181 (pl. 13, fig. 10)
Neighbourhood of Akiyama, Okumyogata-mura, Gujo-gun, Gifu Prefecture
Oppara Formation
Late Carboniferous

***Epimastopora kosakiensis* Konishi, 1954**
Jap. Jour. Geol. Geogr., vol. 25, nos. 1-2, p. 5, pl. 2, figs. 23-25
(Syntypes): UT ? no. PP7244-PP7247
Northern slope of the Kosaki Creek valley in the vicinities of Kosaki, Eri and Kigisu hamlets, Shimomatsukoma-mura, Yatsushiro-gun, Kumamoto Prefecture
Kosaki Formation
Middle Permian

***Epimastopora lateinterporosa* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 127, pl. 1, fig. 4, pl. 2, fig. 1
Holotype: GKD no. 1089 (pl. 1, fig. 4), (Paratype: GKD no. 1137 (pl. 2, fig. 1))
Along or around the uphill path from east of Kyozuka to the pass located northeast of "Ryugoho", Akiyoshi, Shuho-cho Yamaguchi Prefecture (GKD no. 1089); northeast of Okugawa, Mine-shi Yamaguchi Prefecture (GKD no. 1137)
Akiyoshi Limestone Group
(Early Permian)

***Epimastopora longituba* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 285, pl. 38, figs. 2-3
Syntypes: IW slide nos. 556 (pl. 38 fig. 3), 509, (Paratype: IW slide no. 569 (pl. 38, fig. 2))
East of Arito (IW slide no. 569) and eastern part of Zenbutsuji-dani (IW slide no. 556), Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Arito (IW slide no. 569) and Maedani (IW slide nos. 556) Formations
Permian

***Gyroporella hannoensis* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 120, pl. 11, figs. 7-9
Holotype: NSM no. P1-18128
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Gyroporella igoi* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 190, pl. 34, figs. 1-5, pl. 35, figs. 1-5, pl. 40, fig. 3, pl. 41, figs. 7-8
Holotype: TKD ? no. 21128, (Paratypes: TKD ? nos. 21130, 21135 (pl. 34, fig. 5), 21048; IW slide nos. 610, 613 (pl. 40, fig. 3), 617))
Horadani (TKD ? no. 21128, 21130; IW slide nos. 610, 613, 617) and Yokoberadani (TKD ? no. 21135) valleys, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu Formation
Permian

***Gyroporella konishii* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 288, pl. 39, figs. 9-10
Syntypes: IW slide nos. 568 (pl. 39, fig. 9), 549 (pl. 39, fig. 10)
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Gyroporella kwantoensis* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 233, pl. 25, figs. 3-8
Syntypes: IW slide nos. 223 (pl. 25, fig. 3), 232 (pl. 25, fig. 4), 330 (pl. 25, fig. 7), 336 (pl. 25, fig. 6), 368 (pl. 25, fig. 8), 391, (Paratype: IW slide no. 380 (pl. 25, fig. 5))
Near Showadenko factory, Kagemori-mura, Chichibu-gun, Saitama Prefecture (IW slide nos. 223, 232); Shomaru-toge Pass (IW slide no. 368) and Sakaishi (IW slide nos. 330, 336, 380), Agano-mura, Iruma-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

***Gyroporella* (?) *longipora* Endo, 1951**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 4, p. 125, pl. 10, fig. 6, pl. 11, figs. 6-7
Syntypes: IW ? slide nos. 8 (pl. 11, fig. 6), 32 (pl. 11, fig. 7), 34 (pl. 10, fig. 6), specimen 10765
Sashizawa Stage, Sakamotozawa, Hikoroichi-mura, Kasen-gun (Ofunato City), Iwate Prefecture
(Sakamotozawa Formation)
Middle and early Permian

***Gyroporella longithalla* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 94, pl. 10, figs. 2-5, pl. 11, figs. 1-2
Holotype: GSJ no. 510606-8 (=510606-B ?; pl. 10, figs. 2-3), (Paratypes: GSJ nos. 510606-6 (pl. 10, fig. 4), 510529-12 (pl. 11, fig. 1-2), 510605-2 (pl. 10, fig. 5))
North of Manganji (GSJ no. 510606-8), west of Nagaoka (GSJ nos. 510606-6, 510605-2), and east of Onogi (GSJ no. 510529-12), Santo-machi, Sakata-gun, Shiga Prefecture
Onogi (GSJ no. 510529-12) and Samegai (GSJ nos. 510606-8, 510606-6, 510605-2) Formations
Early to middle Permian
(The holotype specimen was collected from the lower Permian Samegai formation)

***Gyroporella microporosa* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 231, pl. 23, figs. 6-11
Syntypes: IW slide nos. 232 (pl. 23, fig. 10), 236, 307, 332 (pl. 23, figs. 6-7), 390 (pl. 23, fig. 8), (Paratypes: IW slide no. 322 (pl. 23, fig. 7), 365 (pl. 23, fig. 9))
Shomaru-toge Pass (IW slide no. 365) and Sakaishi (IW slide nos. 322, 332, 390), Agano-mura, Iruma-gun Saitama Prefecture; Hinoda (IW slide no. 307) and near Showadenko factory, Kagemori-mura (IW slide no. 232), Chichibu-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

***Gyroporella multiporosa* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 94, pl. 11, fig. 3, pl. 12, fig. 12, pl. 13, fig. 8
Holotype (syntypes): GSJ nos. 510606-B (pl. 13, fig. 18), 510603-1 (pl. 11, fig. 3), (Paratype: GSJ no. 510529-2 (pl. 12, fig. 12))
West of Nagaoka (GSJ no. 510529-2) and north of Mnganji (GSJ no. 510606-B), Santo-machi, Sakata-gun Shiga Prefecture; Muraki (GSJ no. 510603-1), Ibuki-mura, Sakata-gun, Shiga Prefecture
Samegai Formation
Early Permian

***Gyroporella nipponica* Endo and Hashimoto, 1955**
Proc. Japan Acad., vol. 31, no. 10, p. 705, fig. 1
Holotype: ?
Down-stream area of the Penke River, Nakaokoppe, Nishiokoppe-mura, Monbetsu-gun, Kitamino-kuni, Hokkaido
Nakaokoppe Formation
Permian

***Gyroporella omensis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 93, pl. 10, fig. 1, pl. 12, figs. 1-4
Holotype (syntypes): GSJ nos. 510604-3, 510604-1 (pl. 10, fig. 1), (Paratypes: GSJ nos. 510604-5, 510601-2, 510524-3)
Southern slope of Iwayama hill, Ibuki-mura, Shiga Prefecture (GSJ no. 510524-3); Manganji (GSJ nos. 510604-1, 510604-5) and Suwara (GSJ no. 510601-2), Santo-machi, Sakata-gun, Shiga Prefecture
Ibukiyama Limestone Formation (GSJ no. 510524-3) and Samegai Formation (GSJ nos. 510601-2, 510604-1, 510604-5)
Early to middle Permian
(The syntype specimens were collected from the lower Permian Samegai Formation.)

***Gyroporella praturloni* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 121, pl. 11, figs. 3-6
Holotype: NSM no. P1-18050a
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Gyroporella* (?) *tenuimarginata* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 232, pl. 23, fig. 12, pl. 24, figs. 1-4
Syntypes: IW slide nos. 208, 229, 286 (pl. 24, figs. 1, 4), 307 (pl. 24, fig. 2), 381, (Paratypes: IW slide nos. 228 (pl. 23, fig. 12), 391 (pl. 24, fig. 3))
Near Showadenko factory, Kagemori-mura (IW slide nos. 228, 286) and Hinoda, Yokose-mura (IW slide no. 307), Chichibu-gun, Saitama Prefecture; Sakaishi, Agano-mura (IW slide no. 391), Iruma-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

***Gyroporella watanabei* Nakamura and Chisaka, 1984**
Bull. Nat. Sci. Mus., vol. 10, no. 3, p. 102, pl. 8, figs. 11-17
Syntypes: NSM nos. PP7910e (pl. 8, fig. 15) PP7950a (pl. 8, fig. 11), PP7950b (pl. 8, fig. 16), (Paratypes: NSM nos. PP7911b, PP7911c, PP7956a, PP7956b (pl. 8, fig. 17a), PP7956c (pl. 8, fig. 17b))
Atagoyama, Choshi-shi, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

***Gyroporella* sp. Konishi, 1952** (species name was not given)
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 5, p. 157, pl. 14, figs. 15-16
Holotype: UT ?
Dodo, 5.5 km north of Yanahara Mine, Okayama Prefecture
Gravel in the Dodo Congromerate
Permian

***Macroporella aganoensis* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 115, pl. 8, fig. 3, pl. 9, fig. 3
Holotype: NSM no. P1-18073b
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Macroporella atagoyamensis* Nakamura and Chisaka, 1984**
Bull. Nat. Sci. Mus., vol. 10, no. 3, p. 98, pl. 7, figs. 15-19
Syntypes: NSM nos. PP7901d (pl. 7, fig. 15) PP7908c (pl. 7, fig. 16), (Paratypes: PP7901e (pl. 7, fig. 18), PP7908d (pl. 7, fig. 19), PP7915e (pl. 7, fig. 17))
Atagoyama, Choshi-shi, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

***Macroporella infundibula* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 90, pl. 7, figs. 5
Holotype ?: (GSJ no. 510605-3)
South of Minami-Toba-ue, Nagahama-shi, Shiga Prefecture
Samegai Formation
Early Permian

***Macroporella kantoensis* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 114, pl. 7, figs. 3-4
Holotype: NSM no. P1-18120e
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N and 139°13.1'E)
Manba Formation
Early Permian

***Macroporella maxima* Endo, 1952**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 1, p. 26, pl. 1, figs. 3-8 (3-9)
Syntypes: IW ? slide nos. 108-109 (pl. 1, figs. 6-7), specimens 10793, 10796, (Paratypes: IW ? slide nos. 101, 102 (pl. 1, figs. 8-9), 103, 107)
West bank of Kitakami River, opposite the main part of Maiya-machi (Towa Town, Tome-gun, Miyagi Prefecture) (Nishikori Formation)
Middle Permian

***Macroporella mina* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 286, pl. 38, figs. 4-6
Syntypes: IW slide nos. 496 (pl. 38, figs. 4-5), 497 (pl. 38, fig. 6)
Misaka, Shinsaka-mura, Jinseki-gun, Hiroshima Prefecture
Misaka Formation
Permian

***Macroporella multiporosa* Endo and Horiguchi, 1957**
Jap. Jour. Geol. Geogr., vol. 28, no. 4, p. 172, pl. 14, figs. 4-6
Syntypes: IW slide nos. 595 (pl. 14, fig. 4), 596 (pl. 14, fig. 5), 597 (pl. 14, fig. 6)
Ichinotani stream, west of Fukuji village, Gifu Prefecture
Mizuyagadani Formation
Permian

***Macroporella* (?) *nyugawensis* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 186, pl. 31, figs. 5-6
Holotype (syntypes): TKD ? nos. 21149 (pl. 31, fig. 5), 21158 (pl. 31, fig. 6)
Sotedani (TKD ? no. 21149) and Yokoberadani (TKD ? no. 21158) valleys, Nyugawa-mura, Ono-gun, Gifu Prefecture
Gonbo and Ozu Formations
Permian

***Macroporella tenuimarginata* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 89, pl. 7, figs. 2-4
Holotype: GSJ no. 52068-10 (pl. 7, fig. 3), (Paratypes: GSJ nos. 510529-12 (pl. 7, fig. 2), 510603-1 (pl. 7, fig. 4))
East of Onogi (GSJ no. 510529-12) and Muraki (GSJ no. 510603-1), Santo-machi, Sakata-gun, Shiga Prefecture; Yadani valley (GSJ no. 52068-10), Nagahama-shi, Shiga Prefecture
Onogi(GSJ no. 510529-12), Samegai (GSJ no. 52068-10) and Kiyotaki (GSJ no. 510603-1) Formations
Early Permian
(The holotype specimen was collected from the lower Permian Samegai Formation)

Makroporella tosaensis* Yabe and Toyama, 1949** (= ***Macroporella tosaensis)
Proc. Japan Acad., vol. 25, no. 7, p. 40, figs. 1a-b
Holotype: ?
Hanabata, Tokano-mura, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Late Jurassic

***Mizzia longiporosa* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 125, pl. 1, fig. 5, pl. 2, figs. 5-6, pl. 3, fig. 1, pl. 4, fig. 4
Holotype: GKD no. 2267A (pl. 1, fig. 5), (Paratypes: GKD nos. 2267B, 2267C, 2267 (pl. 13, fig. 1), 2267D (pl. 4, fig. 4))
About 900 m south of Haguwara, Ofuku, Mine-shi, Yamaguchi Prefecture
Akiyoshi Limestone Group
(Middle Permian)

***Mizza sakaishiensis* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 106, pl. 3, figs. 6-7
Holotype: NSM no. P1-18091a
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Neogyroporella elegans* Yabe and Toyama, 1949**
Proc. Japan Acad., vol. 25, no. 5, p. 163, figs. 5-10
Holotype: ?
Hanabata, Togano-mura, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Late Jurassic

***Neogyroporella* sp. Yabe and Toyama, 1949** (species name was not given)
Proc. Japan Acad., vol. 25, no. 5, p. 164, fig. 11
Holotype: ?
Hanabata, Togano-mura, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Late Jurassic

***Nipponophysoporella* Endo, 1959 n. gen.**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 197,

Type-species; *Nipponophysoporella elegans* Endo, described from the Permian Ozu Formation, Gifu Prefecture

***Nipponophysoporella elegans* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 197, pl. 36, figs. 5-7, pl. 37, figs.1-2
Holotype (syntypes): TKD ? nos. 21049, 21129b, (Paratypes: TKD ? nos. 21061 (pl. 36, fig. 7), 21128 (pl. 37, fig. 1), 21129a (pl. 37, fig. 2))
Sotedani (TKD ? no. 21061) and Horadani (TKD ? nos. 21049, 21129b, 21128) valleys, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu Formation
Permian

***Oligoporella cauliculus* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 96, pl. 8, fig. 4
Holotype: GSJ no. 510529-12
East of Onogi, Santo-machi, Sakata-gun, Shiga Prefecture
Onogi Formation
Middle Permian

***Oligoporella expansa* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 192, pl. 34, figs. 6-8
Holotype (syntypes): TKD ? nos. 21133, 21132b, (Paratype: TKD ? 21132a)
Hatahokodani valley, Nyugawa-mura, Ono-gun, Gifu Prefecture
Gonbo Formation
Permian

***Oligoporella hidaensis* Endo, 1954 in Endo and Kanuma, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 198, pl. 15, figs. 4-6
Syntypes: IW slide nos. 193-195
South of the Otohime Fall near Hachiman-machi, Gujo-gun, Gifu Prefecture; Kamikowa, Suwara-mura, Mugi-gun, Gifu Prefecture; Shima-dani, Hachiman-machi, Gujo-gun, Gifu Prefecture
Shimadani Formation
Middle Permian

***Oligoporella himurensis* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 123, pl. 7, fig. 5, pl. 12, fig. 1-A
Holotype: NSM no. P1-18095a
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Oligoporella horiguchii* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 290, pl. 40, figs. 1-4
Syntypes: IW slide no. 564
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Oligoporella isomii* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 97, pl. 12, fig. 11
Holotype: GSJ no. 510606-B
Quarry of Manganji, Santo-machi, Sakata-gun, Shiga Prefecture
Samegai Formation
Early Permian

***Oligoporella nipponica* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 235, pl. 24, figs. 10-12, pl. 25, figs. 1-2
Holotype (syntypes): IW slide nos. 223 (pl. 24, fig. 12), 234 (pl. 25, fig. 1), Paratype: IW slide nos. 302 (pl. 24, fig. 11), 310, (316 (pl. 25, fig. 2)), 368 (pl. 24, fig. 10)
Near Showadenko factory, Kamikagemori, Kagemori-mura Chichibu-gun, Saitama Prefecture (IW slide no. 223); Hinoda, Chichibu-shi, Saitama Prefecture (IW slide no. 234, 316); Shimokuzu, Agano-mura, Iruma-gun, Saitama Prefecture (IW slide nos. 302, 368)
(Geologic horizon was not described)
Artinskian, Permian

***Oligoporella omiensis* Endo, 1952**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 8, p. 246, pl. 23, fig. 8
Syntypes: IW slide no. 121
Utatonami, Nishikubiki-gun, Niigata Prefecture
(Omi Limestone)
Early Permian

***Oligoporella skawadai* Endo, 1952**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 8, p. 245, pl. 23, figs. 9-10
Holotype (syntypes): IW slide nos. 117, 124
Mt. Kurohime, Nishikubiki-gun, Niigata Prefecture
(Omi Limestone)
Middle Permian

***Physoporlla chichibuensis* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 126, pl. 14, figs. 1-5
Holotype: NSM no. P1-18094a
Sakaishimachibun, Hanno-shi, Saitama Prefecture

(35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Physoporella elegantannulata* Endo, 1954 in Endo and Kanuma, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 200, pl. 17, figs. 3-6
Holotype: IW slide no. 185, Paratype(s): IW slide nos. (194 (pl. 17, figs. 3, 6)), 209 (pl. 17, figs. 4-5)
Kamikowa, Suwara-mura, Mugi-gun, Gifu Prefecture
Kuchibora Formation
Middle Permian

***Physoporella japonica* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 291, pl. 40, figs. 7-11, pl. 41, fig. 1
Syntypes: IW slide nos. 493, 494 (pl. 41, fig. 1), 532, 561 (pl. 40, fig. 9), 563 (pl. 40, fig. 8), 564 (pl. 40, fig. 7)
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture (IW slide nos. 561, 563, 564); Misaka, Shinsaka-mura, Jinseki-gun, Hiroshima Prefecture (IW slide nos. 493, 494)
Maedani (IW slide nos. 561, 563, 564) and Misaka Formations (IW slide nos. 493, 494)
Permian

***Physoporella kitakamiensis* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 236, pl. 30, figs. 5-6, pl. 31, figs. 1-4
Syntypes: IW slide nos. 212 (pl. 26, fig. 6), 213, (Paratype: IW slide no. 294 (pl. 30, fig. 5))
Toyomane-mura, Shimohei-gun, Iwate Prefecture
(Geologic horizon was not described)
Permian

***Physoporella konisii* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 195, pl. 42, figs. 4-5
Holotype (syntypes): IW slide nos. 614 (pl. 42, fig. 4), 617 (pl. 42, fig. 5)
Horadani valley, Otani, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu Formation
Permian

***Physoporella lativentrusa* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 196, pl. 42, figs. 8, 9
Holotype (syntypes): IW slide nos. 611 (pl. 42, fig. 8), 618 (pl. 42, fig. 9)
Horidani valley (Horadani valley ?), Otani, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu Formation
Permian

***Physoporella nyugawensis* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 193, pl. 35, figs. 9-10, pl. 40, fig. 2
Holotype (syntypes): TKD ? no. 21126 (pl. 35, fig. 9), (Paratypes: TKD ? no. 21129 (pl. 35, fig. 10), IW slide no. 613 (pl. 40, fig. 2))
Ozudani (TKD ? no. 21126) and Horadani (TKD ? no. 21129; IW slide no. 613) valleys, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu Formation
Permian

***Physoporella ovata* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 99, pl. 15, fig. 1, pl. 16, fig. 1, pl. 17, figs. 5-6
Holotype: GSJ no. 510605-1 (pl. 16, fig. 1), (Paratypes: GSJ nos. 510606-C (pl. 17, fig. 6), 510529-2 (pl. 17, fig. 5), 510601-2 (pl. 15, fig. 1))
East of Onogi (GSJ no. 510529-2), west of Nagaoka (GSJ nos. 510605-1, 510606-C) and Sukawa (GSJ no. 510601-2), Santo-machi, Sakata-gun, Shiga Prefecture
Onogi (GSJ no. 510529-2) and Samegai (GSJ nos. 510605-1, 510606-C, 510601-2) Formations
Early to middle Permian
(The holotype specimen was collected from the lower Permian Samegai Formation)

***Physoporella tenuiaxis* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 194, pl. 36, fig. 8, pl. 37, fig. 3 (-4)
Holotype (syntypes): TKD ? nos. 21130 (pl. 36, fig. 8, pl. 37, fig. 3), 21048 (pl. 37, fig. 4)
Horadani valley, Otani, Nyugawa-mura, Ono-gun, Gifu Prefecture
Ozu Formation
Permian

***Poikiloporella japonica* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 127, pl. 11, fig. 12, pl. 12, fig. 4
Holotype: NSM no. P1-18120a
Sakaishimachibun, Hanno-shi, Saitama Prefecture
(35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudoemipastopora jurassica* Endo, 1961 (=*Pseudoepimastopora jurassica*)**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 61, pl. 14, figs. 1-2, pl. 15, figs. 3-4
Holotype: IW slide no. 646a (pl. 14, fig. 1), (Paratypes: 646b,

646c, 671)
Hachigamori, 1.5 km southeast of Sakawa-machi, Takaoka-gun, Kochi-Prefecture
Torinosu Limestone
Late Jurassic

***Pseudoepimastopora pertunda* Endo, 1960**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 3, p. 268, pl. 44, figs. 2-6
Holotype (syntypes): GKD nos. 641 (pl. 25, fig. 3), 639 (pl. 25, fig. 5), (Paratypes: GKD nos. 634, 637, 641)
Along or around the uphill road from Kuroiwa southeastward to Chojaga-mori, Kuroiwa, Kyowa, Shuho-cho, Mine-gun, Yamaguchi Prefecture
Akiyoshi Limestone Group
(Early Permian)

***Pseudogyroporella* Endo, 1959 n. gen.**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 183, Type-species; *Pseudogyroporella mizziaformis* Endo, described from the Permian Gonbo Formation, Gifu Prefecture

***Pseudogyroporella annulata* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 112, pl. 5, fig. 4-B, pl. 6, figs. 7-11
Holotype: NSM no. P1-18109b
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudogyroporella ellipitica* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 110, pl. 5, figs. 5-9
Holotype: NSM no. P1-18129a
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudogyroporella elongata* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 108, pl. 4, figs. 8-A, B
Holotype: NSM no. P1-18104e
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudogyroporella endoi* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 107, pl. 4, figs. 2-5
Holotype: NSM no. P1-18101a
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudogyroporella ishijimai* Nakamura and Ota, 1974**
Bull. Akiyoshi-dai Sci. Mus., no. 10, p. 12, pl. 5, figs. 1-3
Holotype: ASM no. 00128a (pl. 5, fig. 1), (Paratypes: ASM nos. 00126 (pl. 5, fig. 2), 00127 (pl. 5, fig. 3))
Nishiyama, Akiyoshi Plateau, Yamaguchi Prefecture
Akiyoshi Limestone Group
Late Carboniferous

***Pseudogyroporella longiporosa* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 110, pl. 4, figs. 6-7
Holotype: NSM no. P1-18094b
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudogyroporella longissima* Nakamura and Ota, 1974**
Bull. Akiyoshi-dai Sci. Mus., no. 10, p. 11, pl. 3, figs. 1-3, pl. 4, figs. 1-8
Holotype: ASM no. 00084 (pl. 3, fig. 1), (Paratypes: ASM nos. 4152a (pl. 3, fig. 2), 4152b (pl. 3, fig. 3), 4152c (pl. 4, fig. 3), 4152 d (pl. 4, fig. 7), 00083a (pl. 4, fig. 1), 00083b (pl. 4, fig. 4), 00099 (pl. 4, fig. 8), 00116 (pl. 4, fig. 5?), 00119a (pl. 4, fig. 2), 20092 (pl. 4, fig. 6?))
Nishiyama, Akiyoshi Plateau, Yamaguchi Prefecture
Akiyoshi Limestone Group
Late Carboniferous

***Pseudogyroporella longithalla* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 108, pl. 5, figs. 1-2
Holotype: NSM no. P1-18119a
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudogyroporella macroporosa* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 111, pl. 6, figs. 1-3

Holotype: NSM no. P1-18106a
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudogyroporella minor* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 109, pl. 5, figs. 3, 4-A
Holotype: NSM no. P1-18124
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Pseudogyroporella mizziaformis* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 184, pl. 30, figs. 3-4
Holotype (syntypes): TKD ? nos. 21112 (pl. 30, fig. 4), 21132 (pl. 30, fig. 3)
Hatahokodani (TKD ? no. 21132) and Ozudani (TKD ? no. 21112) valleys, Nyugawa-mura, Ono-gun, Gifu Prefecture
Gonbo Formation
Permian

***Pseudogyroporella rotunda* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 112, pl. 6, figs. 4-6
Holotype: NSM no. P1-18130c
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Shigaporella* Endo, 1961 n. gen.**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 105, Type-species; *Shigaporella exortiva* Endo, described from the lower Permian Samegai and Takayama Formations, Shiga Prefecture

***Shigaporella exortiva* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 106, pl. 16, fig. 4, pl. 17, fig. 7-8
Holotype (syntypes): GSJ nos. 520417-2 (pl. 17, fig. 7), 510603-1 (pl. 16, fig. 4), (Paratype: GSJ no. 510523-4 (pl. 17, fig. 8)
Eastern slope of Iwakura-yama hill, Sekigahara-machi, Fuwa-gun, Gifu Prefecture (GSJ no. 510523-4); Muraki, Ibuki-mura, Santo-machi, Sakata-gun, Shiga Prefecture (GSJ no. 510603-1); Make, Kita-Tominaga-mura, Higashi-asai-gun, Shiga Prefecture (GSJ no. 520417-2)
Ibukiyama Limestone Formation (GSJ no. 510523-4), Samegai Formation (GSJ no. 510603-1), and Takayama Formation (GSJ no. 520417-2)
Early to middle Permian
(The syntype specimens were collected from the lower Permian Samegai and Takayama Formations)

***Teutloporella* (?) *hidensis* Endo and Horiguchi, 1957**
Jap. Jour. Geol. Geogr., vol. 28, no. 4, p. 173, pl. 15, figs. 4-5
Holotype: IW slide no. 604
Ichinotani stream, the west of Fukuji village, Gifu Prefecture
Mizuyagadani Formation
Permian

***Teutloporella japonica* Endo, 1956**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 2, p. 234, pl. 26, figs. 1-2
Syntypes: IW slide no. 333
Sakaishi, Agano-mura, Iruma-gun, Saitama Prefecture
(Geologic horizon was not described)
Artinskian, Permian

***Teutloporella scalata* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 98, pl. 17, figs. 2-3, pl. 19, fig. 4
Holotype: GSJ no. 510605-2 (pl. 19, fig. 4), (Paratypes: GSJ nos. 510605-1 (pl. 17, fig. 2), 510605-6, 510605-B (pl. 17, fig. 3), 510606-B)
West of Nagaoka (GSJ no. 510605-2) and northeast of Manganji (GSJ nos. 510605-1, 510605-B), Santo-machi, Sakata-gun, Shiga Prefecture
Samegai Formation
Early Permian

***Teutloporella taishakuensis* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 289, pl. 40, figs. 5-6
Syntypes: IW slide no. 568
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

***Teutloporella terayamensis* Horiguchi, 1958**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 1, p. 135, pl. 28, figs. 4-5
Syntypes: IW slide nos. 11067 (pl. 28, fig. 5), 11068 (pl. 28, fig. 4), 11704
Ohazama mati, Iwate Prefecture
Hinoyama Formation
Early Permian

***Thyrsoporella* (?) *hatigamoriensis* Yabe and Toyama, 1949**
Proc. Japan Acad., vol. 25, no. 7, p. 42, figs. 2a-c
Holotype: ?

Hachigamori near Sakawa, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Late Jurassic

***Velomorpha* Horiguchi 1961 n. gen.**
Sci. Rep. Saitama Univ., Ser. B, vol. 4, no. 1, p. 96,
Type-species; *Velomorpha kuzuensis* Horiguchi, described from the middle Permian Nabeyama Formation, Tochigi Prefecture

***Velomorpha kuzuensis* Horiguchi, 1961**
Sci. Rep. Saitama Univ., ser. B, vol. 4, no. 1, p. 97, pl. 23, figs. 1-7, pl. 25
Holotype: IW slide no. 11134 (pl. 25), (Paratypes: IW slide nos. 11136 (pl. 23, figs. 3, 7), 11137 (pl. 23, fig. 1), 11138, (pl. 23, fig. 5), 11139 (pl. 23, figs. 2, 4), 11140 (pl. 23, fig. 6)
Yamasuge, Kuzu Town, Aso-gun, Tochigi Prefecture
Nabeyama Formation
Middle Permian

***Velomorpha valiabilis* Horiguchi, 1961**
Sci. Rep. Saitama Univ., ser. B, vol. 4, no. 1, p. 98, pl. 24, figs. 1-4.
Holotype: IW slide no. 11141 (pl. 24, figs. 3-4), (Paratypes: IW slide nos. 11142 (pl. 24, fig. 2), 111443 (pl. 24, fig. 1))
Yamazaki, Maiya Town, Tome-gun, Miyagi Prefecture
Limestone pebble in the Yamazaki Conglomerate (Usuginu-type Conglomerate)
Late Permian

***Vermiporella* (?) *nipponica* Endo, 1954 in Endo and Kanuma, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 191, pl. 13, figs. 2-5
Holotype: IW slide no. 175, (Paratypes: IW slide nos. 176 (pl. 13, fig. 4), 177 (pl. 13, fig. 5))
A vally, southwest of Kuchibora near Hachiman-machi, Gujo-gun, Gifu Prefecture; Asagara, Aioi-mura, Gujo-gun, Gifu Prefecture
Kuchibora Formation
Late Permian

Dasycladales ?

***Thaiporella*, Endo 1966 n. gen.**
Jap. Jour. Geol. Geogr, vol. 37, nos. 2-4, p. 171,
Type-species; *Thaiporella kobayashii* Endo, described from upper Ordovician or lower Silurian rocks in Thailand

***Thaiporella kobayashii*, Endo 1966**
Jap. Jour. Geol. Geogr, vol. 37, nos. 2-4, p. 172, pl. 7, fig. 3
Type specimen: TKD GMI no. 30448
Bank along a brook at the south-western foot of the Doi Chang hill, northern Thailand
Upper Ordovician or lower Silurian (?)

Class RHODOPHYCEAE Ruprecht in Middendorff, 1851

Order Nemaliales Schmitz in Engler, 1982

***Gymnocodium grandise* Endo, 1954**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 3, p. 220, pl. 19, figs. 5-7
Syntypes: IW ? slide nos. 220 (pl. 19, figs. 5, 7), 221 (pl. 19, fig. 6)
Momiya, Sakamoto-mura, Taga-gun, Ibaraki Prefecture (Kume Formation)
(Pliocene)

***Gymnocodium japonicum* Konishi, 1952**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 7, p. 217, pl. 20, figs. 1-9
Holotype: UT ? no. PP7201, (Paratypes: UT ? nos. PP7195-7200, PP7202)
Inogadaira, Takura-village, Fukui Prefecture; 35°48'38.7"N, 136°20'17.7"E
(Geologic horizon was not described)
Early Permian

***Gymnocodium kanmerai* Konishi, 1954**
Jap. Jour. Geol. Geogr., vol. 25, nos. 1-2, p. 8, pl. 1, figs. 1-6, 13-14, pl. 2, figs. 17, 19-20
Holotype: UT ? no. PP7216 (pl. 1, fig. 14), (Paratypes: UT ? nos. PP7217 (pl. 1, fig. 1), PP7218 (pl. 1, fig. 2), PP7219 (pl. 1, fig. 3), PP7220 (pl. 1, fig. 4), PP7221 (pl. 1, fig. 13), PP7222 (pl. 1, figs. 5-6), PP7223 (pl. 2, fig. 17), PP7224 (pl. 2, fig. 20), PP7225 (pl. 2, fig. 19), PP7226, PP7227 (pl. 1, fig. 7), PP7228 (pl. 1, fig. 8), PP7229 (pl. 1, figs. 9-10), PP7230 (pl. 1, fig. 11), PP7231 (pl. 1, fig. 12), PP7232 (pl. 1, figs. 15-a, b, c), PP7233 (pl. 2, fig. 21))
Northern slope of the Kosaki Creek valley in the vicinities of Kosaki, Eri and Kigisu hamlets, Shimomatsukoma-mura, Yatsushiro-gun, Kumamoto Prefecture
Kosaki Formation
Middle Permian

***Gymnocodium kanmerai* f. *annulata* Konishi, 1954 n. form.**
Jap. Jour. Geol. Geogr., vol. 25, nos. 1-2, p. 18, pl. 1, figs. 10-12, 15-c (15-a)
"Holotype": UT ? no. PP7229 (pl. 1, fig. 10), ("Paratypes": UT ? nos. PP7230 (pl. 1, fig. 11), PP7231 (pl. 1, fig. 12), PP7232 (pl. 1, fig. 15-a))
Northern slope of the Kosaki Creek valley in the vicinities of Kosaki, Eri and Kigisu hamlets, Shimomatsukoma-mura, Yatsushiro-gun, Kumamoto Prefecture
Kosaki Formation

Middle Permian

***Gymnocodium torinosensis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 62, pl. 3, figs. 3-7
Holotype: IW slide no. 623, (Paratypes: IW slide nos. 622, 625, 626, 628 (pl. 3, fig. 5))
Ezuishi-sawa (IW slide nos. 622, 625) and Kayano-saka (IW slide nos. 623, 626, 628), Hayama, Kashima-machi, Soma-gun, Fukushima Prefecture
Torinosu Limestone
Late Jurassic

***Permocalcus pini* Endo, 1957**
Sci. Rep. Saitama Univ., ser. B, vol. 2, no. 3, p. 295, pl. 41, figs. 5-6
Syntypes: IW ? slide no. 557
Eastern part of Zenbutsuji-dani, Taishaku-mura, Hiba-gun, Hiroshima Prefecture
Maedani Formation
Permian

Order Corallinales Silva and Johansen, 1986

***Amphiroa comprexa* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 56, pl. 1, fig. 4, 11
Holotype: ?
Shoko-zan, Okayama-gun, Takao Prefecture, Taiwan
Ryukyu Limestone
(Pleistocene)

***Amphiroa cylindrica* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 63, pl. 2, fig. 6, pl. 3, figs. 2, 7
Holotype: ?
Shoko-zan, Okayama-gun, Takao Prefecture, Taiwan; Koto-sho, Taiwan; Shirakawa, Nishibaru, Shimaziri-gun, Okinawa-zima (Nishihara, Okinawa-jima, Okinawa Prefecture)
Ryukyu Limestone
(Pleistocene)

***Amphiroa elongata* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 55, text-fig. 1, pl. 1, fig. 1
Holotype: ?
Taikozan, Okayama-gun, Takao Prefecture, Taiwan
Ryukyu Limestone
(Pleistocene)

***Amphiroa formosana* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 58, pl. 1, fig. 6
Holotype: ?
Taiko-zan, Okayama-gun, Takao Prefecture, Taiwan
Ryukyu Limestone
(Pleistocene)

***Amphiroa hanzawai* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 55, pl. 37, fig. 4
Holotype: GITU (Taihoku University) no. ?
Itoman, Shimajiri-gun, Okinawa-jima, Ryukyu Is. (Itoman City, Okinawa Prefecture)
Ryukyu Limestone
Pleistocene

***Amphiroa hayasakai* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 56, text-fig. 3, pl. 1, fig. 3
Holotype: ?
Junko-shi, Koshun-gun, Takao Prefecture, Taiwan
Ryukyu Limestone
(Pleistocene)

***Amphiroa howei* Ishijima, 1938**
Jap. Jour. Geol. Geogr. vol. 15, nos. 1-2, p. 14, pl. 1, fig. 3
Holotype: IGPS ? slide no. 31 of S. Hanzawa collection
The raised coral reef of Ishigaki-zima, Ryukyu (Ishigaki-jima, Okinawa Prefecture)
(Geologic horizon was not described)
Tertiary and later (Pleistocene or Holocene)

***Amphiroa izuensis* Ishijima, 1968**
St. Paul's Rev. Sci., vol. 2, no. 7, p. 251, pl. 4, fig. 2
Holotype: ?
East of Makinogo, near Shuzenji, Izu Peninsula, Shizuoka Prefecture (34°59.3'N, 138°58.2'E)
Shirahama Group
Miocene

***Amphiroa kotobukiensis* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 59, pl. 1, fig. 8
Holotype: ?
Kotobuki-yama, north of Takao City, Takao Prefecture, Taiwan
Ryukyu Limestone
(Pleistocene)

***Amphiroa longissima* Ishijima, 1938**
Jap. Jour. Geol. Geogr. vol. 15, nos. 1-2, p. 14, pl. 1, fig. 2
Holotype: IGPS ? slide no. 32 of S.Hanzawa collection
Sirakawa, Southwest of Nisihara, Simaziri-gun, Okinawa-zima, Ryukyu Islands (Nishihara, Okinawa-jima, Okinawa Prefecture)
(Ryukyu Limestone)

Tertiary and later (Pleistocene)

***Amphiroa maxima* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 57, pl. 36, figs. 1-4
Holotye: IGPS no. 79460, (Paratype: ?)
Manrido, about 4 km west of Koshun-sho, Koshun-gun, Takao-shu, Formosa (Taiwan) (pl. 36, figs. 1-3); Nekoyama, Taito-gai, Taito-cho, Foromosa (Taiwan) (paratype specimen)
Ryukyu Limestone (IGPS no. 79460) and Pliocene limestone (paratype specimen)
Pleistocene (IGPS no. 79460) and Pliocene (paratype specimen)

***Amphiroa monoderma* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 56, pl. 41, figs. 5a-b, pl. 42, fig. 2
Holotype: IGPS no. 79457
Babukutsu, Taito-cho, Formosa (Taiwan)
(Geologic horizon was not described)
Miocene

***Amphiroa okamotoi* Ishijima, 1962**
St. Paul's Rev. Sci., vol. 2, no. 1, p. 23, pl. 4, figs. 1, 5
Holotype: ?
Kaikawa, Yuya-cho, Yamaguchi Prefecture
Igami Formation
Miocene?

***Amphiroa prerigida* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 63, pl. 37, figs. 6-7, 9-10
Holotype: IGPS no. 79401
Babukutsu, Taito-cho, Formosa (Taiwan)
(Geologic horizon was not described)
Miocene

***Amphiroa shimodaensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 59, pl. 37, fig. 5
Holotype: IGPS no. 79462
Harada, Shirahama-mura, Kamo-gun, Izu Peninsula, Shizuoka Prefecture
(Shirahama Limestone ?)
Pliocene

***Amphiroa shirahamaensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 64, pl. 33, figs. 1-8, pl. 34, fig. 8
Holotype: IGPS no. 79402
Harada, Shirahama-mura, Kamo-gun, Izu Peninsula, Shizuoka Prefecture
(Shirahama Limestone ?)
Pliocene

***Amphiroa shirakawaensis* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 70, pl. 4, fig. 8
Holotype: ?
Shirakawa, northwest of Nishibarn (Nishibaru), Shimaziri-gun, Okinawa-zima (Nishihara, Okinawa-jima, Okinawa Prefecture)
Ryukyu Limestone
(Pleistocene)

***Amphiroa taiwanensis* Ishijima, 1942**
Taiwan Chigaku Kiji, vol. 13, nos. 2-3, p. 82, pl. 4, fig. 4
Holotype: IGPS no. ?
Kotosyo (Botel Tobago Island), Taiwan
Ryukyu Limestone
(Pleistocene)

***Amphiroa taiwanica* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 66, pl. 3, fig. 5
Holotype: ?
Koto-sho, Taiwan
Ryukyu Limestone
(Pleistocene)

***Amphiroa tan-i* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 55, pl. 41, figs. 1-3
Holotype: IGPS no. 79456
Babukutsu, Taito-cho, Formosa (Taiwan)
(Geologic horizon was not described)
Miocene

***Amphiroa tenuis* Ishijima, 1938**
Jap. Jour. Geol. Geogr. vol. 15, nos. 1-2, p. 14, pl. 1, fig. 1
Holotype: IGPS ? slide no. 21212 of S. Hanzawa collection
Sirakawa, Nisihara, Simaziri-gun, Okinawa-zima (Nishihara, Okinawa-jima, Okinawa Prefecture)
Ryukyu Limestone
Tertiary and later (Pleistocene)

***Amphiroa undulata* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 57, pl. 35, figs. 1a-b, 3, pl. 41, fig. 4
Holotype: IGPS no. 79459
Nekoyama, Taito-city, Taito-cho, Formosa (Taiwan)
Pliocene limestone gravel in the Hinanzan Conglomerate
Pliocene

***Amphiroa wanaiensis* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 60, pl. 2, fig. 1
Holotype: ?
Wanai, Okierabu-zima (Okierabu-jima, Kagoshima

Prefecture)
Ryukyu Limestone
(Pleistocene)

***Amphiroa* ? sp. Ishijima, 1944** (species name was not given)
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 66, pl. 4, fig. 7
Holotype: ?
Shirakawa, south-west of Nishibaru, Shimaziri-gun, Okinawa-zima (Nishihara, Okinawa-jima, Okinawa Prefecture)
Ryukyu Limestone
(Pleistocene)

***Archaeolithothamnium borneoense* Ishijima, 1978**
Geol. Palaeont. Southeast Asia, vol. 19, p. 170, pl. 20
Holotype: ?
Northwest coast of Semporna, Sabah Province, Malaysia
Sipit Limestone
Early Miocene

***Archaeolithothamnium fosteri* Johnson, 1964**
U.S. Geol. Survey Prof. Paper, 399-C, p. C3, pl. 1, figs. 1-6
Holotype: slide no. IS-F-49(1) (specimen A788a; pl. 1, figs. 1-2), (Paratypes: slide nos. IS-F-50 (specimen A789; pl. 1, figs. 4-5), IS-F-80(2), IS-F-163(2), IS-F-163(4) (specimen A824; pl. 1, fig. 3), 2532, IS-M-239 B, IS-M-240 C)
(Repository of the type specimens was not indicated)
Osaki (slide nos. IS-F-49(1), IS-F-50, IS-F-163(2), IS-F-163(4)), Miyara (slide no. IS-F-80), and Hoshino (slide nos. IS-M-239B, IS-M-240C), Ishigaki-jima, Okinawa Prefecture
(Miyaragawa Formation)
Eocene

***Archaeolithothamnium galapagosensis* Ishijima, 1963**
St. Paul's Rev. Sci., vol. 2, no. 2, p. 63, pl. 1, figs. 1-3
Holotype: ?
San Salvador, Galapagos Islands
(Geologic horizon was not described)
Pleistocene

***Archaeolithothamnium hanzawai* Ishijima, 1938**
Jap. Jour. Geol. Geogr., vol. 15, nos. 1-2, p. 15, pl. 1, fig. 4
Holotype: IGPS ? slide no. 31 of R. Aoki collection
Tosato, Isigaki-zima, Ryukyu Islands (Ishigaki-jima, Okinawa Prefecture)
Ryukyu Limestone
Tertiary and later (Pleistocene)

***Archeolithothamnium hashimotoi* Ishijima, 1970**
Geol. Palaeont. Southeast Asia, vol. 8, p. 154, pl. 27, figs. 1-2, 4
Holotype: ?
Marinduque Island, Philippines
(Geologic horizon was not described)
Late Aquitanian, Miocene

***Archaeolithothamnium kobamazimensis* Ishijima, 1942**
Trans. Nat. Hist. Soc. Formosa, vol. 32, no. 231, p. 354, pl. 1, figs. 1-3
Holotype: IGPS no. ?
Sakora, northern coast of Kobamajima, Ryukyu Islands (Kohama-jima, Okinawa Prefecture)
(Miyaragawa Formation)
Eocene

***Archaeolithothamnium kuboiensis* Ishijima, 1942**
Trans. Nat. Hist. Soc. Formosa, vol. 32, no. 231, p. 355, pl. 2, figs. 1- 3
Holotype: IGPS no ?
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Misaka Group
Miocene

***Archeolithothamnium marinduquensis* Ishijima, 1970**
Geol. Palaeont. Southeast Asia, vol. 8, p. 154, pl. 28, fig. 2
Holotype: ?
Marinduque Island, Philippines
(Geologic horizon was not described)
Late Aquitanian, Miocene

***Archaeolithothamnium megamiensis* Ishijima, 1933**
Jap. Jour. Geol. Geogr., vol. 11, nos. 1-2, p. 29, pl. 5, fig. 2
Holotype: ?
Megami-yama (Megami Taishaku-yama), Sagara district, Totomi province (Shizuoka Prefecture)
Megamiyama Limestone (Megami limestone body in the Megami Formation; Nakamori et al., 1991)
(Miocene)

***Archaeolithothamnium mindorensis* Ishijima, 1969**
Geol. Palaeont. Southeast Asia, vol. 6, p. 279, pl. 29, fig. 1
Holotype: ?
Western part of Mindoro Island, Philippines
(Geologic horizon was not described)
Late Eocene

***Archaeolithothamnium pseudonummuliticum* Ishijima, 1941**
Taiwan Chigaku Kiji, vol. 12, no. 1, p. 3, pl. 1, (figs. 1-2)
Holotype: ?
Kotosyo, Botel Tobago Island, Taiwan
Aquitanian

***Archaeolithothamnium somensis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 56, pl. 3, figs. 1-2, pl. 4, figs. 1-4

Holotype: IW slide no. 675 (pl. 4, figs. 2-4), (Paratypes: IW slide nos. 622 (pl. 3, figs. 1-2), 674 (pl. 4, fig. 1), 693 Ezuishi-sawa (IW slide no. 622) and Kayano-sawa (IW slide no. 675), Hayama, Kashima-machi, Soma-gun, Fukushima Prefecture; Shiraishi quarry in Nakano-sawa, Tomi-sawa, Soma-shi, Fukushima Prefecture (IW slide no. 674); Suyama-michi, Matsuno-machi, Kita-Uwa-gun, Ehime-Prefecture
Torinosu Limestone
Late Jurassic

***Archaeolithothamnium taiwanensis* Ishijima, 1942**
Taiwan Chigaku Kiji, vol. 13, no. 4, p. 120
Holotype: IGPS no. ?
Payapaya, Taito district, Taiwan
Byoritu beds
(Pliocene?)
(see ***Archaeolithothamnium taiwanensis*** described by Ishijima (1954, p. 18, pl. 1, fig. 5))

***Arthrocardia konitaensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 73, pl. 39, fig. 4, pl. 43, figs. 5a-b, 7a-b
Holotype: IGPS no. 79420
Konita, Katsumata-mura, Haibara-gun, Shizuoka Prefecture
Geologic horizon was not described
Miocene

***Arthrocardia varmai* Ishijima, 1960**
Sci. Rep., Tohoku Univ., 2nd ser. (Geol.), spec. vol., no. 4, p. 159, pl. 14, fig. 11
Holotype: GLR no. ?
Ishizuchi-yama and its environs, Ehime Prefecture
Nimyo Formation
Eocene

***Arthrocardia weberi* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 67, text-fig. 5, pl. 1, fig. 10
Holotype: ?
Kotobuki-yama, north of Takao City, Takao Prefecture, Taiwan
Ryukyu Limestone
(Pleistocene)

***Cheilosporum kuboiensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 73, pl. 43, fig. 3
Holotype: IGPS no. 79419
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Corallina binangonensis* Ishijima, 1943**
Trans. Nat. Hist. Soc. Taiwan, vol. 33, nos. 242-243, p. 645, figs. 1-2, 4-6
Holotype: ?
Binangonan, Rizal state, Ruzon Island, Philippines
Geologic horizon was not described
Aquitanian, Miocene
(see ***Corallina binangonensis*** described by Ishijima (1950, p. 333, figs. 1-3))

***Corallina chichibuensis* Ishijima, 1967**
St. Paul's Rev. Sci., vol. 2, no. 6, p. 200, pl. 2, fig. 1
Holotype: ?
Beneath the Tochiya Bridge over the Tochiya River, a tributary of the Yokose River, at Kidohara of Takashino, Chichibu City, Saitama Prefecture
Saginosu Formation
Middle to late Miocene

***Corallina crassa* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 65, pl. 39, fig. 1
Holotype: IGPS no. 79404
Arakura, Mizuho-mura, Minamitsuru-gun, Yamanashi Prefecture
(Geologic horizon was not described)
Miocene

***Corallina elliptica* Ishijima, 1932**
Jap. Jour. Geol. Geogr., vol. 9. nos. 3-4, p. 147, pl. 12, fig. 1-2, pl. 13, figs. 3-4
Holotype: ?
Ogami-yama, Haibara-gun, province of Totomi (Shizuoka Prefecture)
(Ogami limestone body in the Megami Formation)
(Miocene)

***Corallina elongata* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 64, pl. 38 (28), figs. 2-3, pl. 40, figs. 1a-b
Holotype: IGPS no. 79403
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Corallina formosana* Ishijima, 1965**
St. Paul's Rev. Sci., vol. 2, no. 5, p. 187, pl. 6, fig. 3
Holotype: ?
West slope of Chinko-shan, about 30 km southeast of Sinchu, Taiwan
Limestone in Kokan Tuff Member, Kiirun Group
Early Miocene

***Corallina hayasakai* Ishijima, 1943**
Trans. Nat. Hist. Soc. Taiwan, vol. 33, nos. 242-243, p. 646, fig. 3
Holotype: ?
Binangonan, Rizal state, Ruzon Island, Philippines
Geologic horizon was not described
Aquitanian, Miocene
(see ***Corallina hayasakai*** described by Ishijima (1950, p. 334, fig. 4))

***Corallina izuensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 68, pl. 38, figs. 1-5, 7
Holotype: IGPS no. 79411
Harada, Shirahama-mura, Kamo-gun, Izu Peninsula, Shizuoka Prefecture
(Shirahama Limestone ?)
Pliocene

***Corallina Johnsoni* Ishijima, 1960**
Sci. Rep., Tohoku Univ., 2nd ser. (Geol.), spec. vol., no. 4, p. 157, pl. 15, figs. 6, 7
Holotype: GLR no. ?
Ishizuchi-yama and its environs, Ehime Prefecture
Nimyo Formation
Eocene

***Corallina mindorensis* Ishijima, 1969**
Geol. Palaeont. Southeast Asia, vol. 6, p. 287, pl. 34, fig. 2
Holotype: ?
Sipitag River, a tributary of Cagray River, western part of Mindoro Island, Philippines
(Geologic horizon was not described)
Eocene

***Corallina minima* Ishijima, 1969**
Geol. Palaeont. Southeast Asia, vol. 6, p. 286, pl. 33, fig. 1
Holotype: ?
Sipitag River, a tributary of Cagray River, western part of Mindoro Island, Philippines
(Geologic horizon was not described)
Eocene

***Corallina nagaii* Ishijima, 1960**
Sci. Rep., Tohoku Univ., 2nd ser. (Geol.), spec. vol., no. 4, p. 157, pl. 14, figs. 1, 3-5, 8-9
Holotype: GLR no. ?
Ishizuchi-yama and its environs, Ehime Prefecture
Nimyo Formation
Eocene

***Corallina otsukiensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 71, pl. 40, fig. 10
Holotype: IGPS no. 79416
Otsuki, Kitatsuru-gun, Yamanashi Prefecture
Misaka Group
Miocene

***Corallina pakistanica* Ishijima, 1975**
St. Paul's Rev. Sci., vol. 3, no. 4, p. 112, pl. 1, figs. 1, 3-4, pl. 2, figs. 1-3, pl. 3, figs. 1-2
Holotype: ?
Hindu Kush district, Pakistan
Gaj Formation
Miocene

***Corallina quadratica* Ishijima, 1960**
Sci. Rep., Tohoku Univ., 2nd ser. (Geol.), spec. vol., no. 4, p. 156, pl. 14, figs. 4-5
Holotype: GLR no. ?
Ishizuchi-yama and its environs, Ehime Prefecture
Nimyo Formation
Eocene

***Corallina typica* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 70, pl. 44, figs. 2a-b, 4
Holotype: IGPS no. 79415
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Goniolithon izuensis* Ishijima, 1967**
St. Paul's Rev. Sci., vol. 2, no. 6, p. 211, pl. 1, fig. 2
Holotype: ?
Matsuzaki district, Izu Peninsula, Shizuoka Prefecture
Lepidocyclina limestone in the Shirahama Group
Miocene

***Jania elongata* Ishijima, 1960**
Sci. Rep., Tohoku Univ., 2nd ser. (Geol.), spec. vol., no. 4, p. 158, pl. 14, figs. 6-7, 12
Holotype: GLR no. ?
Ishizuchi-yama and its environs, Ehime Prefecture
Nimyo Formation
Eocene

***Jania hanzawai* Ishijima, 1960**
Sci. Rep., Tohoku Univ., 2nd ser. (Geol.), spec. vol., no. 4, p. 158, pl. 15, fig. 2
Holotype: GLR no. ?
Ishizuchi-yama and its environs, Ehime Prefecture
Nimyo Formation
Eocene

***Jania ? kuboiensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p.,

Yuho-do, Tokyo, p. 75, pl. 28, fig. 4, pl. 29, figs. 3-5, pl. 43, figs. 4a-b
Holotype: IGPS no. 79422
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Jania lemoini* Ishijima, 1932**
Jap. Jour. Geol. Geogr., vol. 9. nos. 3-4, p. 146, pl. 12, fig. 3, pl. 13, figs. 1-2
Holotype: ?
Kuboi, Oishi-mura, Minami-tsuru-gun, province of Kai (Yamanashi Prefecture)
(Kawaguchi Formation)
(Miocene)

***Jania mayei* Johnson, 1964**
U.S. Geol. Survey Prof. Paper, 399-C, p. C11, pl. 7, figs. 1-2
Holotype: slide no. M-248C (pl. 7, fig. 2), (Paratypes: slide nos. F-176-55L (pl. 7, fig. 1), M-239B(4), M-248(2))
(Repository of the type specimens was not indicated)
Miyara (slide nos. M-248C, M-248(2)), Dacho-zaki on the Hirakubo Peninsula (slide no. F-176-55L), and Hoshino (slide no. M-239B(4)), Ishigaki-jima, Okinawa Prefecture
(Miyaragawa Formation)
Eocene

***Jania philippinensis* Ishijima, 1970**
Geol. Palaeont. Southeast Asia, vol. 8, p. 159, pl. 31, fig. 1
Holotype: ?
Marinduque Island, Philippines
(Geologic horizon was not described)
Aquitanian, Miocene

***Lithophyllum hanzawae* Johnson, 1961**
U.S. Geol. Survey Prof. Paper, 260-Z, p. 928, pl. 272, figs. 2-3.
Holotype: IGPS ? slide no. 141 of R. Aoki collection
Kita-Daito-Jima core depth 53t (16 m), (Okinawa Prefecture)
(Daito Formation)
Pleistocene ? (Pliocene ?)

***Lithophyllum hashimotoi* Ishijima, 1978**
Geol. Palaeont. Southeast Asia, vol. 19, p. 175, pl. 27, figs. 1-2
Holotype: ?
National highway 349 km, directly below the north side of former Mt. Data Gate, Mountain Province, Philippines
(Geologic horizon was not described)
Eocene

***Lithophyllum imamurai* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 40, pl. 19, figs. 3a-b
Holotype: IGPS no. 79442
Yuyashima, Otsu-gun, Yamaguchi Prefecture
(Geologic horizon was not described)
Miocene

***Lithophyllum irregularis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 41, pl. 27, fig. 2, pl. 29, fig. 1
Holotype: IGPS no. 79444
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Lithophyllum johnsoni* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 42, pl. 25, figs. 4a-c, pl. 26, figs. 1-3, pl. 27, fig. 3
Holotype: IGPS no. 79445
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Lithophyllum mindae* Ishijima, 1968**
St. Paul's Rev. Sci., vol. 2, no. 7, p. 249, pl. 3, fig. 1
Holotype: ?
East of Makinogo, near Shuzenji, Izu Peninsula, Shizuoka Prefecture (34°59.3'N and 138°58.2'E)
Shirahama Group
Miocene

***Lithophyllum minoensis* Ishijima, 1969**
St. Paul's Rev. Sci., vol. 2, no. 8, p. 258, pl. 1, fig. 3
Holotype: ?
West of Akeyo, Toki City, Gifu Prefecture (35°22.2'N and 137°12.3'E)
Akeyo Formation, Mizunami Group
Miocene

***Lithophyllum nishiwadai* Ishijima, 1944**
Mem. Fac. Sci. Taihoku Imp. Univ., ser. 3, vol. 1, no. 3, p. 74, text-fig. 7
Holotype: ?
(Megami Taishaku-yama, Sagara Town, Nishihaibara-gun, Shizuoka Prefecture)
(Megami limestone body in the Megami Formation)
(Miocene)
(No formal taxomic decription was given)

***Lithophyllum oborensis* Ishijima, 1969**
St. Paul's Rev. Sci., vol. 2, no. 8, p. 258, pl. 1, fig. 1
Holotype: ?
West of Akeyo, Toki City, Gifu Prefecture (35°22.2'N and 137°12.3'E)
Akeyo Formation, Mizunami Group

Miocene

***Lithophyllum otsukiensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 44, pl. 27, figs. 1a-b, (4), pl. 28, figs. 1a-b, pl. 30, fig. 1
Holotype: IGPS no. 79447
Otsuki, Kitatsuru-gun, Yamanashi Prefecture
Misaka Group
Miocene

***Lithophyllum pactum* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 43, pl. 20, fig. 2, pl. 26, figs. 4a-b
Holotype: IGPS no. 79446
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Lithophyllum quadratum* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 37, pl. 22, figs. 5a-b, pl. 23, figs. 1-4
Holotype: IGPS no. 79439
Daihanroku, Koshun-sho, Koshun-gun, Takao-shu, Formosa (Taiwan)
Ryukyu Limestone
Pleistocene

***Lithophyllum torinosensis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 57, pl. 13, figs. 1-2
Holotype: IW slide no. 671
Hachigamori, 1.5 km southeast of Sakawa-machi, Takaoka-gun, Kochi-Prefecture
Torinosu Limestone
Late Jurassic

***Lithophyllum yuyashimaensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 40, pl. 23, fig. 5, pl. 24, fig. 1
Holotype: IGPS no. 79441
Yuyashima, Otsu-gun, Yamaguchi Prefecture
(Geologic horizon was not described)
Miocene

***Lithoporella australis* Ishijima, 1942**
Taiwan Chigaku Kiji, vol. 13, no. 4, p. 130, pl. 10, figs. 4-5
Holotype: ?
Kita-daito-zima (Kita-daito-jima, Okinawa Prefecture)
(Daito Formation)
Plio-Pleistocene (Pliocene?)

***Lithoporella crassa* Ishijima, 1942**
Taiwan Chigaku Kiji, vol. 13, no. 4, p. 131, pl. 10, fig. 8, pl. 11, figs. 9-10
Holotype: ?
Near Ota-ana, Shinto-mura, Shimajiri-gun, Minami-daito-zima (Minami-daito-jima, Okinawa Prefecture)
(Daito Formation)
(Pliocene?)

***Lithoporella formosana* Ishijima, 1942**
Taiwan Chigaku Kiji, vol. 13, no. 4, p. 129, pl. 10, fig. 7
Holotype: ?
Kotobuki-yama, Takao-city, Formosa (Taiwan)
Ryukyu Limestone
Plio-Pleistocene (Pleistocene)

***Lithoporella hayasakai* Ishijima, 1942**
Taiwan Chigaku Kiji, vol. 13, no. 4, p. 129, pl. 9, fig. 1
Holotype: ?
North of Odake, Kobama-zima, Ryukyu (Kohama-jima, Okinawa Prefecture)
(Ryukyu Limestone)
Plio-Pleistocene (Pleistocene)

***Lithoporella minus* Johnson, 1964**
U.S. Geol. Survey Prof. Paper, 399-C, p. C10, pl. 2, fig. 6
Holotype: slide no. IS-F-84-55(1), (Paratypes: slide no. IS-50) (Repository of the type specimens was not indicated)
Miyara, Ishigaki-jima, Okinawa Prefecture
(Miyaragawa Formation)
Eocene

***Lithoporella parvus* Ishijima, 1942**
Taiwan Chigaku Kiji, vol. 13, no. 4, p. 129, pl. 10, fig. 6
Holotype: ?
Kasari, Kasari-mura, Amami-oshima (Kagoshima Prefecture)
Ryukyu Limestone
Plio-Pleistocene (Pleistocene)

***Lithoporella quadratica* Ishijima, 1933**
Jap. Jour. Geol. Geogr., vol. 11, nos. 1-2, p. 29, pl. 5, fig. 3
Holotype: ?
Megami-yama (Megami Taishaku-yama), Sagara district, Totomi province (Shizuoka Prefecture)
Megamiyama Limestone (Megami limestone body in the Megami Formation)
(Miocene)

***Lithoporella ryukyuensis* Ishijima, 1938**
Jap. Jour. Geol. Geogr. vol. 15, nos. 1-2, p. 15, pl. 1, fig. 5
Holotype: IGPS ? slide no. 31 of R. Aoki collection
Tosato, Isigaki-zima, Ryukyu (Ishigaki-jima, Okinawa Prefecture)
(Ryukyu Group)
Tertiary and later (Pleistocene)

***Lithothamnium amakusaensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 29, pl. 6, fig. 1
Holotype: TKD ? no. ?
Hondo, Amakusa (Kumamoto Prefecture)
(Geologic horizon was not described)
Nummulites amakusensis subamakusensis zone, Lutetian, Eocene

***Lithothamnium araii* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 26, pl. 8, figs. 3-4, pl. 9, figs. 1-3
Holotype: IGPS no. 79426
Kuroya, Haraya-mura, Chichibu-gun, Saitama Prefecure
Haraya Beds in the Chichibumachi Formation
Miocene

***Lithothamnium boninensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 26, pl. 4, figs. 1-3c, pl. 5, figs. 1-6b
Holotype: TKD ? no. ?
Shizukazawa, Oki-mura, Haha-jima, Ogasawara Islands
(Geologic horizon was not described)
Lutetian, Eocene

***Lithothamnium huseini* Ishijima, 1975**
St. Paul's Rev. Sci., vol. 3, no. 4, p. 111, pl. 1, fig. 5, pl. 2, fig. 4
Holotype: ?
Hindu Kush district, Pakistan
Gaj Formation
Miocene

***Lithothamnium iharai* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 29, pl. 8, figs. 1a-b
Holotype: TKD ? no. ?
Kaseda, Kawanabe-gun, Kagoshima Prefecture
(Geologic horizon was not described)
Pliocene

***Lithothamnium ishigakiensis* Johnson, 1964**
U.S. Geol. Survey Prof. Paper, 399-C, p. C6, pl. 3, figs. 1-2
Holotype: slide no. IS-F-83-55(4) (pl. 3, figs. 1-2),
(Paratypes: slide nos. IS-F-49-55L(4), IS-F-50-55L, IS-F-83-55(3), IS-F-83-55L(5), IS-F-163-55(1), 2532)
(Repository of the type specimens was not indicated)
Osaki (slide nos. IS-F-49-55L(4), IS-F-50-55L, IS-F-163-55(1)) and Irabu (slide nos. IS-F-83-55(3), IS-F-83-55(4), IS-F-83-55L(5)), Ishigaki-jima, Okinawa Prefecture
(Miyaragawa Formation)
Eocene

***Lithothamnium ishizuchiensis* Ishijima, 1960**
Sci. Rep., Tohoku Univ., 2nd ser. (Geol.), spec. vol., no. 4, p. 155, pl. 14, figs. 1-2
Holotype: GLR no. ?
Ishizuchi-yama and its environs, Ehime Prefecture
Nimyo Formation
Eocene

***Lithothamnium izuensis* Ishijima, 1968**
St. Paul's Rev. Sci., vol. 2, no. 7, p. 247, pl. 2, fig. 1
Holotype: ?
East of Makinogo, near Shuzenji, Izu Peninsula, Shizuoka Prefecture (34°59.3'N, 138°58.2'E)
Shirahama Group
Miocene

***Lithothamnium johnsoni* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 28, pl. 7, figs. 1a-b
Holotype: IGPS no. 79429
Baanzan, Koshun-gun, Takao-shu, Formosa (Taiwan)
Ryukyu Limestone
Pleistocene

***Lithothamnium kasedaensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 28, pl. 7, figs. 2a-c
Holotype: TKD ? no. ?
Kaseda, Kawanabe-gun, Kagoshima Prefecture
(Geologic horizon was not described)
Pliocene

***Lithothamnium makinogensis* Ishijima, 1968**
St. Paul's Rev. Sci., vol. 2, no. 7, p. 247, pl. 1, fig. 2
Holotype: ?
East of Makinogo, near Shuzenji, Izu Peninsula, Shizuoka Prefecture (34°59.3'N, 138°58.2'E)
Shirahama Group
Miocene

***Lithothamnium mastrorillii* Ishijima, 1970**
Geol. Palaeont. Southeast Asia, vol. 8, p. 155, pl. 29, fig. 2
Holotype: ?
Marinduque Island, Philippines
(Geologic horizon was not described)
Aquitanian, Miocene

***Lithothamnium misakaensis* Ishijima, 1960**
St. Paul's Rev. Sci., no. 7, p. 6, pl. 2, figs. 2, 4, 6, pl. 3, figs. 1-2, pl. 4. Figs. 1, 3-4
Holotype: ?
Kaizawa, Doshi-mura, Minamitsuru-gun, Yamanashi Prefecture; Idozawa, Aone-mura, Tsukui-gun, Kanagawa Prefecture

Misaka Group
Miocene

***Lithothamnion nodai* Ishijima, 1956**
St. Paul's Rev. Arts Sci., no. 1, p. 3, pl. 1, fig. 1, pl. 2, fig. 3
Holotype: GLR no. ?
Sakito-Matsushima coral-field, Nagasaki Prefecture
Tokuman Sandstone, Nakaura Formation, Nishisonoki Group
Oligocene

***Lithothamnium shirahamaensis* Ishjima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 30, pl. 8, fig. 2
Holotype: IGPS no. 79430
Harada, Shirahama-mura, Kamo-gun, Izu Peniusula, Shizuoka Prefecture
Shirahama Limestone
Pliocene

***Lithothamnium taishakuensis* Ishijima, 1960**
St. Paul's Rev. Sci., no. 7, p. 3, pl. 1, figs. 6-7
Holotype: ?
Taihaku-yama (Megami Taishaku-yama), near Sagara, Shizuoka Prefecture
(Megami limestone body in the Megami Formation)
Miocene

***Lithothamnium tenuicrustum* Ishijima, 1978**
Geol. Palaeont. Southeast Asia, vol. 19, p. 173, pl. 22, figs. 1, 2, pl. 23, figs. 1-3, pl. 24, fig. 2, pl. 25, figs. 1-2
Holotype: ?
National highway No. 11, 374 km + 150 km, Mountain Province, Philippines
(Geologic horizon was not described)
Late Eocene

***Lithothamnium tokiensis* Ishijima, 1969**
St. Paul's Rev. Sci., vol. 2, no. 8, p. 257, pl. 3, fig. 3
Holotype: ?
West of Akeyo, Toki City, Gifu Prefecture (35°22.2'N, 137°12.3'E)
Akeyo Formation, Mizunami Group
Miocene

***Lithothamnium tsushimaensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 27, pl. 6, figs. 2a-b
Holotype: IGPS no. 79427
Ebishima, northern end of Tsushima, Nagasaki Prefecture
(Geologic horizon was not described)
Pliocene (probably upper Pliocene)

***Mesophyllum arakuraensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 33, pl. 13, figs. 3-4
Holotype: IGPS no. 79434
Arakura, Mizuho-mura, Minamitsuru-gun, Yamanashi Prefecture
Misaka Group
Burdigalian, Miocene

***Mesophyllum chichibuensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 36, pl. 10, figs. 1-5, pl. 11, figs. 1-2, pl. 14, figs. 1-2 (figs. 1a-b), pl. 15, figs. 1, 3 (fig. 1)
Holotype: IGPS no. 79438
Kuroya, Haraya-mura, Chichibu-gun, Saitama Prefecture
Haraya Formation
Miocene

***Mesophyllum contii* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 33, pl. 19, figs. 1-2
Holotype: IGPS no. 79435
Arakura, Mizuho-mura, Minamitsuru-gun Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Mesophyllum formosana* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 31, pl. 13, fig. 3 (2), pl. 14, fig. 2
Holotype: IGPS no. 79431
Jurin, south of Koshun, Koshun-gun, Takao-shu, Formosa (Taiwan)
Ryukyu Limestone
Pleistocene

***Mesophyllum hashimotoi* Ishijima, 1943**
Trans. Nat. Hist. Soc. Taiwan, vol. 33, nos. 242-243, p. 647, figs. 8, 9
Holotype: ?
Binangonan, Rizal state, Ruzon Island, Philippines
(Geologic horizon was not described)
Aquitanian, Miocene
(see *Mesophyllum hashimotoi* described by Ishijima (1950, p. 337, figs. 6-7))

***Mesophyllum indicum* Ishijima, 1965**
St. Paul's Rev. Sci., vol. 2, no. 3, p. 83, pl. 1, fig. 3
Holotype: ?
Cocos Guyot located at about 200 km southwest of the Cocos Island (Keeling Island) of the Indian Ocean; 13°14.4'S and 96°12.1'E
Aquitanian, Miocene

***Mesophyllum ishigakiensis* Johnson, 1964**
U.S. Geol. Survey Prof. Paper, 399-C, p. C7, pl. 5, fig. 4

Holotype: slide no. F-50, (Paratype: slide no. F-49)
(Repository of the type specimens was not indicated)
Osaki, Ishigaki-jima, Okinawa Prefecture
(Miyaragawa Formation)
Eocene

***Mesophyllum izuensi* Ishijima, 1968**
St. Paul's Rev. Sci., vol. 2, no. 7, p. 247, pl. 1, fig. 3, pl. 4, fig. 4
Holotype: ?
East of Makinogo, near Shuzenji, Izu Peninsula, Shizuoka Prefecture (34°59.3'N, 138°58.2'E)
Shirahama Group
Miocene

***Mesophyllum japonicum* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 32, pl. 12, figs. 1-5, pl. 13, fig. 1
Holotype: IGPS no. 79433
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Mesophyllum mai* Ishijima, 1965**
St. Paul's Rev. Sci., vol. 2, no. 5, p. 182, pl. 1, figs. 1-3, pl. 2, figs. 1-4, pl. 3, fig. 1, pl. 6, figs. 1, 4
Holotype: ?
West slope of Chinko-shan, about 30 km southeast of Sinchu, Taiwan
Limestone in Kokan Tuff Member, Kiirun Group
Early Miocene

***Mesophyllum marinduquensis* Ishijima, 1970**
Geol. Palaeont. Southeast Asia, vol. 8, p. 156, pl. 27, fig. 3, pl. 29, fig. 1
Holotype: ?
Marinduque Island, Philippines
(Geologic horizon was not described)
Late Aquitanian, Miocene

***Mesophyllum ninoi* Ishijima, 1965**
St. Paul's Rev. Sci., vol. 2, no. 3, p. 82, pl. 2, figs. 2-3
Holotype: ?
Cocos Guyot located at about 200 km southwest of the Cocos Island (Keeling Island) of the Indian Ocean; 13°14.4'S, 96°12.1'E
Aquitanian, Miocene

***Mesophyllum nipponicum* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 35, pl. 20, figs. 3a-b
Holotype: IGPS no. 79437
Kuboi, Oishi-mura, Minamitsuru-gun, Yamanashi Prefecture
Kawaguchi Formation
Miocene

***Mesophyllum ryukyuensis* Johnson, 1964**
U.S. Geol. Survey Prof. Paper, 399-C, p. C8, pl. 5, figs. 1-3, pl. 7, fig. 6
Holotype: slide no. IS-F-49-55L(1) (specimen A787A; pl. 5, figs. 1-2), Paratypes: slide nos. IS-50, IS-F-81-55, IS-F-83-55(1), IS-F-83-55(2), IS-F-163-55(1), IS-F-163-55(2), IS-F-163-55(3), F-49 (4) (pl. 7, fig. 6), 2530, 2534 (Repository of the type specimens was not indicated)
Osaki (F-49(4), IS-F-49-55L(1), IS-50, IS-F-163-55(1), IS-F-163-55(2), IS-F-163-55(3), F-49 (4)), Inoda (IS-F-81-55), and Ibaruma (IS-F-83-55(1), IS-F-83-55(2)), Ishigaki-jima, Okinawa Prefecture
(Miyaragawa Formation)
Eocene

***Mesophyllum tokumanensis* Ishijima, 1956**
St. Paul's Rev. Arts Sci., no. 1,p. 5, pl. 1, fig. 3
Holotype: GLR no. ?
Sakito-Matsushima coral-field, Nagasaki Prefecture
Tokuman Sandstone, Nakaura Formation, Nishisonoki Group
Oligocene

***Mesophyllum yabei* Ishijima, 1942**
Trans. Palaeontol. Soc. Japan, no. 149, p. 154, fig. 1-2
Holotype: ?
About 4 km north of Matuda-mati, Asigarakami-gun, Sagami province (Kanagawa Prefecture)
Misaka Series
Burdigalian (Miocene)

***Mesophyllum yuyashimaensis* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 31, pl. 15, figs. 2-5, pl. 16, figs. 1-5, pl. 17, figs. 1-5, pl. 18, figs. 1-2, pl. 20, fig. 1, (pl. 23, fig. 5)
Holotype: IGPS no. 79432
Yuyawan, Otsu-gun, Yamaguchi Prefecture
Yuya-wan Formation
Miocene

***Porolithon hanzawai* Ishijima, 1954**
Cenozoic Coralline Algae from the Western Pacific, 87p., Yuho-do, Tokyo, p. 52, pl. 3, fig. 5
Holotype: IGPS no. 79452
Jinkoshi, Koshun-gun, Takao-shu, Formosa (Taiwan)
Ryukyu Limestone
Pleistocene

"Ancestral corallines"

***Archaeolithoporella* Endo, 1959 n. gen.**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 182,
Type-species: *Archaeolithoporella hidensis* Endo, described

from the Permian Gonbo Formation, Gifu Prefecture

***Archaeolithoporella hidensis* Endo, 1959**
Sci. Rep. Saitama Univ., ser. B, vol. 3, no. 2, p. 182, pl. 39, figs. 3-5
Holotype: TKD ? no. 21320 (or 21170 (pl. 39, fig. 3)), (Paratype: TKD ? no. 21321, S. no. 405* (pl. 39, fig. 5; *repository was not indicated)
Hiragane, Nyugawa-mura, Ono-gun, Gifu Prefecture
Gonbo Formation
Permian
(Holotype specimen numbers were described as 21320 in the protolog and as 21170 in the figure caption)

***Paleophyllum hashimotoi* Endo, 1968**
Geol. Palaeontol. Southeast Asia, vol. 4, p. 213, pl. 35, fig. 4
Holotype: TKD no. 30445
Vicinity of Agbahag Point, 500 m east of Barrio Manaul, Mansalay Municipality, Mindoro Oriental Province
Permian rocks in the Jurassic Mansalay Formation
Permian

"Solenoporaceae algae"

***Metasolenopora* Yabe, 1912 n. gen.**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 1, no. 1, p. 2, Type-species; *Metasolenopolla rothpletzi* Yabe, described from the Jurassic Torinosu Limestone, Kochi Prefecture

***Metasolenopolla rothpletzi* Yabe, 1912**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 1, no. 1, p. 2, pl. 1, figs. 2-5
Holotype: ?
Kompirayama in Iwasa and Hanabata near Sakawa, Province of Tosa (Kochi Prefecture)
Torinosu Limestone
Jurassic

***Parachaetetes lamellatus* Konishi, 1954**
Jour. Fac. Sci. Univ. Tokyo, sect. 2, vol. 4, p. 236, pl. 2, figs. 4-5
Holotype: GK no. Q1009 (Ku442-70), Paratypes: GK nos. Ku442-12, Ku442-74
Nakagawara-dani, Kawamata-mura, Yatsushiro-gun, Kumamoto Prefecture
Kuma Formaion
Late Permian

***Parachaetetes torinosuensis* Ishijima and Hatai, 1973**
St. Paul's Rev. Sci., vol. 3, no. 3, p.71, fig. 2
Holotype: ?
Quarry at Torinosu, Sagawa-cho, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Jurassic

***Petrophyton* Yabe, 1912 n. gen.**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 1, no. 1, p. 6, Type-species; *Petrophyton miyakoense* Yabe, described from the Cretaceous Miyako Group, Iwate Prefecture

***Petrophyton miyakoense* Yabe, 1912**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 1, no. 1, p. 6, pl. 2, figs. 1-8, text-fig. 4
Holotype: ?
Raga, Moshi, Taro and Hideshima, Province of Rikuchu (Iwate Prefecture)
(Miyako Group)
Cretaceous

***Petrophyton penetrans* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 58, pl. 16, fig. 1, pl. 17, fig. 4
Holotype: IW slide no. 633 (pl. 17, fig. 4), (Paratype: IW slide no. 685 (pl. 16, fig. 1))
Hachigamori, 1.5 km southeast of Sakawa-machi, Takaoka-gun, Kochi-Prefecture (IW slide no. 633); Doganaro, Susaki-shi, Kochi-Prefecture (IW slide no. 685)
Torinosu Limestone
Late Jurassic

***Petrophyton tenue* Yabe, 1928 in Yabe and Toyama 1928**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 12, no. 1, p. 142, pl. 20, figs. 1-2
Holotype: ?
Sakamoto, Kami-Matsukuma-mura, Yatsushiro-gun, province of Higo (Kumamoto Prefecture)
Torinosu Limestone ?
(Jurassic ?)

***Petrophyton yabei* Nakamura and Chisaka, 1984**
Bull. Nat. Sci. Mus., vol. 10, no. 3, p. 90, pl. 2, figs. 1-4, pl. 3, figs. 1-4
Syntypes: NSM nos. PP7907a (pl. 2, figs. 3-4), PP7947a (pl. 3, figs. 1-4), PP7955a (pl. 2, figs. 1-2)
Atagoyama, Choshi-shi, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

Psedochaetetes shigensis* Endo, 1961** (= ***Pseudochaetetes shigensis)
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 84, pl. 3, fig. 2
Holotype: GSJ no. 510604-12
Taniguchi velley, Asai-machi, Higashi-Asai-gun, Shiga Prefecture
Takayama Formation
Middle Permian

***Solenopora choshiensis* Ishijima, 1975**
St. Paul's Rev. Sci., vol. 3, no. 4, p. 121, pl. 1, figs. 1-2
Holotype: ?
Choshi Peninsula, Chiba Prefecture
Takagami Conglomerate in the Atagoyama Formation
Late Permian

***Solenopola divergens* Ishijima, Ozaki and Nakamura, 1971**
Bull. Nat. Sci. Mus. Tokyo, vol. 14, no. 1, p. 103, pl. 1, figs. 2-4
Holotype: NSM no. P1-18120g
Sakaishimachibun, Hanno-shi, Saitama Prefecture (35°54.3'N, 139°13.1'E)
Manba Formation
Early Permian

***Solenopora kumensis* Endo and Horiguchi, 1967**
Bull. Tokyo Coll. Dom. Sci., no. 7, p. 3, pl. 2, fig. 3, pl. 4, figs. 1-3
Holotype: GKL no. Gk. S3 (pl. 4, fig. 1), (Paratypes: GKL nos. Gk. S1-2, Gk. S4)
Koguchi, Ashikita-cho, Ashikita-gun, Kumamoto Prefecture
Koguchi Formation
Jurassic

***Solenopora yabei* Endo, 1953 in Endo and Kanuma, 1953**
Sci. Rep. Saitama Univ., ser. B, vol. 1, no. 2, p. 191, pl. 13, fig. 1, pl. 15, figs. 12-13
Syntypes: IW slide no. 211
Kinshozan hill, Akasaka-machi, Gifu Prefecture (Akasaka Limestone)
Late Permian

***Stenoporidium* Yabe and Toyama, 1928 n. gen.**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 12, no. 1, p. 149, Type-species: *Stenoporidium chaetetiformis* Yabe and Toyama, described from the lower Cretaceous Hiraiga Formation of the Miyako Group, Iwate Prefecture

***Stenoporidium chaetetiformis* Yabe and Toyama, 1928**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 12, no. 1, p. 150, pl. 22, figs. 2-4
Holotype ?: IGPS no. 35453
Oshima, the Miyako Cretaceous district, Shimo-Hei-gun, province of Rikuchu (Iwate Prefecture)
Hiraiga Sandstone (Hiraiga Formation of the Miyako Group)
Early Cretaceous

***Stenoporidium sphericum* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 67, pl. 16, figs. 2-4
Holotype: IW slide no. 681 (pl. 16, fig. 2), Paratypes: IW slide nos. 686 (pl. 16, fig. 4), 687 (pl. 16, fig. 3)
Doganaro, Susaki-shi, Kochi Prefecture (IW slide nos. 681, 687); Suyama-michi, Matsuno-machi, Kita-Uwa-gun, Ehime Prefecture (IW slide no. 686)
Torinosu Limestone
Late Jurassic

Order Gigartinales Schmitz in Engler, 1892 ?

***Nipponophycus* Yabe and Toyama, 1928 n. gen.**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 12, no. 1, p. 142, Type-species; *Nipponophycus racemosus* Yabe and Toyama, described from the Jurassic to Cretaceous rocks in Japan

***Nipponophycus racemosus* Yabe and Toyama, 1928**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 12, no. 1, p. 142, pl. 18, figs. 1-6, pl. 23, figs. 2-3
Holotype: ?
Iwameji, Mitoda, Hachigamori, Torinosu and Togano, all near Sakawa-machi, Takaoka-gun, province of Tosa (Kochi Prefecture); Sajiki, Kami-gun, province of Tosa (Kochi Prefecture); Zusahara near Nakamura, Soma-gun, province of Iwaki (Fukushima Prefecture); Raga, north of Miyako, Shimo-Hei-gun, province of Rikuchu (Iwate Prefecture); 4 km south of Ponmoshiri, along the Sorachi-gawa, Sorachi-gun, province of Ishikari (Hokkaido)
Torinosu Limestone
Jurassic to Cretaceous

***Nipponophycus kanmerai* Endo and Horiguchi, 1967**
Bull. Tokyo Coll. Dom. Sci., no. 7, p. 4, pl. 1, figs. 2-4, pl. 2, figs. 1-2
Holotype: GKL no. Gk. S7a (pl. 1, fig. 2, pl. 2, figs. 1-2), (Paratypes: GKL no. Gk. S7b-c)
Koguchi, Ashikita-cho, Ashikita-gun, Kumamoto Prefecture
Koguchi Formation
Jurassic

CYANOBACTERIA

***Girvanella tosaensis* Yabe and Toyama, 1928**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 12, no. 1, p. 151, pl. 23, figs. 4-6
Holotype: ?
Hachigamori, near Sakawa, province of Tosa, (Kochi Prefecture)
Torinosu Limestone
Jurassic

***Girvanella sinensis* Yabe, 1912**
Sci. Rep. Tohoku Univ., 2nd ser. (Geol.), vol. 1, no. 1, p. 1, pl. 1, fig. 1
Holotype: ?
San-yu-tung, Tung-hu-hsien, I-chang-fu, China

(Geologic horizon was not described)
Carboniferous (?)

***Neospongiostroma tosensis* Endo, 1961**
Sci. Rep. Saitama Univ., ser. B, Endo Commemorative vol., p. 68, pl. 6, figs. 1-2
Holotype: IW slide no. 638
Hachigamori, 1.5 km southeast of Sakawa-machi, Takaoka-gun, Kochi Prefecture
Torinosu Limestone
Late Jurassic

STROMATOLITE

***Endophycus wakinoensis* Ishijima, 1979**
Bull. Kitakyushu Mus. Nat. Hist., vol. 1, p. 27, plates 5-9
Holotype: KMNH no. AP100001, Paratype: NSM no. PP15632
The old Yamada ammunition depot, stretching from Kokumano to Gamo of Kumagai-cho, Kokura Kita-ku, Kitakyushu City, Fukuoka Prefecture
Wakino Subgroup, Kanmon Group
Neocomian, Early Cretaceous

ALGAE ?

***Manchuriophycus* Endo, 1933, n. gen.**
Jap. Jour. Geol. Geogr., vol. 11, no. 1-2, p. 47, Type-species; *Manchuriophycus yamamotoi* Endo, described from the Precambrian Nanshan Formation, northeast China

***Manchuriophycus yamamotoi* Endo, 1933**
Jap. Jour. Geol. Geogr., vol. 11, nos. 1-2, p. 47, pl. 6, fig. 3, pl. 7, fig. 2
Holotype: IGPS no. 48105
Slope of Jinjayama, near Chiao-tou Station on the Antung-Mukden line, South Manchuria (China)
Nanshan Formation
Precambrian

***Manchuriophycus inexpectans* Endo, 1933**
Jap. Jour. Geol. Geogr., vol. 11, nos. 1-2, p. 48, pl. 6, figs. 1-2, pl. 7, fig. 1
Holotype: IGPS no. 48104
Slope of Jinjayama, near Chiao-tou Station on the Antung-Mukden line, South Manchuria (China)
Nanshan Formation
Precambrian

Paleozoic and Mesozoic Stromatoporoidea

Kei Mori

c/o Tohoku University Museum, Tohoku University, Aoba-ku, Sendai, 980-8578 Japan

Mesozoic Stromatoporoidea

***Actinostroma tokadiensis* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 175, pl. 56 (17), figs. 4. 5; pl. 57 (18), fig. 2
Holotype: IGPS coll. cat. no. 37889
The pass west of Tokadi, Kusaka-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Actinostromaria asiatica* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 176, pl. 70 (31), figs. 1, 2
Holotype: IGPS coll. cat. no. 38770
South of Nekodake in Yatsuji, Kitahara-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Actinostromaria shimizui* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 175, pl. 56 (17), fig. 6; pl. 58 (19), figs. 1-4
Holotype: IGPS coll. cat. no. 36856
Ko-otosi, near Nomura-mati, Higashi-Uwa-gun, Tosa province
Torinosu Group
Late Jurassic

***Milleporella fasciuclata* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 184, pl. 56 (17), fig. 7; pl. 60 (21), figs. 3-6
Holotype: IGPS coll. cat. no. 37828
Kompirayama, Tokano-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Milleporidium arinokiense* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 187, pl. 69 (30), figs. 5, 6
Holotype: IGPS Coll. cat. no. 43458
Arinoki near Sakawa-machi, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Milleporidium fasciculatum* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 188, pl. 64 (25), figs. 1-6; pl. 65 (26), figs. 1-5; pl. 66 (27), figs. 1-4
Holotype: IGPS Coll. cat. no. 37809
Hanabata, Tokano-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Milleporidium hanabataense* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 189, pl. 67 (28), figs. 4-6
Holotype: IGPS Coll. cat. no. 37843
Hanabata, Tokano-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Milleporidium styliferum* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 188, pl. 63 (24), fig. 7; pl. 65 (26), fig. 6; pl. 67 (28), figs. 1-3
Holotype: IGPS Coll. cat. no. 37836
Sasiki, Mirahu-mura, Kami-gun, Tosa province
Torinosu Group
Late Jurassic

***Milleporidium somaense* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 189, pl. 56 (17), fig. 2; pl. 58 (19), fig. 5; pl. 62 (23), figs. 5, 6; pl. 63 (24), fig. 6; pl. 66 (27), figs. 5-8
Holotype: not cited
East of Zusahara, Kamimano-mura, Soma-gun, Iwaki province
Nakanosawa Formation
Late Jurassic

***Stromatopora* (*Epistromatopora*) *torinosuensis* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 183, pl. 46 (7), figs. 3, 4; pl. 52 (13), figs. 4, 5; pl. 54 (15), figs. 1, 2; pl. 71 (32), figs. 1, 2
Holotype: IGPS coll. cat. no. 37813
Torinosu, Tokano-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Epistromatopora*) *delicata* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 183, pl. 54 (15), figs. 3-6
Holotype: IGPS coll. cat. no. 37838
Yatudi, Kitahara-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *crassifibra* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 179, pl. 41 (2), fig. 8: pl. 43 (4), fig. 8; pl. 45 (6), fig. 3; pl. 51 (2), fig. 9; pl. 57 (18), figs. 6, 7; pl. 61 (22), fig. 1
Holotype: IGPS coll. cat. no. 37816
Hukazawa, near Itukaiti-mati, Nishi-Tama-gun, Musasi province
Torinosu Limestone
Late Jurassic

***Stromapotopora* (*Parastromatopora*) *inouei* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 181, pl. 48 (9), figs. 4-6; pl. 49 (10), figs. 3, 4
Holotype: IGPS coll. cat. no. 7189
Nisigaho, Egawasaki-mura, Hata-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *japonica* Yabe, 1903**
Jour. Geol. Soc. Japan, vol. 10, no. 123, p. 1, pl. 2
Holotype: unknown
Hukazawa near Itsukaichi-mati, Nishi-tama-gun, Musasi province
Torinosu Limestone
Late Jurassic

***Stromatopora* (*Parastromatopora*) *kiiensis* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 179, pl. 41 (2), figs. 9, 10; pl. 46 (7), figs. 1, 2; pl. 57 (18), fig. 1
Holotype: IGPS coll. cat. no. 41003
Kamiya, Sirasaki-mura, Arita-gun, Kii province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *kotoi* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 182, pl. 51 (12), figs. 6-8; pl. 52 (13), figs. 2, 3; pl. 53 (14), fig. 4; pl. 56 (17), figs. 2, 3; pl. 48 (29), fig. 7
Holotype: not cited
Mitoda, Kamo-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *kotoi* var. *tosaensis* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 182, pl. 47 (8), figs. 1, 2; pl. 68 (29), fig. 6
Holotype: not cited
Mitoda, Kamo-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *memoria-naumanni* Yabe, 1927**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 11, no. 1, p. 1
Holotype: IGPS coll. cat. no. 37837
Hanabata, Takano-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *memoria-naumanni* var. *tenuissima* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 181, pl. 53 (4), figs. 1-3; pl. 63 (24), figs. 3-5
Holotype: IGPS coll. cat. no. 37812
Sanokuni, Ogawa-mura, Aki-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *minutissima* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 180, pl. 45 (6), fig. 4; pl. 47 (8), figs. 1-3; pl. 57 (18), fig. 8
Holotype: IGPS coll. cat. no. 37859
Mitoda, Kamo-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *mitodaensis* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 179, pl. 44 (5), figs. 4-6; pl. 45 (6), fig. 4; pl. 47 (8), figs. 3, 4
Holotype: IGPS coll. cat. no. 38781
Mitoda, Kamo-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatopora* (*Parastromatopora*) *subjaponica* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 178, pl. 43 (4), figs. 2-7; pl. 44 (5), figs. 1-3; pl. 45 (6), figs. 1, 2
Holotype: IGPS coll. cat. no. 37839
Mitoda, Kamo-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Stromatoporellina* ? *undulata* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 184, pl. 57 (18), figs. 3-5
Holotype: IGPS coll. cat. no. 37914
Kotaki, Tokano-mura, Takaoka-gun, Tosa province
Torinosu Group
Late Jurassic

***Tosastroma kiiensis* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 185, pl. 69 (30), figs. 1-4
Holotype: IGPS coll. cat. no. 43464
Kamiide, Sirasaki-mura, Arita-gun, Kii province
Torinosu Group
Late Jurassic

***Tosastroma tokunagai* Yabe and Sugiyama, 1935**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 185, pl. 59 (20), figs. 1-6; pl. 60 (21), figs. 1, 2

Paleozoic Stromatoporoidea

***Actinostroma ? mingshankouensis* Ozaki, 1938**
Jour. Shanhai Sci. Inst., Sec. 2, vol. 2, p. 206, pl. 23, figs. 1a-e
Holotype: not cited
Ming-shan-kou near Pen-hsi-hu, South Manchuria
Tsinan System
Ordovician

***Actinostroma sakariense* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 446, pl. 24, figs. 3, 4
Holotype: IGPS coll. cat. no. 60809
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Actinostroma takainariense* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 446, pl. 24, figs. 1, 2
Holotype: IGPS coll. cat. no. 61526
Kusayami-zawa, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Actinostroma variabile* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 447, pl. 24, figs. 5, 6
Holotype: IGPS coll. cat. no. 60834
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Actinostroma yabei* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 447, pl. 25, figs. 1, 2
Holotype: IGPS coll. cat. no. 61521
Kusayami-zawa at the southern foot of Takainari-yama, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Amphipora cylindrica* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 455, pl. 24, figs. 13, 14
Holotype: IGPS coll. cat. no. 60806
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Amphipora higutizawaensis* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 455, pl. 25, fig. 12
Holotype: not cited
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Aulacera peichuangensis* Ozaki, 1938**
Jour. Shanhai Sci. Inst., Sec. 2, vol. 2, p. 217, pl. 33, fig. 1; pl. 34, fig. 1
Holotype: not cited
West of Pei-chuang, Chang-chiu-hsien, Shantung
Tsinan System
Ordovician

***Clathrodictyon giganteum* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 450, pl. 25, figs. 4, 5
Holotype: IGPS coll. cat. no. 60631
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Clathrodictyon onukii* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 449, pl. 24, figs. 7, 8
Holotype: IGPS coll. cat. no. 60805
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Clathrodictyon punctatum* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 60, pl. 22 (6), figs. 1-4
Holotype: IGPS coll. cat. no. 36614
Auberg near Gerolstein, Eifel, Germany

Middle Devonian

***Clathrodictyon somaense* Yabe and Sugiyama, 1933**
Jap. Jour. Geol. Geogr., vol. 11, p. 22, text-fig. 3
Holotype: IGPS coll. cat. no. 34479
2. 5 km west of Jisabara, Kashima-cho, Soma-gun, Fukushima Prefecture
Oashi Formation
Permian
(It is not considered to be a valid stromatoporoid species.)

***Clathrodictyon tenuilaminatum* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 449, pl. 24, fig. 9; pl. 25, fig. 3
Holotype: IGPS coll. cat. no. 60825
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Clavidictyon columnare* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 451, pl. 25, figs. 6-8
Holotype: IGPS coll. cat. no. 60813
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Clavidictyon delicatulum* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 452
Holotype: not cited
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Clavidictyon japonicum* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 452, pl. 25, fig. 11
Holotype: IGPS coll. cat. no. 60813
Yamanasu-zawa in Kawauchi, Hikoroichi-choo, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Kitakamiia mirabilis* Sugiyama, 1940**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 21, no. 2, p. 113, pl. 32 (20), figs. 3-6
Holotype: IGPS coll. cat. no. 63070
Kusayami-zawa at the southern foot of Takainari-yama, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian
(It is not a stromatoporoid, but an Alveolitid tabulate coral.)

***Labechia changchiuensis* Ozaki, 1938**
Jour. Shanhai Sci. Inst., Sec. 2, vol. 2, p. 211, pl. 28, figs. 2a,b; pl. 29, figs. 1a-c
Holotype: not cited
Han-chia-chuang, west of Pei-chuang and Meng-chia-yu, Chang-chiu-hsien, Shantung
Tsinan System
Ordovician

***Labechia ? chingchiachuangensis* Ozaki, 1938**
Jour. Shanhai Sci. Inst., Sec. 2, vol. 2, p. 212, pl. 32, figs. 2a-c
Holotype: not cited
Ching-chia-chuang, Chang-chin-hsien, Shantung
Tsinan System
Ordovician

***Labechia coreanica* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 57, pl. 21 (5), figs. 11, 12
Holotype: not cited
The northern foot of Matatsu-san, Kwasen-do, Koto-gun, Heian-nan-do, Korea
Ordovician

***Labechia regularis* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 56, pl. 18 (2), figs. 5, 6; pl. 21 (5), fig. 8
Holotype: IGPS coll. cat. no. 37684
Wu-hu-tzui, Fu-hsien, province of Liaoning
Toufangkou Limestone
Ordovician

***Labechia regularis* var. *tenuis* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 57, pl. 21 (5), figs. 9, 10
Holotype: IGPS coll. cat. no. 37686
The northern foot of Matatsu-san, Kwasen-do, Koto-gun, Heian-nan-do, Korea
Ordovician

***Labechia shanhsiensis* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 56, pl. 18 (2), figs. 2-4
Holotype: IGPS coll. cat. no. 37685
Hsi-chiao, Ping-ting-hsien, province of Shahnsi
Ordovician

***Labechia variabilis* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 54, pl. 17 (1), figs. 1-9; pl. 18 (2), fig. 1; pl. 21 (5), figs. 5-7

Syntype: IGPS coll. cat. nos. 37676, 37679, 37680, 37681, 37682
Toufangkou, Pen-hsi-hsien, province of Liaoning
Toufangkou Limestone
Ordovician

***Labechiella regularis* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 454, pl. 24, figs. 10, 11
Holotype: IGPS coll. cat. no. 50593
Kusayami-zawa at the southern foot of Takainari-yama, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian
(It is not a stromatoporoid, but a rugose coral.)

***Lophiostroma ozawai* Yabe and Sugiyama, 1931**
Jap. Jour. Geol. Geogr., vol. 9, p. 18, pl. 3, figs. 1-4
Holotype: IGPS coll. cat. no. 38751
Mine-shi, Yamaguchi Prefecture
Akiyoshi Limestone Group
Permian
(It is not a stromatoporoid, but a strophomenid brachiopod.)

***Lophiostroma shantungensis* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p.57, pl. 20 (4), figs. 5-7
Holotype: IGPS coll. cat. no. 37683
Hou-yu, Po-shan-hsien, province of Shantung
Ordovician

***Ludictyon vesiculatum* Ozaki, 1938**
Jour. Shanhai Sci. Inst., Sec. 2, vol. 2, p. 219, pl. 33, figs. 3a-c; pl. 34, fig. 3
Holotype: not cited
West of Pei-chuang, Chang-chin-hsien, Shantung
Tsinan System
Ordovician

***Pseudolabechia granulata* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 59, pl. 22 (6), figs. 5-12
Holotype: IGPS coll. cat. no. 720
Gotland, Sweden
Silurian

***Pseudostylodictyon poshanensis* Ozaki, 1938**
Jour. Shanhai Sci. Inst., Sec. 2, vol. 2, p. 208, pl. 24, fig. 2; pl. 25, figs. 1a-e
Holotype: not cited
North of Wo-yu, Po-shan-hsien, Shantung
Tsinan System
Ordovician

***Rosenella woyuensis* Ozaki, 1938**
Jour. Shanhai Sci. Inst., Sec. 2, vol. 2, p. 215, pl. 30, fig. 2; pl. 31, figs. 1a-d
Holotype: not cited
North of Wo-yu and Ta-tui-shan, Po-shan-hsien, Shantung
Tsinan System
Ordovician

***Sinodictyon columnare* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.), vol. 14, p. 52, pl. 18 (2), figs. 7-10; pl. 19 (3), figs. 2-5
Syntype: IGPS coll. cat. nos. 37674, 37675, 37678
Wu-hui-tzui, Fu-hsien, province of Liaoning
Toufangkou Limestone
Ordovician

***Stromatopora cnaliculata* Sugiyama, 1939**
Jubil. Public. Commem. Prof. H. Yabe 60th Birth., vol. 1, p. 545, pl. 25, figs. 9, 10
Holotype: IGPS coll. cat. no. 60819
Yamanasu-zawa in Kawauchi, Hikoroichi-cho, Ofunato City, Iwate Prefecture
Kawauchi Formation
Silurian

***Stromatopora* ? *manchuriensis* Yabe and Sugiyama, 1930**
Sci. Rep. Tohoku Imp. Univ., 2nd Ser. (Geol.)., vol. 14, p. 58, pl. 19 (3), fig. 1; pl. 21 (5), figs. 1-4
Holotype: IGPS coll. cat. no. 37687
Hung-lien-kou, Niu-hsien-tai, Pen-hsi-hsien, province of Liaoning
Toufangkou Limestone
Ordovician

***Stromatopora* (*Parallelopora*) *minoensis* Yabe and Sugiyama, 1930**
Jap. Jour. Geol. Geogr., vol. 8, p. 20, pl. 7, figs. 1-5
Holotype: IGPS coll. cat. no. 37948
Kinshozan, Akasaka, Gifu Prefecture
Akasaka Limestone
Lower Permian
(It is not a stromatoporoid, but a sponge.)

Triassic and Jurassic Foraminifera

Fumio Kobayashi

Institute of Natural and Environmental Sciences
Himeji Institute of Technology,
Sanda 669-1546, Japan

Triassic new species was not proposed in Japan

Jurassic Foraminifera

***Acervulina inhaerens huzimotoi* Hanzawa, 1940**
Jour. Geol. Soc. Japan, vol. 46, p. 202, Figs. 1, 2
Syntypes: IGPS no. 21446
Fukazawa, Itsukaichi-machi (Akiruno City), Tokyo Prefecture
Torinosu-type limestone (a limestone block contained in the Middle to Upper Jurassic Kamiyozawa Formation (Ozawa and Kobayashi, 1986))
Jurassic
(Acervulinacean *Acervulina* Schultze, 1854 is exclusively known from Miocene to Holocene. *Acervulina inhaerens huzimotoi* Hanzawa is thought to be assignable not to foraminifera but to brozoans or other metazoa)

***Choffatella peneropliformis* Yabe and Hanzawa, 1926**
Sci. Rep., Tohoku Imp. Univ., vol. 9, no. 1, p. 11, pl. 2, figs. 1, 2
Syntypes: IGPS no. ?
Iwasa-Kompirayama, Sakawa-cho, Takaoka-gun, Kochi Prefecture
Torinosu Limestone (Torinosu Group (Kimura, 1956))
Jurassic
(*Choffatella peneropliformis* Yabe and Hanzawa was dsignated as the type species of ***Torinosuella*** proposed by Maync (1959))

***Cyclammina lituus* Yokoyama, 1890**
In Nauman, E. and Neumayr, M., Denksch. Kaiserl. Akad. Wissensch. Wien, Mathem.-Naturwissensch. Classe, vol. 57, p. 26, pl. 5, fig. 7 (three specimens illustrated)
Syntypes: UMUT MF no. ?
Torinosu and Iwasa-Kompira, Sakawa-cho, Takaoka-gun, Kochi Prefecture
Torinosu Limestone (Torinosu Group (Kimura, 1956))
Jurassic
(*Cyclammina lituus* Yokoyama was designated as the type species of ***Pseudocyclammina*** proposed by Yabe and Hanzawa (1926))

Mesozoic planktic foraminifers

Shiro Hasegawa[1] and Hiroshi Nishi[2]

[1] Division of Natural Environmental Sciences, Graduate School of Science and Technology, Kumamoto University, Kumamoto 860-8555, Japan
[2] Division of Earth and Planetary Sciences, Graduate School of Science, Hokkaido University, Sapporo 060-0810, Japan

***"Globigerinella" japonica* Takayanagi, 1960**
Tohoku Univ., Sci. Rep., 2nd Ser. (Geol.), v. 32, no. 1, 131-132, Pl. IX, figs. 12a, b
Holotype: IGPS no. 74975, Paratype: 74894 (text-figs. 22a-e)
The section at a river cliff on the right side of the Wakka-uembetsu River, about 500 m downstream from the junction of the Wakka-uembetsu River and the Hannoki-zawa, two tributaries of the Abeshinai River, Kyowa, Nakagawa-mura, Nakagawa-gun, Teshio Province, Hokkaido, Japan.
Upper part of the Usobushinai Formation
Early Hetonaian (middle-late Campanian), Late Cretaceous
(***Globigerinelloides ultramicra*** (Subbotina) by Takayanagi, Yasuda and Shimamura (1982))

***Globotruncana hanzawae* Takayanagi, 1960**
Tohoku Univ., Sci. Rep., 2nd Ser. (Geol.), v. 32, no. 1, 136-137, Pl. X, figs. 6a-c
Holotype: IGPS no. 74983
A section at a river cliff on the left side of the Deto-futamata River, about 5,650 m upstream from the junction of the Haboro River and the Deto-futamata River, Haboro-machi, Tomamae-gun, Teshio Province, Hokkaido, Japan
Ug of the upper Yezo Group
Upper Urakawan (= Santonian), Late Cretaceous
(***Dicarinella hanzawai*** (Takayanagi) by Kaiho (1992))

***Globotruncana japonica* Takayanagi, 1960**
Tohoku Univ., Sci. Rep., 2nd Ser. (Geol.), v. 32, no. 1, 135-136, Pl. X, figs. 4a-c
Holotype: IGPS no. 74981
A section at a river cliff of the Akano-sawa, about 2,500m upstream from the junction of the Obirashibe River and the Akano-sawa, Obira-mura, Rumoi-gun, Teshio Province, Hokkaido, Japan
Ug (uppermost part) of the upper Yezo Group
Latest Urakawan (= early Campanian), Late Cretaceous
(***Dicarinella japonica*** (Takayanagi) by Takayanagi, Yasuda and Shimamura (1982))

***Globotruncana japonica* Takayanagi *robusta* Takayanagi, 1960**
Tohoku Univ., Sci. Rep., 2nd Ser. (Geol.), v. 32, no. 1, 136, Pl. X, figs. 5a-c
Holotype: IGPS no. 74982
A section at a river cliff of a western tributary of the Akano-sawa, a tributary of the Obirashibe River, about 3,800 m N72°E of Daitengu-daka, and about 3,750 m N7°W of Kawakami, Obira-mura, Rumoi-gun, Teshio Province, Hokkaido, Japan
Uppermost part (Uj) of the upper Yezo Group
Early Hetonaian (= middle-late Campanian), Late Cretaceous
(***Globotruncana robusta*** Takayanagi by Takayanagi and Hasegawa (1987))

***Globotruncana putahensis* Takayanagi, 1965**
Tohoku Univ., Sci. Rep., 2nd Ser. (Geol.), v. 36, no. 2, 221-223, Pl. 27, figs. 2a-c
Holotype: Paleo. Type Coll. No. 9799, Stanford University, Alto, California
A depth of 70-76 feet in Shell Oil Company Diamond Core Hole No. 5A, Section A, drilled along the Putah Creek on the Yolo-Solano County line, SW1/4, sec. 23, T. 8 N., R. 4 W., Yolo County, California
Middle to upper part of the *Globotruncana subcircumnodifer* Zone in the Forbes Formation.
Campanian, Late Cretaceous

***Hedbergella madagascarensis* Ujiié and Randrianasolo, 1977**
Natl. Sci. Mus., (Tokyo), Bull., ser. C (Geol. & Paleontol.), v. 3, no. 4, 189-190, Pl. 5, figs. 2a-c
Holotype: NSM 01815, Paratypes: NSM 01816, 01817 (Pl. 5, figs. 3a-4c)
Diégo-Suarez region, northernmost Madagascar
Marly mudstone in Betahitra Valley
Middle Cenomanian, Late Cretaceous

***Hedbergella trocoidea* (Gandolfi) *yezoana* Takayanagi and Iwamoto, 1962**
Palaeontol. Soc. Japan, Trans. Proc., N. S., no. 45, 191-192, Pl. 28, figs. 2a-c
Holotype: IGPS no. 75142, Paratype: 75143 (Pl. 28, figs. 1a-c)
A cliff of an eastern branch of the Sekiyu-zawa, a northern tributary of the Horomui River, about 7,630 m S12.5°W of the Ikushumbetsu Station, and about 7,070 m S40°E of the Mikasa Station of the Poronai Railway Line, Iwamizawa City. Ishikari Province, Hokkaido, Japan
Lower Middle Yezo Group (black, laminated shale in the unit Mc)
Late Albian, Early Cretaceous

***Hedbergella kyphoma* Hasegawa 1999**
Paleontological Research, v. 3. no. 3, 180, 182, Figs. 5-1a-c
Holotype: IGPS no. 102504, Paratypes: 102505-102507 (Figs. 5-2a-4c)

A section at a river cliff of about 3,000 m upstream from the junction of the Shirakin (=Hakkinzawa) River and the Penkemoyuparo River, Yubari City, central Hokkaido, Japan
Lower part of the Takinosawa Formation
Early Turonian, Late Cretacceous

***Praeglobotruncana compressa* Hasegawa, 1999**
Paleontological Research, v. 3, no. 3, 182, Figs. 5-5a-c
Holotype: IGPS no. 102707, Paratype: IGPS no. 102708 (Figs. 5-6a-c)
A section at a river cliff of about 3,000 m upstream from the junction of the Shirakin (=Hakkinzawa) River and the Penkemoyuparo River, Yubari City, central Hokkaido, Japan
Lower part of the Takinosawa Formation
Late Cenomanian, Late Cretaceous

***Praeglobotruncana inermis* Hasegawa, 1999**
Paleontological Research, v. 3, no. 3, 182, 184, Figs. 6-1a-c
Holotype: IGPS no. 102704, Paratypes: 102703, 102705, 102706 (Figs. 6-2a-4c)
A section at a river cliff of about 3,000 m upstream from the junction of the Shirakin (=Hakkinzawa) River and the Penkemoyuparo River, Oyubari City, central Hokkaido, Japan
Lower part of the Takinosawa Formation
Late Cenomanian, Late Cretaceous

***Praeglobotruncana shirakinensis* Hasegawa, 1999**
Paleontological Research, v. 3, no. 3, 184, Figs. 5-8a-c
Holotype: IGPS no. 102523
A section at a river cliff of about 3,000 m upstream from the junction of the Shirakin (=Hakkinzawa) River and the Penkemoyuparo River, Yubari City, central Hokkaido, Japan
Lower part of the Takinosawa Formation
Late Cenomanian, Late Cretaceous

***Dicarinella takayanagii* Hasegawa, 1999**
Paleontological Research, v. 3, no. 3, 186, 188, Figs. 8-3a-c
Holotype: IGPS no. 102515, Paratypes: 102513, 102514, 102516 (Figs. 8-1a-2c, 8-4a-c)
A section at a river cliff of about 3,000 m upstream from the junction of the Shirakin (=Hakkinzawa) River and the Penkemoyuparo River, Yubari City, central Hokkaido, Japan
Lower part of the Takinosawa Formation
Latest Cenomanian, Late Cretaceous

Paleozoic Ammonoidea

Masayuki Ehiro

The Tohoku University Museum
Sendai 980-8578, Japan

(Latitude and longitude values are referred to the Japanese Geodetic Datum 2000)

***Abadehceras nakazawai* Bando, 1979**
Mem. Fac. Educ., Kagawa Univ., ser. 2, vol. 29, no. 2, p. 121, pl. 3, figs. 3a-3b, text-fig. 5, I
Holotype: Ab-75016
North of Shurgazestan, Abadeh, Central Iran
Unit 6, Dzhulfian Formation (lower part of the Hambast Formation)
Lower Dzhulfian (Lower Wuchiapingian), Upper Permian
(This type-specimen was transferred to the Geological Survey of Iran)

***Akiyoshiceras subridens* Kyuma and Nishida, 1987**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 22, p. 28, pl. 1, figs. 1-3, pl. 2, figs. 1-2, pl. 3, figs. 1-3, pl. 4, figs. 1-2, text-figs. 2-8
Holotype: ASM 50439 (pl. 1, figs. 1a-1c, text-fig. 3-2), Paratypes: ASM 50119-50123, 50127, 50130, 50132, 50136, 50138-50140, 50140, 50144-50145, 50148-50149, 50158, 50165, 50167-50168, 50189, 50193-50194, 50213, 50224, 50231, 50235, 50242, 50248, 50262, 50266, 50270-50271, 50281, 50286, 50306, 50329-50332, 50342-50345, 50348, 50358, 50369-50370, 50372, 50375, 50383-50385, 50400, 50426, 50433, 50439-50440, 504443, 50453, 50457, 50467, 50469, 50506, 50514-50515, 50524, 50541-50545, 50577, 505823, 50605-50607, 50617-50623, 50667, 50673, 50683-50688, 50706, 50736, 50751-50752, 50791-50795, 50798, 50810, 50828-50830, 50832- 50834, 50854-50857, 50932, 50934-50944, 50996-50999, 51031, 51115-51132, 51166, 51177-51189, 51191-51193, 51204, 51207, 51389-51190, 51215, 51219, 51388
Holotype from Loc. IM60 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Mine City, Yamaguchi Prefecture; ca. 34° 11.0'N, 131° 14.5'E). Paratypes from Locs. IM57, IM59, IM60, IM, IM70 (all ca. 34° 11.0'N, 131° 14.5'E) in the Isa Quarry.
Akiyoshi Limestone Group (upper part of the *Profusulinella beppensis* Zone to *Fusulinella simplicata* Subzone)
Upper Carboniferous (Moscovian)

***Agathiceras toriyamai* Nishida, 1971**
Bull. Akiyoshi-dai Sci. Mus. no. 7, p. 3, pl. 1, figs. 1-7, text-fig. 2
Holotype: GK. C6360 (pl. 1, figs. 1a-1c, text-fig. 2), Paratypes: GK. C6361-6366
Holotype from Loc. 1 at Shuchikujo, southern margin of the Yowara Plateau (Isa-cho, Mine City, Yamaguchi Prefecture; ca. 34° 11.5'N, 131° 15.8'E). Paratypes from Locs. 1 and 5 (ca. 34° 11.5' " N, 131° 15.7'E) at Shuchikujo, and Locs. 3 (ca. 34° 11.5'N, 131° 15.2'E) and 4 (ca. 34° 11.5'N, 131° 15.2'E) at northeast of Kawara (Isa-cho, Mine City, Yamaguchi Prefecture)
Akiyoshi Limestone Group (*Profusulinella beppensis* Zone and *Fusulinella biconica* Zone)
Upper Carboniferous (Bashkirian to Moscovian)

***Bisatoceras akiyoshiense* Nishida, 1971**
Bull. Akiyoshi-dai Sci. Mus. no. 7, p. 6, pl. 2, figs. 1-5, text-fig. 3
Holotype: GK. C6367 (pl. 2, figs. 1a-1d, text-fig. 3), Paratypes: GK. C6368-6371
Holotype from Loc. 1 at Shuchikujo, southern margin of the Yowara Plateau (Isa-cho, Mine City, Yamaguchi Prefecture; ca. 34° 11.5'N, 131° 15.8'E). Paratypes from Locs. 1 and 2 (ca. 34° 11.3'N, 131° 15.3'E) at Shoboji (Isa-cho, Mine City, Yamaguchi Prefecture)
Akiyoshi Limestone Group (*Profusulinella beppensis* Zone)
Upper Carboniferous (Bashkirian)

***Cymoceras otai* Nishida and Kyuma, 1982**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 17, p. 43, pl. 9, figs. 1-4, text-fig. 13
Holotype: ASM 5503 (pl. 9, figs. 1a-1c, text-fig. 10-A), Paratypes: ASM 5504, 5569, 5603, 5647, 5749, 5690-5692
Loc. IM01, IM04, and IM11 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Isa-cho, Mine City, Yamaguchi Prefecture; ca.34° 10.8'N, 131° 14.0'E)
Akiyoshi Limestone Group (*Pseudostaffella antiqua* Zone)
Upper Carboniferous (Bashkirian)

***Eumedlicottia matini* Bando, 1979**
Mem. Fac. Educ., Kagawa Univ., ser. 2, vol. 29, no. 2, p. 114, pl. 7, figs. 1a-1d
Holotype: Ab-72004
J-section of Kuh-e-Hambast, Abadeh, Central Iran
Unit 6, Dzhulfian Formation (lower part of the Hambast Formation)
Lower Dzhulfian (Lower Wuchiapingian), Upper Permian
(This type-specimen was transferred to the Geological Survey of Iran)

***Faqingoceras nagatoense* Nishida, Kyuma and Egashira, 1996**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 31, p. 7, pl. 1, figs. 1-6, pl. 2, figs. 1-5, pl. 3, figs. 1-12, text-figs. 4-10
Holotype: ASM 50474 (pl. 1, figs. 1a-1c, text-fig. 5-A), Paratypes: ASM 5949, 50048, 50050, 50054-50056, 50070, 50300, 50356, 50409, 50430, 50472-50473, 50555, 50560, 50626, 50797, 50831, 51036-51037, 51405, 51415, 51447,

51524, 51570, 52104, 52113, 52144
Holotype from IM60 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Isa-cho, Mine City, Yamaguchi Prefecture; ca. 34° 11.0'N, 131° 14.5'E). Paratypes from Locs. IM58, IM59, IM60 and IM64 (all ca. 34° 11.0'N, 131° 14.5'E) in the Isa Quarry, and Loc. SE02, southwest of Akiyoshi (west of Horinouchi, Iwanagahongo, Shuho Town, Mine-gun, Yamaguchi Prefecture; ca. 34° 11.8'N, 131° 16.4'E)
Akiyoshi Limestone Group (*Fusulinella biconica* Zone)
Upper Carboniferous (Upper Moscovian)

***Faqingoceras ruzhencevi* Nishida, Kyuma and Egashira, 1996**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 31, p. 7, pl. 4, figs. 1-5, pl. 5, figs. 1-9, text-figs. 6-14
Holotype: ASM no. 51780 (pl. 4, figs. 1a-1d, text-fig. 12-A), Paratypes: ASM no. 51740-51742, 51743-51744, 51746, 51749-51750, 51787-51788, 51791, 51876, 51947, 52111, 52150, 52164, 52202, 52210, 52216, 52223, 52228-52229, 52232-52233, 52236, MMHF no. 100075,
Holotype from IM77 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Mine City, Yamaguchi Prefecture; ca. 34° 11.1'N, 131° 14.6'E). Paratypes from Loc. IM71 (ca. 34° 11.0'N, 131° 14.5'E), IM73 (ca. 34° 11.0'N, 131° 14.5'E), IM77, IM78 (ca. 34° 11.1'N, 131° 14.6'E), IM87 (ca. 34° 11.1'N, 131° 14.6'E), IM120 (ca. 34° 11.1'N, 131° 14.6'E) and IM121 (ca. 34° 11.1'N, 131° 14.6'E) in the Isa Quarry.
Akiyoshi Limestone Group (*Fusulinella biconica* Zone to *Beedeina akiyoshiensis* Zone)
Upper Carboniferous (Upper Moscovian)

***Faqingoceras yangae* Nishida, Kyuma and Egashira, 1996**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 31, p. 12, pl. 5, figs. 10-12, text-figs. 6, 14-15
Holotype: GS. C050 (pl. 5, figs. 10a-10c, text-fig. 6-D, 14-D), Paratypes: GS. C051-052
Loc. CGFO2 in Faqing (Suicheng Special District of Riupansui City, Western Guizhou, China)
Dala Formation
Upper Carboniferous (Upper Moscovian)
(These type-specimens were transffered to the Nanjing Institute of Geology and Palaeontology, Academia Sinica)

***Gastrioceras* (*Lissogastrioceras*) *matsumotoi* Nishida and Kyuma, 1982**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 17, p. 21, pl. 2, figs. 1-5, text-fig. 5
Holotype: ASM 5557 (5558?) (pl. 2, figs. 1a-1b, text-fig. 5-a), Paratypes: ASM 5558-5563, 5600-5601, 5612, 5620, 5629, 5637, 5657, 5663, 5678, 5687-5689, 5739
Loc. IM01, IM04, and IM11 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Isa-cho, Mine City, Yamaguchi Prefecture; all ca.34° 10.8'N, 131° 14.0'E)
Akiyoshi Limestone Group (*Pseudostaffella antiqua* Zone)
Upper Carboniferous (Bashkirian)

***Iranites ishii* Bando, 1979**
Mem. Fac. Educ., Kagawa Univ., ser. 2, vol. 29, no. 2, p. 133, pl. 6, fig. 2a-3b
Holotype: Ab-72015 (pl. 6, fig. 2a-b), Paratype: Ab-72017
Kuh-e-Hambast, Abadeh, Central Iran
Unit 7, *Paratirolites* bed (upper part of the Hambast Formation)
Upper Dorashamian (Upper Changhsingian), Upper Permian
(These type-specimens were transferred to the Geological Survey of Iran)

***Jilingites kesennumensis* Ehiro and Araki, 1997**
Paleont. Res., vol. 1, no. 1, p. 60, fig. 4-a-b, fig. 5-1a-1b, 4-5,
Holotype: IGPS 103119 (fig. 5-4, text-fig. 4-a), Paratypes: IGPS 103120-103122
Loc. B-1 and B-2, Kurosawa River, Kamiyasse, Kesennuma City, Miyagi Prefecture (38° 58'39" N, 141° 31'57" E)
Upper part of the Ochiai Formation
Upper Capitanian, Middle Permian

***Julfotoceras abadehensis* Bando, 1979**
Mem. Fac. Educ., Kagawa Univ., ser. 2, vol. 29, no. 2, p. 124, pl. 3, figs. 2a-2b, text-fig. 5, F-G
Holotype: Ab-75014
North of Shurgazestan, Abadeh, Central Iran
Unit 7, Dorashamian bed (upper part of the Hambast Formation)
Lower Dorashamian (Lower Changhsingian), Upper Permian
(This type-specimen was transferred to the Geological Survey of Iran)

***Julfotoceras tarazi* Bando, 1973**
Sci. Rep. Tohoku Univ., 2nd ser., Spec. Vol., no. 6 (Hatai Mem. Vol.), p. 349, pl. 38, figs. 1a-1b, pl. 39, figs. 1a-1d
Holotype: no record
Kuh-e-Ali Bashi, Julfa, Northwest Iran
Lower Triassic ? (Lower part of the Dorashammian bed)
Lower Dorashamian (Lower Changhsingian), Upper Permian
(This type-specimen was transferred to the Geological Survey of Iran)

***Lenticoceltites okimurai* Bando, 1979**
Mem. Fac. Educ., Kagawa Univ., ser. 2, vol. 29, no. 2, p. 130, pl. 4, fig. 10, pl. 6, figs. 6a-6d,
Holotype: Ab-72043
J-section, Kuh-e-Hambast, Abadeh, Central Iran
Unit 6, Dzhulfian Formation (lower part of the Hambast Formation)
Upper Dzhulfian (Upper Wuchiapingian), Upper Permian
(These type-specimen was transferred to the Geological Survey of Iran)

***Medlicottia kitakamiensis* Bando and Ehiro 1985**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 137, p. 39, pl. 6, figs. 1-7, text-fig. 8, A-D
Holotype: GLKU-TY-8001 (pl. 6, fig.4, text-fig. 8, A), Paratypes: GLKU-TY-8002, 8101-8109
Holotype from Iwanosawa (38° 46'35"N, 141° 25'12"E), Senmatsu, Fujisawa-cho, Higashiiwai-gun, Iwate Prefecture. Paratypes from Iwanosawa (38° 46'35"N, 141° 25'12"E) and Nagasakiyama (38° 48'23"N, 141° 25'33"E), Senmatsu, Fujisawa-cho, Higashiiwai-gun, Iwate Prefecture, and Takizawa-toge (38° 44'43"N, 141° 25'22"E), south of Magome, Motoyoshi-cho, Motoyoshi-gun, Miyagi Prefecture
Senmatsu Formation
Changhsingian, Upper Permian
(***Neogeoceras kitakamiense* (Bando and Ehiro)** by Zakharov, 1988)
(These type-specimens were transferred to the Tohoku University Museum, Sendai)

***Minepronorites takahashii* Nishida, Kyuma and Egashira, 1998**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 33, p. 18, pl. 4, figs. 1-3, pl. 5, figs. 1-9, pl. 6, figs. 1-8, pl. 7, figs. 1-7, text-figs. 6-14
Holotype: ASM 50181 (pl. 5, figs. 1a-1d, text-fig. 10-B), Paratypes: ASM 5759, 5770, 50141, 50276, 50603, 50675, 50701, 50862, 50866, 51089, 51149, 51196, 51691, 51693, 51736, 51945-51946, 52076, 52152-52153, 52196-52198, 52267, 52268-52269, 52273-52278, MMHF 0076-0080,
Holotype from IM60 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Isa-cho, Mine City, Yamaguchi Prefecture; ca. 34° 11.0'N, 131° 14.5'E). Paratypes from Loc. IM01 (ca.34° 10.8'N, 131° 14.0'E), IM60, IM64 (ca. 34° 11.0'N, 131° 14.5'E), IM71 (ca. 34° 11.1'N, 131° 14.6'E), IM77 (ca. 34° 11.1'N, 131° 14.6'E), IM87 (ca. 34° 11.1'N, 131° 14.6'E) and IM123 (ca.34° 11.1'N, 131° 14.6'E) in the Isa Quarry, and Loc. SE02 at about 2.5 km southwest of Akiyoshi (west of Horinouchi, Iwanagahongo, Shuho Town, Mine-gun, Yamaguchi Prefecture; ca. 34° 11.8'N, 131° 16.4'E)
Akiyoshi Limestone Group (*Pseudostaffella antiqua* Zone to *Pseudofusulinella hidensis* Zone)
Upper Carboniferous (Upper Bashkirian to Moscovian)
(a part (ASM 5573, 5571 and 5574) of ***Pseudopronorites arkansiensis* (Smith)** by Nishida and Kyuma (1982) refereed to this spesies)

***Neoglaphyrites japonicus* Nishida and Kyuma, 1982**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 17, p. 35, pl. 7, figs. 1-7, text-fig. 10
Holotype: ASM 5507(pl. 7, figs. 1a-1b), Paratypes: ASM 5505-5506, 5508-5512, 5532, 5579-5584, 5609-5611, 5618, 5666-5667, 5693-5702, 5705-5706, 5742
Loc. IM01, IM04, and IM11 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Isa-cho, Mine City, Yamaguchi Prefecture; all ca.34° 10.8'N, 131° 14.0vE)
Akiyoshi Limestone Group (*Pseudostaffella antiqua* Zone)
Upper Carboniferous (Bashkirian)

***Okafujiceras isaense* Nishida and Kyuma, 1982**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 17, p. 40, pl. 8, figs. 1-4, text-fig. 12
Holotype: ASM 5552 (pl.8, figs. 1a-1c, text-fig. 10-c), Paratypes: ASM 5703-5704, 5714-5715, 5741
Loc. IM01, IM04, and IM11 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Isa-cho, Mine City, Yamaguchi Prefecture; all ca.34° 10.8'N, 131° 14.0'E)
Akiyoshi Limestone Group (*Pseudostaffella antiqua* Zone)
Upper Carboniferous (Bashkirian)

***Paralegoceras furnishi* Nishida, 1971**
Bull. Akiyoshi-dai Sci. Mus. no. 7, p. 6, pl. 6, figs. 1-3, text-fig. 9
Holotype: GK. C6387 (pl. 6, figs. 1, text-fig. 9-b, d), Paratypes: GK. C6388-6389
Holotype from Loc. 3 at Shuchikujo (Isa-cho, Mine City, Yamaguchi Prefecture; ca. 34° 11.5'N, 131° 15.2'E). Paratypes from Locs. 3 and 4 (ca. 34° 11.5'N, 131° 15.2'E), northeast of Kawara (Isa-cho, Mine City, Yamaguchi Prefecture)
Akiyoshi Limestone Group (*Fusulinella simplicata* Subzone)
Upper Carboniferous (Moscovian)
(Synonymous ? with ***Winslowoceras henbesti* Miller and Downs, 1948**: Kyuma and Nishida (1992))

***Paratirolites compressus* Ehiro 1996**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 184, p. 593, fig. 3-a-c
Holotype: IGPS 103144
Maeda, Ikawa-cho, Ofunato City, Iwate Prefecture (39° 05'45"N, 141° 42'02"E)
Unnamed formation
Changhsingian, Upper Permian

***Prototoceras compressum* Bando, 1979**
Mem. Fac. Educ., Kagawa Univ., ser. 2, vol. 29, no. 2, p. 127, pl. 3, figs. 1a-1c, text-fig. 5, B
Holotype: Ab-75015
Kuh-e-Hambast, Abadeh, Central Iran
Unit 6, Dzhulfian Formation (lower part of the Hambast Formation)
Dzhulfian (Wuchiapingian), Upper Permian
(This type-specimen was transferred to the Geological Survey of Iran)

***Prototoceras japonicum* Bando and Ehiro 1985**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 137, p. 42, pl. 7, figs. 3a-3c, text-fig. 9, A
Holotype: GLKU-TY-8201
Ishihama, Utatsu-cho, Motoyoshi-gun, Miyagi Prefecture

(38°43'58"N, 141°33'49"E)
Suenosaki Formation
Lower Wuchiapingian, Upper Permian
(***Vescotoceras japonicum* (Bando and Ehiro)** by Zakharov, 1988)
(This type-specimen was transferred to the Tohoku University Museum, Sendai)

***Pseudagathiceras ornatum* Ehiro and Araki, 1997**
Paleont. Res., vol. 1, no. 1, p. 62, fig. 4-d, fig5-6a-7
Holotype: IGPS 103135 (fig. 5-6a-6b), Paratype: IGPS 103136
Loc. B-1, Kurosawa River, Kamiyasse, Kesennuma City, Miyagi Prefecture (38°58'39"N, 141°31'57"E)
Upper part of the Ochiai Formation
Upper Capitanian, Middle Permian

***Pseudohalorites celestris* Yabe, 1928**
Japan. Jour. Geol. Geogra., vol. 6, p. 21, pl. 6, figs. 3a-c
Holotype: no record
Precise locality and formation unknown (Hsiang-tan-hsien, Hunan Province, China)
Triassic or Permian (Artinskian-Kungurian by Kullman et al., 2000)
(***Zhonglupuceras celestre* (Yabe)** by Zhou, 1985)

***Pseudohalorites subglobosus* Yabe, 1928**
Japan. Jour. Geol. Geogra., vol. 6, p. 20, pl. 6, figs. 1a-2b
Holotype: no record
Precise locality and formation unknown (Hsiang-tan-hsien, Hunan Province, China)
Triassic or Permian (Artinskian-Kungurian by Kullman et al., 2000)

***Pseudoparalegoceras yini* Nishida and Kyuma, 1984**
Jour. Fac. Educ., Saga Univ., vol. 31, no. 2, pt. 2, p. 232, pl. 1, figs. 1-5, pl.2, figs. 1-2, text-figs. 5, 7
Holotype ASM 6000 (pl. 1, fig. 1, text-figs. 5, 7), Paratypes ASM 5922, 5991, 6037-8, 6040-2
Loc. 5 (about 2 km southwest of Kawara, Isa-cho, Mine City, Yamaguchi Prefecture; ca. 34°10.9'N, 131°14.1'E)
Fusulinella biconica Zone of the Akiyoshi Limestone Group
Carboniferous (Middle Moscovian)

***Stacheoceras iwaizakiense* Mabuti, 1935**
Saito Ho-on Kai Mus. Nat. Hist., Res. Bull., no. 6, p.145, pl. 14, figs. 1-6
Holotype: IGPS 51723
Iwaizaki, (Kesennuma City, Miyagi Prefecture; ca 38°50'N, 141°36'E)
Iwaizaki Limestone (*Monodiexodina matsubaishi* Zone of the Iwaizaki Limestone)
Permian (Roadian-Wordian, Middle Permian)

***Stacheoceras otomoi* Ehiro, Shimoyama and Murata 1986**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 142, p. 404, pl. 79, figs. 1a-1d, text-fig. 3, A
Holotype: IGPS 98895
Kohama, Ogatsu-cho, Monoo-gun, Miyagi Prefecture (38°32'12"N, 141°29'24"E)
Lowermost part of the Toyoma Formation
Lower Wuchiapingian, Upper Permian

***Stenopronorites ruani* Nishida, Kyuma and Egashira, 1998**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 33, p. 8, pl. 1, figs. 1-6, pl. 2, figs. 1-2, text-figs. 4-11
Holotype: GS. C185 (pl. 1, figs. 1a-1c, text-fig. 4-A), Paratypes: GS. C186-187, 189-202, 206, 212 Loc. CGF02 in Faqing (Suicheng Special District of Riupansui City, Western Guizhou, China
Dala Formation (uppermost part)
Upper Carboniferous (Upper Moscovian)
(These type-specimens were transferred to the Nanjin Institute of Geology and Palaeontology, Academia Sinica)

***Timorites takaizumii* Ehiro and Araki, 1997**
Paleont. Res., vol. 1, no. 1, p. 62, fig. 6-a-b, fig. 7, fig. 8-1a-5
Holotype: IGPS 103125 (fig. 6-a, fig. 8-1a-5), Paratypes: IGPS 103126-103134
Loc. B-1, Kurosawa River, Kamiyasse, Kesennuma City, Miyagi Prefecture (38°58'39"N, 141°31'57"E)
Upper part of the Ochiai Formation
Upper Capitanian, Middle Permian

***Vedioceras nakamurai* Bando, 1979**
Mem. Fac. Educ., Kagawa Univ., ser. 2, vol. 29, no. 2, p. 117, pl. 4, figs. 3a-4b, text-fig. 3, C-D
Holotype: Ab-72057-2 (pl. 4, figs. 4a-4b, text-fig. 3, C-D?), Paratypes: Ab-72057-1, JF-69094
Holotype from Kuh-e-Hambast, Abadeh, Central Iran. Paratypes from Kuh-e-Hambast, Abadeh, Central Iran and Kuh-e-Ali Bashi, Julfa, Northwest Iran
Unit 6, Dzhulfian Formation (lower part of the Hambast Formation) and Dorasham Formation
Dzhulfian-Dorashamian (Wuchiapingian-Changhsingian), Upper Permian
(These type-specimens were transferred to the Geological Survey of Iran)

***Wellerites kanmerai* Kyuma and Nishida, 1992**
Bull. Akiyoshi-dai Mus. Nat. Hist., no. 27, p. 18, pl. 8, figs. 1-2, text-figs. 3, 4, 8
Holotype: ASM 51877 (pl. 8, figs. 1a-1d, text-fig. 3-D, 8-A), Paratypes: MMHF 0050, ASM 51817
Loc. IM77 in the Isa Quarry of the Ubekosan Co. Ltd. (Maruyama, Mine City, Yamaguchi Prefecture; ca. 34°11.1'N, 131°14.6'E).

Akiyoshi Limestone Group (*Beedeina akiyoshiensis* Zone)
Upper Carboniferous (Upper Moscovian)

***Xenodiscus muratai* Bando, 1979**
Mem. Fac. Educ., Kagawa Univ., ser. 2, vol. 29, no. 2, p. 131, pl. 1, fig. 4a-4c, text-fig. 6, H
Holotype: Ab-72017
Surmaq, Abadeh, Central Iran
Unit 1, Surmaq Formation
Middle Permian (Wordian?)
(This type-specimen was transferred to the Geological Survey of Iran)

Paleozoic non-ammonoid cephalopods

Shuji Niko

Department of Environmental Studies, Faculty of Integrated Arts and Sciences
Hiroshima University, Higashihiroshima 739-8521, Japan

***Actinoceras exogastrale* Kobayashi, 1930**
Japan. Jour. Geol. Geog., vol. 7, nos. 3, 4, p. 85, pl. 8, figs. 5a, b
Holotype: UMUT PM0060
Shoko-ri, Bantatsu-men, Koto Prefecture, South Heian-do, Korea [North Korea]
Unkaku Bed
Middle Ordovician

***Actinoceras fuchouensis* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 206, pl. 10, figs. 9, 10
Holotype: IGPS 55540
Vicinity of Wu-hu-tsui colliery, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: ***Pararmenoceras fuchouense***, new combination by Shimizu and Obata (1936).

***Actinoceras harioi* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 196, pl. 20, fig. 12, pl. 21, fig. 9
Syntypes: UMUT PM0040, PM0041
To-fan-go and Wu-hu-tsui, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)
Remarks: ***Armenoceras harioi***, new combination by Endo (1932). ***Ormoceras harioi***, new combination by Kobayashi (1934).

***Actinoceras kakui* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 206, pl. 10, figs. 1, 2
Holotype: IGPS 55573
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Actinoceras konoi* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 207, pl. 10, figs. 3, 4
Holotype: IGPS 55575
Vicinity of Wu-hu-tsui colliery, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: ***Ormoceras konoi***, new combination by Chao *et al.* (1965).

***Actinoceras manchurense* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 194, pl. 20, fig. 10, pl. 21, fig. 7, pl. 22, figs. 2a, b
Syntypes: UMUT PM0032–PM0034
To-fan-go, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)
Remarks: ***Armenoceras manchurense***, new combination by Endo (1932).

***Actinoceras murakamii* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 198, pl. 22, fig. 6
Holotype: UMUT PM0048
To-fan-go, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)
Remarks: ***Armenoceras murakamii***, new combination by Endo (1932).

***Adnatoceras ichinotaniensis* Niko and Hamada, 1987**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 148, p. 225, figs. 3-1–6
Holotype: UMUT PM18068
Paratype: UMUT PM18069
Ichinotani Valley, Fukuji, Kamitakara Village, Yoshiki County, Gifu Prefecture
Ichinotani Formation
Middle Carboniferous (late Bashkirian)

***Adnatoceras onimarense* Niko, 1990**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 159, p. 555, figs 2-2–5
Holotype: UMUT PM18785
Onimaru Quarry, Hikoroichi, Iwate Prefecture
H2 Member, Hikoroichi Formation
Early Carboniferous (Visean)

***Aktastioceras nishikawai* Niko, Nishida and Hamada, 1993**
Jour. Paleont., vol. 67, no. 2, p. 314, figs. 2.1–2.8
Holotype: NSM PM15474
Paratypes: NSM PM15475, PM15476
Loc. NSM PCL 15-53-1, Miharanoro, Hiroshima Prefecture
Uyamano Formation, Taishaku Limestone Group
Early Permian (Asselian)

***Armenoceras banestanense* Niko, Kakuwa, Watanabe and Matsumoto, 1999**
Paleont. Res., vol. 3, no. 1, p. 42, figs. 3-1–6

Holotype: UMUT PM27328
Paratype: UMUT PM27327
Loc. 3, Banestan, Kerman, Iran
Unnamed formation
Early Silurian (late Llandovery or early Wenlock)

***Arionoceras densiseptum* Kobayashi in Kobayashi, Katto and Hamada, 1984**
Res. Rep. Kochi Univ., vol. 32, p. 246, pl. 3, figs. 3–5
Holotype: KGS 3582
Paratype: KGS 3583
Shiroishi-ohsawa in Mt. Yokokura, Kochi Prefecture
Yokokurayama Formation
Late Silurian (early Ludlow)

***Armenoceras coreanicum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 449, pl. 30, figs. 1, 2
Holotype: UMUT PM0697
Makkol, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)
Remarks: ***Pararmenoceras? coreanicum***, new combination by Shimizu and Obata (1935).

***Armenoceras kobayashii* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 211, pl. 11, figs. 8, 9
Holotype: IGPS 55567
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Armenoceras magnitubulatum* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 211, pl. 11, figs. 6, 7
Holotype: IGPS 55569
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Armenoceras nakaoi* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 212, pl. 15, figs. 10, 11
Holotype: IGPS 55576
Vicinity of San-kang-yao, 3 miles south of Yen-tai colliery, Liaotung, Manchoukuo [Northeast China]
Kangyao Formation
Early Ordovician

***Armenoceras shibatai* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 213, pl. 11, figs. 4, 5
Holotype: IGPS 55572
Vicinity of Wu-hu-tsui colliery, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Armenoceras similis* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 213, pl. 12, fig. 18
Holotype: IGPS 55545
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Armenoceras tateiwai* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 449, pl. 28, figs. 3, 4, pl. 29, figs. 5–7
Syntypes: UMUT PM0698, PM0699 (=PM0700)
Makkol and Kochiri, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)
Remarks: ***Shantungoceras tateiwai***, new combination by Shimizu and Obata (1936). ***Armenoceras tateiwai***, retroactive combination by Teichert (1964).

***Armenoceras ventrosiphonatum* Kobayashi, 1937**
Japan. Jour. Geol. Geog., vol. 14, nos. 1, 2, p. 5, pl. 1, figs. 3a–c, pl. 2, fig. 6
Holotype: UMUT PM1705 (=PM1706)
Sohyo-do, Nan-men, Sosan-gun, Heian-hoku-do, North Chosen [North Korea]
Toufangian limestone
Middle Ordovician

***Armenoceras wuhutsuiense* Shimizu and Obata, 1936**
Jour. Shanghai Sci. Inst., sec. 2, vol. 2, p. 34
Holotype: IGPS 55539 (=holotype of *Yabeites orientalis* Endo, 1934)
Remarks: Renamed on ***Yabeites orientalis* Endo, 1934**.

***Bactrites faqingensis* Niko, Nishida and Kyuma, 1997**
Paleont. Res., vol. 1, no. 2, p. 104, figs. 4-1–7
Holotype: GS.C 172
Paratypes: GS.C 173, 174
Faqing, Riupansui, Guizhou Province, South China
Dala (Huanglong) Formation
Middle Carboniferous (Moscovian)

***Bactrites nagatoensis* Niko, Nishida and Kyuma, 1991**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 161, p. 715, figs. 2-1–10; 3-1–5
Holotype: ASM 51310

Paratypes: ASM 51311–51313, 51351–51355, 51384
Locs. IM 60, IM64, Isa, Mine City, Yamaguchi Prefecture
Akiyoshi Limestone Group
Middle Carboniferous (late Bashkirian to early Moscovian)

***Bitauniоceras undulatum* Niko and Nishida, 1987**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 146, p. 37, figs. 2-1–7; 3-1, 2
Holotype: UMUT PM17973
Paratypes; UMUT PM17974–PM17977
Mizuyagadani Valley, some 2 km southwest of Fukuji, Kamitakara Village, Yoshiki County, Gifu Prefecture
Mizuyagadani Formation
Early Permian (Sakmarian)

***Bogoslovskya akiyoshiensis* Niko, Nishida and Kyuma, 1995**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 179, p. 193, figs. 1-1–14
Holotype: ASM 50202
Paratypes: ASM 50151, 50152, 50209, 50210, 50219, 50220, 50239, 51260
Loc. IM60, Isa, Mine City, Yamaguchi Prefecture
Akiyoshi Limestone
Middle Carboniferous (Moscovian)

***Bogoslovskya guizhouensis* Niko, Nishida and Kyuma, 1997**
Paleont. Res., vol. 1, no. 2, p. 100, figs. 2-1–13
Holotype: GS.C 128
Paratypes: GS.C 129, 144–147, 156–159, 167, 170
Faqing, Riupansui, Guizhou Province, South China
Dala (Huanglong) Formation
Middle Carboniferous (Moscovian)

***Bogoslovskya miharanoroensis* Niko and Ozawa, 1997**
Paleont. Res., vol. 1, no. 1, p. 48, figs. 2-1–9
Holotype: ESN 2586
Paratypes: ESN 2587–2591
Loc. 1, Miharanoro, Tojo, Hiroshima Prefecture
Taishaku Limestone Group
Late Carboniferous or Early Permian (late Gzhelian or early Asselian)

***Brachycycloceras akiyoshiensis* Niko, Nishida and Kyuma, 1987**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 148, p. 337, figs. 2-1, 2
Holotype: ASM 51301
Loc. IM60, Isa, Mine City, Yamaguchi Prefecture
Akiyoshi Limestone
Middle Carboniferous (Moscovian)

***Burenoceras? reticulatum* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 272, pl. 2, figs. 2–4
Syntypes: UMUT PM0269–PM0271
Wan-wan-kou, Niuhsintai Basin, South Manchuria [Northeast China]
Wanwankou Dolomite
Early Ordovician (late Ozarkian) [Late Cambrian]

***Cameroceras curvatoformis* Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 41, pl. 6, figs. 5a, b, 6, pl. 9, fig. 3
Holotype: UMUT PM0200
Paratypes: UMUT PM0201, PM0202
Shorinri and Shin-dong, near Kenjiho, Koshu-gun, Kokai-do, North Korea
Shorin Bed
Early Ordovician (Wolungian)
Remarks: ***Cyrtovaginoceras curvatoforme***, new combination by Kobayashi (1934).

***Centroonoceras* Kobayashi, 1934 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 417
Type-species: *Oonoceras? tokunagai* Kobayashi, 1927

***Clarkoceras poulseni* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 165, pl. 16, fig. 8
Holotype: UMUT PM0116
Lao-hu-ting-kou, South Manchuria [Northeast China]
Wanwankou Limestone
Late Cambrian or Early Ordovician (Ozarkian) [Late Cambrian]

***Coelogasteroceras giganteum* Nakazawa, 1960**
Japan. Jour. Geol. Geog., vol. 31, nos. 2–4, p. 125, pl. 10, figs. 3a–c, text-fig. 2
Holotype: Private collection of T. Hayano at Akasaka-machi
Akasaka, Akasaka-machi, Gifu Prefecture
Akasaka Limestone (*Yabeina* Zone)
Middle Permian (Capitanian)

***Coreanoceras* Kobayashi, 1931 n. gen.**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 45
Type-species: *Coreanoceras kemipoense* Kobayashi, 1931

***Coreanoceras kemipoense* Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 47, pl. 7, figs. 1–4, pl. 8, fig. 1, pl. 9, fig. 2
Holotype: UMUT PM0210
Paratypes: UMUT PM0209, PM0211–PM0214
Shorinri near Kenjiho, Kokai-do, North Korea
Shorin Bed
Early Ordovician (Wolungian)

***Coreanoceras kini* Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 49, pl. 8, fig. 2
Holotype: UMUT PM0222
Aphyong-che near Kenjiho, Koshu-gun, Kokai-do, North Korea
Shorin Bed
Early Ordovician (Wolungian)

***Coreanoceras kokaiense* Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 48, pl. 8, figs. 3–5, 7
Syntypes: UMUT PM0215–PM0219
Shorinri near Kenjiho, Koshu-gun, Kokai-do, North Korea
Shorin Bed
Early Ordovician (Wolungian)

***Coreanoceras shorinense* Kobayashi, 1936**
Japan. Jour. Geol. Geog., vol. 13, nos. 1, 2, p. 186, pl. 22, figs. 12, 13, pl. 23, figs. 9, 10
Holotype: UMUT PM0210 (=holotype of *Coreanoceras kemipoense* Kobayashi, 1931)
Shorinri near Kenjiho, Kokai-do, North Korea
Shorin Bed
Early Ordovician (Wolungian)

***Coreanoceras tenuicurvatum* Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 49, pl. 8, fig. 8, pl. 9, fig. 2
Syntypes: UMUT PM0220, PM0221
Shorinri near Kenjiho, Koshu-gun, Kokai-do, North Korea
Shorin Bed
Early Ordovician (Wolungian)

***Cyclendoceras orientale* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 386, pl. 10, figs. 1–5
Holotype: UMUT PM0611 (=PM0612 and PM0613)
Makkol, South Chosen [South Korea]
probably Chikunsan Beds
Middle Ordovician
Remarks: Teichert (1964) synonymized ***Cyclendoceras* Grabau and Schimer, 1910** with ***Endoceras* Hall, 1847**.

***Cycloceras densiannulatum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 419, pl. 22, figs. 3–6
Holotype: UMUT PM0656
Paratype: UMUT PM repository number unknown
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: Shimizu and Obata (1935) synonymized the species with ***Sactorthoceras gonioseptum* Kobayashi, 1934**.

***Cycloceras eccentrosiphonatum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 423, pl. 31, figs. 6, 7
Holotype: UMUT PM0664
Kochiri, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)

***Cycloceras grecicostatum* Kobayashi, 1937**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 4, pt. 4, p. 434, pl. 8, figs. 4a–c
Holotype: UMUT PM1588
Obispo, southern Bolivia
"Knollenschiefer"
Middle Ordovician (Llandeilo)

***Cycloceras kawasakii* Kobayashi, 1930**
Japan. Jour. Geol. Geog., vol. 7, nos. 3, 4, p. 84, pl. 8, figs. 3a, b
Holotype: UMUT PM0059
Shoko-ri, Bantatsu-men, Koto Prefecture, South Heian-do, Korea [North Korea]
Unkaku Bed
Middle Ordovician

***Cycloceras mantalense* Kobayashi, 1930**
Japan. Jour. Geol. Geog., vol. 7, nos. 3, 4, p. 82, pl. 8, figs. 2a, b
Holotype: UMUT PM0058
Shoko-ri, Bantatsu-men, Koto Prefecture, South Heian-do, Korea [North Korea]
Unkaku Bed
Middle Ordovician

***Cycloceras subchikunense* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 422, pl. 20. figs. 7, 8
Holotype: UMUT PM0663
Seihekiri, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Cycloceras taihakuense* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 420, pl. 22, figs. 1, 2, pl. 23, figs. 5, 6, pl. 24, figs. 4–6
Holotype: UMUT PM0659
Paratypes: UMUT PM0657, PM0658
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Cyrtactinoceras mitsuishii* Kobayashi, 1927**
see ***Cyrtoactinoceras mitsuishii***

***Cyrtoceras* (*Meloceras*) *asiaticum* Yabe in Yabe and Hayasaka, 1920**
Palaeontology of Southern China, p. 52, pl. 18, fig. 14, pl. 27, figs. 7a, b
Holotype: No. 102 (no designation about repository)
Pan-tse-ya, Hu-ch'i, Hsing-shan-hsien, Prov. Hu-pei, China
Brownish marly limestone
Ordovician
Remarks: ***Onoceras*** [sic, nom. null., error for ***Oncoceras***] (***Meloceras***) ***asiaticum***, new combination by Yü (1930). ***Meloceras asiaticum***, new combination by Yü (1951). ***Richarsonoceras*** [sic, nom. null. error for ***Richardsonoceras***] ***asiaticum***, new combination by Chao *et al.* (1965).

***Cyrtoceras? kochyonense* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 204, pl. 19, figs. 9a, b
Holotype: UMUT PM0055
Kochyon-nih (east of Makkol), Sanchyan-myon, Samchoku Prefecture, Kogen-do, Corea [South Korea]
Makkol Limestone [Chikunsan Beds]
Ordovician (Caradoc?) [Middle Ordovician (Late Llamdeilo)]
Remarks: ***Centrocyrtoceras kochyonense***, new combination by Kobayashi (1934).

***Cyrtendoceras holmi* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 276, pl. 4. fig. 10
Holotype: UMUT PM0277
San-chia-tzu, South Manchuria [Northeast China]
Wanwankou Limestone proper
Early Ordovician (Late Ozarkian) [Late Cambrian]

Cyrtoactinoceras [sic, nom. null., error for ***Cyrtactinoceras***] ***mitsuishii* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 200, pl. 21, fig. 14
Holotype: UMUT PM0050
To-fan-go, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)

***Cyrtovaginoceras* Kobayashi, 1934 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 383, 390
Type-species: *Cameroceras curvatoforme* Kobayashi, 1931

***Cyrtovaginoceras pacificum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 390, pl. 15, figs. 1–5
Holotype: UMUT PM0618
Saishori, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Discoactinoceras* Kobayashi, 1927**
see ***Discoactionoceras***

Discoactionoceras[sic, nom. null., error for ***Discoactinoceras***] **Kobayashi, 1927 n. gen.**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 200
Type-species: *Discoactinoceras multiplexum* Kobayashi, 1927

***Discoactinoceras multiplexum* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 202, pl. 22, figs. 7a–d
Holotype: UMUT PM0051
Niu-shin-tai, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)

***Discoactinoceras okdongense* Kobayashi, 1978**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 109, p. 229, pl. 32, figs. 3, 4a–c, 5a–e
Holotype: UMUT PM4300
Paratypes: UMUT PM4298, PM4299
Chinku-ri, Okdong, Sangdong-myeon, Yongweol-gun, Kangweon-to, and 1.5 km southwest of Hyeoleom, Sangjang-myeon, Samcheok-gun, Kangweon-to, South Korea
No designation about stratigraphic setting
Middle Ordovician

***Discoceras* (*Hardmanoceras*?) *chrysanthimum* Kobayashi, 1959**
Jour. Fac. Sci., Univ. Tokyo, sec. 2, vol. 11, pt. 4, p. 404, pl. 26, figs. 1a, b
Holotype: UMUT PM2351
Loc. 31, East coast, Pulau Langgon, Langkawi Islands, northern Malaya [Malaysia]
"Setul Formation"
Middle Ordovician
Remarks: ***Hardmanoceras chrysanthimum***, new combination by Stait and Burrett (1984).

***Discoceras* (*Hardmanoceras*?) *laeviventrum* Kobayashi, 1959**
Jour. Fac. Sci., Univ. Tokyo, sec. 2, vol. 11, pt. 4, p. 405, pl. 26, figs. 2a, b
Holotype: UMUT PM2352
Loc. 31, East coast, Pulau Langgon, Langkawi Islands, northern Malaya [Malaysia]
"Setul Formation"
Middle Ordovician
Remarks: Stait and Burrett (1984) synonymized the species with ***Hardmanoceras cyrysanthimum* (Kobayashi, 1959).**

***Domatoceras ogatsuense* Ehiro and Takizawa, 1989**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 155, p. 214, figs. 2-2a–d
Holotype: GSJ. F. 12867
Northeast of Myojin, Ogatsu-cho, Miyagi Prefecture; 38° 31'14"N, 141°29'17"E
Toyoma Formation
Late Permian (Wuchiapingian)

***Ectenoceras ruedemanni* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 270, pl. 2, figs. 5a–d, 11a, b
Holotype: UMUT PM0264
Paratype: UMUT PM0265
Wan-wan-kou, Niuhsintai Basin, South Manchuria [Northeast China]
Wanwankou Dolomite
Early Ordovician (late Ozarkian) [Late Cambrian]
Remarks: Furnish and Glenister (1964) synonymized ***Ectenoceras* Ulrich and Foerste in Kobayashi, 1933** with ***Eremoceras* Hyatt, 1884**.

***Ectenoceras subcurvatum* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sac. 2, vol. 3, pt. 7, p. 270, pl. 1, fig. 9
Holotype: UMUT PM0263
Wan-wan-kou, Niuhsintai Basin, South Manchuria [Northeast China]
Wanwankou Dolomite
Early Ordovician (late Ozarkian) [Late Cambrian]
Remarks: Furnish and Glenister (1964) synonymized ***Ectenoceras* Ulrich and Foerste in Kobayashi, 1933** with ***Eremoceras* Hyatt, 1884**. ***Eoclarkoceras subcurvatum***, new combimation by Chen and Teichert (1983).

Ellesmereoceras[sic, nom. van., error for ***Ellesmeroceras***] ***abruptum* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 269, pl. 1, figs. 2, 8
Holotype: UMUT PM0259
Paratype: UMUT PM0260
Wan-wan-kou, Niuhsintai Basin, South Manchuria [Northeast China]
Wanwankou Dolomite
Early Ordovician (late Ozarkian) [Late Cambrian]

Ellesmereoceras[sic, nom. van., error for ***Ellesmeroceras***] ***amplum* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 162, pl. 17, figs. 1a–c
Holotype: UMUT PM0111
Chiu-shu-kou, South Manchuria [Northeast China]
Wolung Limestone
Early Ordovician
Remarks: ***Endoceras? amplum***, new combination by Chao *et al.* (1965).

Ellesmereoceras[sic, nom. van., error for ***Ellesmeroceras***] ***curvatum* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 161, pl. 16, figs. 2a–c
Holotype: UMUT PM0108
Wan-wan-kou, South Manchuria [Northeast China]
Wanwankou Limestone
Late Cambrian or Early Ordovician (Ozarkian) [Late Cambrian]
Remarks: ***Ectenoceras curvatum***, new combination by Kobayashi (1933). Furnish and Glenister (1964) synonymized ***Ectenoceras* Ulrich and Foerste in Kobayashi, 1933** with ***Eremoceras* Hyatt, 1884**.

Ellesmereoceras[sic, nom. van., error for ***Ellesmeroceras***] ***elongatum* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 160, pl. 16, figs. 1a–c, 5, 6, pl. 19, figs. 9a, b
Holotype: UMUT PM0105
Paratypes: UMUT PM0104, PM0106, PM0107
Chiu-shu-kou and Wan-wan-kou, South Manchuria [Northeast China]
Wanwankou Limestone
Late Cambrian or Early Ordovician (Ozarkian) [Late Cambrian]

Ellesmereoceras[sic, nom. van., error for ***Ellesmeroceras***] ***foerstei* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3; pt. 7, p. 268, pl. 1, figs. 1a, b, 11
Holotype: UMUT PM0257
Paratype: UMUT PM0258
Wan-wan-kou, Niuhsintai Basin, South Manchuria [Northeast China]
Wanwankou Dolomite
Early Ordovician (late Ozarkian) [Late Cambrian]

Ellesmereoceras[sic, nom. van., error for ***Ellesmeroceras***] ***subcircularis* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 161, pl. 19, figs. 5a, b
Holotype: UMUT PM0109
Wan-wan-kou, South Manchuria [Northeast China]
Wanwankou Limestone
Late Cambrian or Early Ordovician (Ozarkian) [Late Cambrian]

Ellesmereoceras[sic, nom. van., error for ***Ellesmeroceras***]? ***flexuostriatum* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 162, pl. 16, figs. 3a, b
Holotype: UMUT PM0110

Wan-wan-kou, South Manchuria [Northeast China]
Wanwankou Limestone
Late Cambrian or Early Ordovician (Ozarkian) [Late Cambrian]
Remarks: ***Sinoeremoceras flexuostriatum***, new combination by Chao *et al.* (1965).

Ellesmereoceras[sic, nom. van., error for ***Ellesmeroceras***]**? *multicameratum* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 163, pl. 16, fig. 7, pl. 19, figs. 2a, b, 3
Holotype: UMUT PM0114
Paratypes: UMUT PM0112, PM0113
Chiu-shu-kou and Wan-wan-kou, South Manchuria [Northeast China]
Wanwankou Limestone
Late Cambrian or Early Ordovician (Ozarkian) [Late Cambrian]
Remarks: ***Multicameroceras multicameratum***, new combination by Kobayashi (1933). ***Sinoeremoceras multicameratum***, new combination by Chen and Teichert (1983).

***Ellesmeroceras abrupyum* Kobayashi, 1933**
see ***Ellesmereoceras abrupyum***

***Ellesmeroceras amplum* Kobayashi, 1931**
see ***Ellesmereoceras amplum***

***Ellesmeroceras curvatum* Kobayashi, 1931**
see ***Ellesmereoceras curvatum***

***Ellesmeroceras elongatum* Kobayashi, 1931**
see ***Ellesmereoceras elongatum***

***Ellesmeroceras foerstei* Kobayashi, 1933**
see ***Ellesmereoceras foerstei***

***Ellesmeroceras subcircularis* Kobayashi, 1931**
see ***Ellesmereoceras subcircularis***

***Ellesmeroceras? flexuostriatum* Kobayashi, 1931**
see ***Ellesmereoceras? flexuostriatum***

***Ellesmeroceras? multicameratum* Kobayashi, 1931**
see ***Ellesmereoceras? multicameratum***

***Endoceras alticameratum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 384, pl. 15, figs. 6–8
Holotype: UMUT PM0610
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Eremoceras wanwanense* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 164, pl. 16, figs. 4a, b
Holotype: UMUT PM0115
Chiu-shu-kou, South Manchuria [Northeast China]
Wanwankou Limestone
Late Cambrian or Early Ordovician (Ozarkian) [Late Cambrian]
Remarks: ***Sinoeremoceras wanwanense***, new combination by Kobayashi (1933).

***Euhuronia* Shimizu and Obata, 1936 n. gen.**
Jour. Shanghai Sci. Inst., sec. 2, vol. 2, p. 23
Type-species: *Stereoplasmoceras yabei* Kobayashi, 1934
Remarks: Teichert (1964) synonymized the genus with ***Orthonybyoceras* Shimizu and Obata, 1935.**

***Euhuronia kobayashii* Shimizu and Obata, 1936**
Jour. Shanghai Sci. Inst., sec. 2, vol. 2, p. 23
Holotype: UMUT PM0691 (=paratype of *Ormoceras koraiense* Kobayashi, 1934)
Makkol, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)
Remarks: Teichert (1964) synonymized ***Euhuronia* Shimizu and Obata, 1936** with ***Orthonybyoceras* Shimizu and Obata, 1935**.

***Foordiceras akiyamai* Hayasaka, 1960**
Bull. Nat. Sci. Mus., vol. 5, no. 2, p. 90, p. 11, figs. 1–3, 3a, pl. 12, figs. 1, 1a, 2a–c
Holotype: NSM P1 4696 (pl. 11, fig. 1, pl. 12, figs. 1, 1a)
Paratypes: NSM P1 4697–4699
Tagara, Kesennuma City, Miyagi Prefecture
Kanokura Series
Middle Permian (Wordian?)

***Foordiceras whnneiforme* Hayasaka and Ozaki, 1955**
Sci. Rep. Kanazawa Univ., vol. 3, no. 1, p. 184, pl. 1, fig. 1
Holotype: no record (Kanazawa Univ.)
Oguradani, Otani, Kamianama-mura, Ono-gun, Fukui Prefecture
Oguradani Beds, Nojiri Group
Middle Permian

***Fukujiceras* Niko, 1996 n. gen.**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 181, p. 348
Type-species: *Fukujiceras kamiyai* Niko, 1996

***Fukujiceras kamiyai* Niko, 1996**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 181, p. 348, figs. 2-1–13
Holotype: UMUT PM19111
Paratypes: UMUT PM19112–PM19123, PM19143

Locs. FH-1, FH-4, southern flank of Ozako Valley and eastern slope of Mt. Sora, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Lochkovian)

***Geisonoceras abruptum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 416, pl. 20, fig. 3
Holotype: UMUT PM0654
Kochiri, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Geisonoceras hyatti* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 415, pl. 23, figs. 3, 4
Holotype: UMUT PM0653
Komei, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: Shimizu and Obata (1935) synonymized the species with ***Sactorthoceras gonioseptum* Kobayashi, 1934**.

***Geisonoceras sejunctus* Niko, Nishida and Kyuma, 1987**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 148, p. 338, figs. 3-1–6
Holotype: ASM 51303
Paratype: ASM 51304
Loc. IM 60, Isa, Mine City, Yamaguchi Prefecture
Akiyoshi Limestone
Middle Carboniferous (Moscovian)

***Geisonocerella nakazatoensis* Niko, 1989**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 156, p. 291, figs. 1-1–4
Holotype: UMUT PM18470
Small tributary of Higuchizawa, Hikoroichi, Ofunato City, Iwate Prefecture; 141°40'8''E, 39°6'55''N
N3 Member, Nakazato Formation
Middle Devonian (middle or late Eifelian)

***Geisonocerina cribrella* Niko, Nishida and Kyuma, 1987**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 148, p. 340, figs. 4-1–8
Holotype: ASM 51305
Paratypes: ASM 51306–51308
Loc. IM 60, Isa, Mine City, Yamaguchi Prefecture
Akiyoshi Limestone
Middle Carboniferous (Moscovian)

***Hamadaites* Niko, 1996 n. gen.**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 181, p. 352
Type-species: *Hamadaites labyrinthus* Niko, 1996

***Hamadaites labyrinthus* Niko, 1996**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 181, p. 354, figs. 6-1–15
Holotype: UMUT PM19182
Paratypes: UMUT PM18499, PM18500, PM19183–PM19201, PM19307, PM19308
Locs. FH-1, FH-4, southern flank of Ozako Valley and eastern slope of Mt. Sora, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Lochkovian)

***Huroniella iranica* Niko, Kakuwa, Watanabe and Matsumoto, 1999**
Paleont. Res., vol. 3, no. 1, p. 46, figs. 4-1–4, 6
Holotype: UMUT PM27326
Loc. 1, Banestan, Kerman, Iran
unnamed formation
Early Silurian (late Llandovery or early Wenlock)

***Irianoceras* Kobayashi in Kobayashi and Burton, 1971 n. gen.**
Proc. Japan Acad., vol. 47, no. 7, p. 627
Type-species: *Irianoceras antiquum* Kobayashi in Kobayashi and Burton, 1971

***Irianoceras antiquum* Kobayashi in Kobayashi and Burton, 1971**
Proc. Japan Acad., vol. 47, no. 7, p. 628, figs. 1a–d, 2a, b, 3a–c
Holotype: UMUT PM8208
Paratype: UMUT PM8209 (=PM8210)
Ok Bon and Ok Atem, Star Mountains, West Irian, New Guinea [Indonesia]
Kembelangan Formation
Early or Middle Ordovician

***Jeholoceras* Kobayashi and Matumoto, 1942 n. gen.**
Japan. Jour. Geol. Geog., vol. 18, no. 4, p. 315
Type-species: *Jeholoceras robustum* Kobayashi and Matumoto, 1942
Remarks: Teichert (1964) synonymized the genus with ***Nybyoceras* Troedsson, 1926**. Chao *et al.* (1965) synonymized the genus with ***Armenoceras* Foerste, 1924**. Stait and Burrett (1981) synonymized the genus with ***Wutinoceras* Shimizu and Obata, 1936**.

***Jeholoceras robustum* Kobayashi and Matumoto, 1942**
Japan. Jour. Geol. Geog., vol. 18, no. 4, p. 316, pl. 30, figs. 1–5, pl. 31, fig. 6
Syntypes: UMUT PM1905–PM1907
Adjacently east of office of Nanpiao coal mines at Nantanchinkou, eastern Jehol, South Manchuria [Northeast China]

Chosen Group
Middle Ordovician
Remarks: ***Nybyoceras robustum***, new combination by Teichert (1964). ***Armenoceras robustum***, new combination by Chao *et al.* (1965). ***Wutinoceras robustum,*** new combination by Stait and Burrett (1981).

***Kawasakiceras* Kobayashi, 1934 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 396
Type-species: *Kawasakiceras densistriatum* Kobayashi, 1934

***Kawasakiceras densistriatum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 397, pl. 14, figs. 6, 7
Holotype: UMUT PM0634
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Kobayashiceras* Niko, 1998 n. gen.**
Jour. Paleont., vol. 72, no. 1, p. 36
Type-species: *Kobayashiceras gifuense* Niko, 1998

***Kobayashiceras gifuense* Niko, 1998**
Jour. Paleont., vol. 72, no. 1, p. 36, figs. 1.1–1.10
Holotype: UMUT PM27286
Paratypes: UMUT PM27287–PM27294, PM27315–PM27317
Locs. FH-1, FH-4, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Lochkovian)

***Kochoceras? yokusenense* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 451, pl. 29, figs. 1–4
Holotype: UMUT PM0701
Doten, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)
Remarks: Shimizu and Obata (1935) synonymized the species with ***Armenoceras submarginale* Grabau, 1922**. ***Selkirkoceras yokusenense***, new combination by Kobayashi (1937).

***Kogenoceras* Shimizu and Obata, 1936 n. gen.**
Jour. Shanghai Sci. Inst., sec. 2, vol. 2, p. 22
Type-species: *Tofangoceras huroiniforme* Kobayashi, 1934

***Kopaninoceras kobayashii* Niko, Hamada and Yasui, 1989**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 154, p. 61, figs. 2-A, B
Holotype: UMUT PM18256
Shiroishi-osawa, Mt. Yokokura area, Ochi Town, Takaoka County, Kochi Prefecture
G3 Member, Yokokurayama Formation
Silurian (late Wenlock or early Ludlow)

***Kotoceras* Kobayashi, 1934 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 391
Type-species: *Kotoceras typicum* Kobayashi, 1934

***Kotoceras cylindricum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 393, pl. 12, figs. 7, 8, pl. 13, figs. 8, 9
Holotype: UMUT PM0623
Paratype: UMUT PM0622
Komei and Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Landeilo)

***Kotoceras multiseptum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 394, pl. 12, figs. 1, 2, pl. 13, figs. 1–3
Holotype: UMUT PM0625
Paratype: UMUT PM0627
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Kotoceras typicum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 392, pl. 11, figs. 1–4
Holotype: UMUT PM0619 (=PM0620 and PM0621)
Paratype: UMUT PM registration number unknown
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Lambeoceras sukoi* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 215, pl. 12, figs. 10, 11
Holotype: IGPS 55574
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Linormoceras* Kobayashi and Matumoto, 1942 n. gen.**
Japan. Jour. Geol. Geog., vol. 18, no. 4, p. 314
Type-species: *Linormoceras centrale* Kobayashi and Matumoto, 1942
Remarks: Teichert (1964) synonymized the genus with ***Armenoceras* Foerste, 1924.**

***Linormoceras centrale* Kobayashi and Matumoto, 1942**
Japan. Jour. Geol. Geog., vol. 18, no. 4, p. 314, pl. 31, figs. 7–9
Holotype: UMUT PM1904
Nantanchinkou, eastern Jehol, South Manchuria [Northeast

China]
Chosen Group
Middle Ordovician
Remarks: ***Armenoceras centrale***, new combination by Teichert (1964).

Lopingoceras hayasakai **Niko and Ozawa, 1997**
Paleont. Res., vol. 1, no. 1, p. 50, figs. 3-1–7
Holotype: ESN 2599
Paratype: ESN 2600
Loc. 2, Miharanoro, Tojo, Hiroshima Prefecture
Taishaku Limestone Group
Late Carboniferous or Early Permian (late Gzhelian or early Asselian)

Loxoceras yokoyamai **Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 186, pl. 18, figs. 9a–c
Holotype: UMUT PM0016
Makkol, Sandon-myon, Neietu Prefecture, Kogen-do, Corea [South Korea]
Makkol Limestone [Chikunsan Beds]
Ordovician (Caradoc?) [Middle Ordovician (late Llandeilo)]
Remarks: ***Sactoceras yokoyamai***, new combination by Kobayashi (1934). ***Leurorthoceras yokoyamai***, new combination by Shimizu and Obata (1935).

Manchuroceras **Ozaki, 1927 n. gen.** emend. Kobayashi, 1935
Jour. Geol. Soc. Japan, vol. 34, no. 401, p. 50 [Ozaki]
Jour. Geol. Soc. Japan, vol. 42, no. 506, p. 743 [Kobayashi]
Type-species: *Piloceras wolungense* Kobayashi, 1931

Manchuroceras hanense **Kobayashi, 1977**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 105, p. 24, pl. 3, figs. 2a–c
Holotype: UMUT PM4885
Godoo-am, Gurae-ri, Sangdong-myeon, Yeongweol-gun, Gangweon-do, South Korea
Jikdong (Chiktong) Limestone
Early Ordovician

Manchuroceras tenuise **Kobayashi, 1977**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 105, p. 23, pl. 4, figs. 2a, b
Holotype: UMUT PM4884
Guemdae-chon, Sanjang-myeon, Samcheok-gun, Gangweon-do, South Korea
Jikdong (Chiktong) Limestone
Early Ordoviocian

Maruyamaceras **Kobayashi, 1931 n. gen.**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 53
Type-species: *Maruyamaceras shimamurai* Kobayashi, 1931
Remarks: Teichert (1937) synonymized the genus with ***Polydesmia*** **Lorenz, 1906.**

Maruyamaceras peshanensis **Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 55, pl. 4, figs. 2a, b
Holotype: UMUT PM0227
Tung-yüeh-yang, Peshan-hsien, Province Shantung, Northeast China
Unnamed limestone
Early Ordovician (Wolungian)
Remarks: ***Maruyamacerina peshanensis***, new combination by Kobayashi (1936). ***Polydesmia peshanensis***, new combination by Teichert (1937). ***Polydesmia (Maruyamacerina) peshanense***, new combination by Kobayashi (1940). ***Polydesmia peshanensis***, retroactive combination by Teichert (1964).

Maruyamaceras shimamurai **Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 54, pl. 3, figs. 1a–d
Holotype: UMUT PM0225
Maruyama near Kenjiho, Koshu-gun, Kokai-do, North Korea
Maruyama Bed
Early Ordovician (Wolungian)
Remarks: ***Polydesmia shimamurai***, new combination by Teichert (1937).

Maruyamaceras watanabei **Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 54, pl. 3, figs. 2a–c
Holotype: UMUT PM0226
Maruyama near Kenjiho, Koshu-gun, Kokai-do, North Korea
Maruyama Bed
Early Ordovician (Wolungian)
Remarks: ***Polydesmia watanabei***, new combination by Teichert (1937).

Maruyamacerina **Kobayashi, 1936 n. gen.**
Chikyu, Globe, vol. 25, p. 335
Type-species: *Maruyamaceras peshanensis* Kobayashi, 1931
Remarks: Kobayashi (1940) treated ***Maruyamacerina*** as a subgenus of ***Polydesmia*** **Lorenz, 1906.** Teichert (1964) synonymized the genus (subgenus) with ***Polydesmia.***

Mericoceras guangxiense **Niko, Nishida and Kyuma, 1997**
Paleont. Res., vol. 1, no. 2, p. 101, figs. 3-4–6
Holotype: GS.C 125
Balai, Riucai, Guangxi Zhuangzu Autonomous Region, South China
Dala (Huanglong) Formation
Middle Carboniferous (Moscovian)

***Metarmenoceras kameii* Niko, 1990**
Jour. Paleont., vol. 64, no. 4, p. 596, figs. 3.3–3.5, 3.7
Holotype: UMUT PM18474
Loc. FH-1, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Gedinnian)

***Metaspyroceras insignis* Niko, 1993**
Jour. Paleont. , vol. 67, no. 2, p. 213, figs. 3.1–3.7
Holotype: UMUT PM18888
Paratypes: UMUT PM18491, PM18889–PM18891, HMNH-N004
Loc. FH-1, southern flank of Ozako Valley, Fukuji, Yoshiki-gun, Gifu Prefecture; 36° 13'14'' N, 137° 31'53''E
Fukuji Formation
Early Devonian (Gedinnian)

***Michelinoceras alticameratum* Kobayashi in Kobayashi, Katto and Hamada, 1984**
Res. Rep. Kochi Univ., vol. 32, p. 245, pl. 3, fig. 1
Holotype: KGS 3580
Shiroishi-ohsawa in Mt. Yokokura, Kochi Prefecture
Yokokurayama Formation
Late Silurian (early Ludlow)

***Michelinoceras hidense* Kobayashi, 1958**
Trans. Palaeont. Soc. Japan, N.S., no. 31, p. 250, pl. 37, figs. 1–7
Holotype: UMUT PM2315
Fukuji, Kamitakara Village, Yoshiki County, Prov. Hida, Gifu Prefecture
Fukuji Formation
Late Silurian (probably Ludlow) [Early Devonian]

***Michelinoceras mizobuchii* Kobayashi in Kobayashi, Katto and Hamada, 1984**
Res. Rep. Kochi Univ., vol. 32, p. 245, pl. 3, fig. 2
Holotype: KGS 3581
Shiroishi-ohsawa in Mt. Yokokura, Kochi Prefecture
Yokokurayama Formation
Late Silurian (early Ludlow)

***Michelinoceras yamakoshii* Niko, 1993**
Jour. Paleont., vol. 67, no. 2, p. 211, figs. 1.1–1.5, 1.12, 2.1
Holotype: UMUT PM18860
Paratypes: UMUT PM18477, PM18861–PM18864
Loc. FH-1, southern flank of Ozako Valley, Fukuji, Yoshiki-gun, Gifu Prefecture; 36° 13'14" N, 137° 31'53" E
Fukuji Formation
Early Devonian (Gedinnian)

***Michelinoceras yoshikiense* Niko, 1993**
Jour. Paleont., vol. 67, no. 2, p. 211, figs. 1.6–1.11, 2.2
Holotype: UMUT PM18872
Paratypes: UMUT PM18475, PM18476, PM18873–PM18875
Loc. FH-1, southern flank of Ozako Valley, Fukuji, Yoshiki-gun, Gifu Prefecture; 36° 13'14"N, 137° 31'53"E
Fukuji Formation
Early Devonian (Gedinnian)

***Mitorthoceras? kamitakarense* Niko, 1996**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 181, p. 355, figs. 7-1–10
Holotype: UMUT PM18497
Paratypes: UMUT PM18498, PM18519, PM19313–PM19316
Loc. FH-4, eastern slope of Mt. Sora, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Lochkovian)

***Mooreoceras kinnoi* Niko, 1990**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 159, p. 554, figs. 1-1–3, 5
Holotype: OCM G-SN01
Onimaru Quarry, Hikoroichi, Iwate Prefecture
H2 Member, Hikoroichi Formation
Early Carboniferous (Visean)

***Multicameroceras* Kobayashi, 1933 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 273
Type-species: *Ellesmeroceras? multicameratum* Kobayashi, 1931
Remarks: Chen and Teichert (1983) synonymized the genus with ***Sinoeremoceras* Kobayashi, 1933**.

***Multicameroceras cylindricum* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 274, pl. 2, fig. 14, pl. 4, fig. 5a, b
Holotype: UMUT PM0274
Paratype: UMUT PM0275
Wan-wan-kou, Niuhsintai Basin, South Manchuria [Northeast China]
Wanwankou Dolomite
Early Ordovician (late Ozarkian) [late Cambrian]
Remarks: Chen and Teichert (1983) synonymized ***Multicameroceras* Kobayashi, 1933** with ***Sinoeremoceras* Kobayashi, 1933**.

***Nybyoceras aigawaense* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 207, pl. 10, fig. 14, pl. 15, fig. 19
Holotype: IGPS 55542
Vicinity of Aigawa-mura, Kuantung Leased Territory, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: ***Wutinoceras aigawaense***, new combination by Chao *et al.* (1965).

***Nybyoceras compressum* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 208, pl. 11, figs. 1–3
Holotype: IGPS 55554
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: ***Wutinoceras? compressum***, new combination by Chao *et al.* (1965).

***Nybyoceras exortivum* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 209, pl. 11, figs. 12, 13, pl. 15, fig. 23
Holotype: IGPS 55547
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: ***Wutinoceras exortivum***, new combination by Chao *et al.* (1965).

***Nybyoceras marginale* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 209, pl. 11, fig. 10
Holotype: IGPS 55553
Vicinity of Wu-hu-tsui colliery, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: Shimizu and Obata (1936) synonymized the species with ***Armenoceras magnitubulatum* Endo, 1932.**

***Nybyoceras penhsiense* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 210, pl. 11, fig. 16
Holotype: IGPS 55538
Ta-pu, just north of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Nybyoceras tenuitubulatum* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 210, pl. 11, fig. 11
Holotype: IGPS 55552
Vicinity of Aigawa-mura, Kuantung Leased Territory, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Nybyoceras troedssoni* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 210, pl. 11, figs. 14, 15
Holotype: IGPS 55562
Vicinity of Wu-hu-tsui colliery, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Nybyoceras? annectans* Endo, 1935**
Sei. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 208, pl. 10, fig. 5
Holotype: IGPS 55568
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: ***Armenoceras annectance***, new combination by Shimizu and Obata (1936).

***Oncoceras katoi* Kobayashi, 1927**
see ***Onoceras katoi***

Onoceras [sic, nom. null., error for ***Oncoceras***] ***katoi* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 203, pl. 19, fig. 8
Holotype: UMUT PM0053
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Makkol Limestone
Ordovician (Caradoc?)
Remarks: ***Cyrtactinoceras? katoi***, new combination by Kobayashi (1934).

Ooceras[sic, nom. null, error for ***Oonoceras***]**? *tokunagai* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 202, pl. 18, figs. 10a, b
Holotype: UMUT PM0052
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Chikunsan Shale
Ordovician (Caradoc?) [Middle Ordovician (late Llandeilo)]
Remarks: ***Centroonoceras tokunagai***, new combination by Kobayashi (1934).

***Oonoceras? tokunagai* Kobayashi, 1927**
see ***Ooceras? tokunagai***

***Ordosoceras jeholense* Kobayashi, 1977**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 107, p. 128, pl. 17, figs. 1, 2, pl. 18, figs. 2–4
Holotype: UMUT PM3894
Nantanchinkou in southwestern part of Nanpiao coal-field, Jehol, Liaoning, Northesat China
Chosen Group
Middle Ordovician

***Ormoceras cricki* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 444, pl. 23, fig. 7, pl. 25, fig. 7
Holotype: UMUT PM0694
Paratype: UMUT PM0695
Farani and Komei, South Chosen [South Korea]
Tsuibon Limestone
Late Ordovician (early Caradoc)

***Ormoceras eccentricum* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 214, pl. 12, fig. 6, pl. 15, fig. 21
Holotype: IGPS 55571
Vicinity of Aigawa-mura, Kuantung Leased Territory, Manchoukuo [Northeast China]
Ssuyan Formation
Middle Ordovician

***Ormoceras foordi* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p.443, pl. 25, figs. 8, 9
Holotype: UMUT PM0693
Farani, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)

***Ormoceras japonicum* Niko, 1990**
Jour. Paleont., vol. 64, no. 4, p. 595, figs. 2.1–2.6, 3.6
Holotype: UMUT PM18472
Paratypes: UMUT PM18473, PM18781–PM18783
Loc. FH-3, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Gedinnian)

***Ormoceras koraiense* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 441, pl. 30, figs. 3–8
Holotype: UMUT PM0688
Paratype: UMUT PM0690
Kochiri and, Komei South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)

***Ormoceras langkawiense* Kobayashi, 1959**
Jour. Fac. Sci., Univ. Tokyo, sec. 2, vol. 11, pt. 4, p. 401, pl. 27, figs. 3a, b, 4a, b, 5a, b
Holotype: UMUT PM2344
Paratypes: UMUT PM2345, PM2346
Loc. 30, Kangar, Perlis, Northern Malaya [Malaysia]
"Setul Formation"
Late? Ordovician

***Ormoceras liaoningense* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 214, pl. 12, figs. 7–9
Holotype: IGPS 55570
Paratype: IGPS 55566
Vicinity of Wu-hu-tsui colliery, and Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: ***Parormoceras? liaoningense***, new combination by Shimizu and Obata (1936).

***Ormoceras woodwardsi* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 445, pl. 31, fig. 5
Holotype: UMUT PM0696
Paratype: UMUT PM registration number unknown
Komei and Keizan-son, South Chosen [South Korea]
Chikunsan and Tsuibon beds
Middle to Late Ordovician (late Llandeilo to early Caradoc)

***Ormoceras yamamotoi* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 215, pl. 12, fig. 16
Holotype: IGPS 55560
Ta-pu, just north of Pen-hsi-hu colliery, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Ormoceras? nanumforme* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8. p. 443,, pl. 29, figs. 10, 11
Holotype: UMUT PM0692
Makkol, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)

Orotocycloceras [sic, nom. null., error for ***Protocycloceras***]***? kogenense* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 183, pl. 18, fig. 8
Holotype: UMUT PM0012
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Makkol Limestone [Chikunsan Beds]
Ordovician (Caradoc?) [Middle Ordovician (late Llandeilo)]
Remarks: ***Sigmocycloceras kogenense***, new combination by Kobayashi (1934).

***Orthoceras coreanicum* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 181, pl. 18, fig. 6, pl. 19, figs. 3a–c
Syntypes: UMUT PM0008, PM0009
Makkol, Sandon-myon, Neietsu Prefecture, South Kogen-do, Corea [South Korea]

Makkol Limestone [Chikunsan Beds]
Ordovician (Caradoc?) [Middle Ordovician (late Llandeilo)]
Remarks: ***Sigmorthoceras coreanicum***, new combination by Kobayashi (1934).

***Orthoceras hadai* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 170, pl. 19, fig. 6
Holotype: UMUT PM0130
Tou-fang-kou, South Manchuria [Northeast China]
Toufangkou Limestone
Middle Ordovician

***Orthoceras kawasakii* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 180, pl. 18, fig. 4, pl. 19, fig. 1
Syntypes: UMUT PM0004, PM0005
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Chikunsan Shale and probably Tsuibon Limestone
Ordovician (Caradoc?) [Middle Ordovician]
Remarks: ***Sactorthoceras kawasakii***, new combination by Kobayashi (1934).

***Orthoceras makkolense* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 181, pl. 18, fig. 5, pl. 19, figs. 2a–c
Syntypes: UMUT PM0006, PM0007
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Chikunsan Shale?
Ordovician (Caradoc?) [Middle Ordovician]
Remarks: ***Sactorthoceras makkolense***, new combination by Kobayashi (1934).

***Orthoceras nakamurai* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 182, pl. 19, fig. 4
Holotype: UMUT PM0010
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Chikunsan Shale
Ordovician (Caradoc?) [Middle Ordovician (late Llandeilo)]

***Orthoceras reticulatum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 406, pl. 16, figs. 3–5
Holotype: UMUT PM0639
Komei, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Orthoceras seihekiense* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 405, pl. 16, figs. 7–9, pl. 17, figs. 1–5
Holotype: UMUT PM0638
Paratype: UMUT PM0637
Seihekiri, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: ***Tofangoceras? seihekiense***, new combination by Shimizu and Obata (1935).

***Orthoceras yüi* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 404, pl. 29, figs. 8, 9
Holotype: UMUT PM0635
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Orthocycloceras gomiense* Kobayashi in Kobayashi, Katto and Hamada, 1984**
Res. Rep. Kochi Univ., vol. 32, p. 248, pl. 3, fig. 6, pl. 4, fig. 2
Holotype: KGS 3585
Paratype: KGS 3588
Shiroishi-ohsawa in Mt. Yokokura, Kochi Prefecture
Yokokurayama Formation
Late Silurian (early Ludlow)

***Parachouteauoceras* Niko and Ozawa, 1997 n. gen.**
Paleont. Res., vol. 1, no. 1, p. 52
Type-species: *Parachouteauoceras bingoense* Niko and Ozawa, 1997

***Parachouteauoceras bingoense* Niko and Ozawa, 1997**
Paleont. Res., vol. 1, no. 1, p. 52, figs. 3-12–15
Holotype: ESN 2601
Paratypes: ESN 2602, 2603
Loc. 2, Miharanoro, Tojo, Hiroshima Prefecture
Taishaku Limestone Group
Late Carboniferous or Early Permian (late Gzhelian or early Asselian)

***Paravaginoceras* Kobayashi, 1934 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 389
Type-species: *Paravaginoceras parvodepressum* Kobayashi, 1934

***Paravaginoceras parvodepressum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 389, pl. 12, figs. 3–5
Holotype: UMUT PM0617
Kochiri, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)

***Piloceras wolungense* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 170, pl. 17, figs. 2,

3a, b, 6, pl. 18, figs. 2a, b, pl. 19, fig. 1
Syntypes: UMUT PM0124–PM0128
Chiu-shu-kou and Wo-lung, South Manchuria [Northeast China]
Wolung Limestone
Early Ordovician
Remarks: ***Manchuroceras wolungense***, new combination by Kobayashi (1935). ***Grabauoceras wolungense***, new combination by Shimizu and Obata (1936). Subsequently, Shimizu and Obata (1936, Jour. Shanghai Sci. Inst. sec. 2, vol. 5, p. 101) synonymized ***Grabauoceras* Shimizu and Obata** (1936, ditto, vol. 2, p. 18) with ***Manchuroceras* Ozaki, 1927**.

***Piloceras wolungense* Kobayashi var. *compressa* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 170, pl. 18, figs. 3a–f
Holotype: UMUT PM0129
Wo-lung, South Manchuria [Northeast China]
Wolung Limestone
Early Ordovician
Remarks: ***Manchuroceras wolungense compressa***, new combination by Kobayashi (1935). ***Grabauoceras compressum***, new combination by Shimizu and Obata (1936). Subsequently, Shimizu and Obata (1936, Jour. Shanghai Sci. Inst. sec. 2, vol. 5, p. 101) synonymized ***Grabauoceras* Shimizu and Obata** (1936, ditto, vol. 2, p. 18) with ***Manchuroceras* Ozaki, 1927**.

***Plectronoceras liaotungense* Kobayashi, 1935**
Japan. Jour. Geol. Geog., vol. 12, nos. 1, 2, p. 17, pl. 6, figs. 1–3
Holotype: UMUT PM0901
Pai-chia-shan, Wuhutsui Basin, Liaotung, South Manchuria [Northeast China]
Paichiashan Series, *Tsinania* Zone
Late Cambrian

***Pleuronautilus yahagiensis* Ehiro, 1995**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 179, p. 187, figs. 3-4; 4-5a–c, 6, 7
Holotype: IGPS 102684 (figs. 4-5a–c)
Paratypes: IGPS 102685, 102686
Nakadaira, Yahagi-machi, Rikuzen-takata City, Iwate Prefecture; 39°01'52"N, 141°31'08"E
Nakadaira Formation
Early Permian

***Plicatoceras* Niko, 1991 n. gen.**
Jour. Paleont., vol. 65, no. 6, p. 917
Type-species: *Plicatoceras nishidai* Niko, 1991

***Plicatoceras nishidai* Niko, 1991**
Jour. Paleont., vol. 65, no. 6, p. 917, figs. 1.1–1.6
Holotype: UMUT PM18481
Loc. FH-1, eastern slope of Mt. Sora, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Gedinnian)

***Protocycloceras chikunense* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 183, pl. 18, figs. 7a, b
Holotype: UMUT PM0011
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Chikunsan Shale
Ordovician (Caradoc?) [Middle Ordovician (late Llandeilo)]
Remarks: ***Cycloceras chikunense***, new combination by Kobayashi (1934).

***Protocycloceras? kogenense* Kobayashi, 1927**
see ***Orotocycloceras? kogenense***

***Protokionoceras? fessicancellatum* Kobayashi in Kobayashi, Katto and Hamada, 1984**
Res. Rep. Kochi Univ., vol. 32, p. 249, pl. 4, figs. 3a, b
Holotype: KGS 3587
Shiroishi-ohsawa in Mt. Yokokura, Kochi Prefecture
Yokokurayama Formation
Late Silurian (early Ludlow)
Remarks: ***Protokionoceras fessicancellatum*** in Niko, Hamada and Yasui (1989).

***Pseudorthoceras ouchii* Endo and Mori, 1969**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 74, p. 112, fig. 1
Holotype: GI., Tokyo Col. Domest. Sci. No. 585
Loc. T7, G2 valley on eastern slope of Takakura-yama hill, 7 km northwest of Yotsukura-cho, Iwaki City, Fukushima Prefecture
Kashiwadaira Formation, Takakurayama Group
Late Permian

***Robsonoceras? meridionale* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 376, pl. 10, fig. 7, pl. 11, figs. 9, 10, pl. 14, fig. 5
Syntypes: UMUT PM0607–PM0609
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: ***Dideroceras meridionale***, new combination by Lai and Tsi (1975).

***Sactoceras eccentricum* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 437,

pl. 27, figs. 7, 8
Holotype: UMUT PM0676
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: Teichert (1964) synonymized ***Sactoceras*** **Hyatt, 1884** with ***Ormoceras*** **Stokes, 1840**.

Sactoceras princeps **Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 437, pl. 28, fig. 1
Holotype: UMUT PM0677
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: Teichert (1964) synonymized ***Sactoceras*** **Hyatt, 1884** with ***Ormoceras*** **Stokes, 1840**.

Sactoceras shirakii **Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 438, pl. 25, figs. 3–6, pl. 27, figs. 12, 13
Holotype: UMUT PM0682
Paratypes: UMUT PM0678–PM0680
Komei and Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: Teichert (1964) synonymized ***Sactoceras*** **Hyatt, 1884** with ***Ormoceras*** **Stokes, 1840**.

Sactorthoceras **Kobayashi, 1934 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 407
Type-species: *Sactorthoceras gonioseptum* Kobayashi, 1934

Sactorthoceras gonioseptum **Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 411, pl. 16, fig. 6, pl. 18, figs. 1–3, pl. 20, fig. 9
Holotype: UMUT PM0650
Paratype: UMUT PM0649
Makkol and Komei, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

Sactorthoceras shimamurai **Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 408, pl. 19, figs. 1–3
Holotype: UMUT PM0643
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: Shimizu and Obata (1935) synonymized the species with ***Sactorthoceras gonioseptum*** **Kobayashi, 1934**.

Sactorthoceras tenuicurvatum **Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 409, pl. 16, figs. 1, 2, pl. 17, figs. 9, 10
Holotype: UMUT PM0645
Paratype: UMUT PM0646
Komei and Seihekiri, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

Sactorthoceras wongiforme **Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 410, pl. 20, fig. 10, pl. 31, figs. 1, 2
Holotype: UMUT PM0647
Paratype: UMUT PM0648
Makkol and Kochiri, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

Selkirkoceras taepaekense **Kobayashi, 1977**
Proc. Japan Acad., vol. 53, ser. B, no. 3, p. 92, figs. 1, 2
Syntypes: UMUT PM1703, PM4209
North of Dongjeom-ni and Kyesan-ch'on, Sangjang-myeon, Samcheok-gun, Kangweon-to, South Korea
Tsuibon Limestone
Late Ordovician (early to middle Cincinatian)

Shansinautilus **Yabe and Mabuti, 1935 n. gen.**
Japan. Jour. Geol. Geog., vol. 12, nos. 1, 2, p. 10
Type-species: *Shansinautilus ozakii* Yabe and Mabuti, 1935
Remarks: Kummel (1964) synonymized the genus with ***Pleuronautilus*** **Mojsisovics, 1882**.

Shansinautilus ozakii **Yabe and Mabuti, 1935**
Japan. Jour. Geol. Geog., vol. 12, nos. 1, 2, p. 11, pl. 4, fig. 1
Holotype: IGPS 51729
Shih-pu-tzui, Ping-ting-hsien, Shansi, China
Taiyuan Formation
Late Carboniferous (Uralian?)
Remarks: ***Pleuronautilus ozakii***, new combination by Kummel (1964).

Shantungoceras **Shimizu and Obata, 1936 n. gen.**
Jour. Shanghai Sci. Inst., sec. 2, vol. 2, p. 31
Type-species: *Armenoceras tateiwai* Kobayashi, 1934
Remarks: Teichert (1964) synonymized the genus with ***Armenoceras*** **Foerste, 1924**.

Sigmocycloceras **Kobayashi, 1934 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 424
Type-species: *Protocycloceras? kogenense* Kobayashi, 1927

Sigmorthoceras **Kobayashi, 1934 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 413
Type-species: *Orthoceras coreanicum* Kobayashi, 1927

***Sigmorthoceras sigmoidale* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 414, pl. 21, figs. 1–3
Holotype: UMUT PM0652
Makkol, South Chosen [South Korea]
probably Chikunsan Beds
Middle Ordovician

***Sinobactrites* Niko, Nishida and Kyuma, 1997 n. gen.**
Paleont. Res., vol. 1, no. 2, p. 107
Type-species: *Sinobactrites wuae* Niko, Nishida and Kyuma, 1997

***Sinobactrites wuae* Niko, Nishida and Kyuma, 1997**
Paleont. Res., vol. 1, no. 2, p. 107, figs. 5-1–4; 6
Holotype: GS.C 184
Faqing, Riupansui, Guizhou Province, South China
Dala (Huanglong) Formation
Middle Carboniferous (Moscovian)

***Sinoeremoceras* Kobayashi, 1933 n . gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 272
Type-species: *Eremoceras wanwanense* Kobayashi, 1931

***Spyroceras erectum* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 205, pl. 10, fig. 13, pl. 15, fig. 9
Holotype: IGPS 55544
Vicinity of Wu-hu-tsui colliery, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Spyroceras fukujiense* Niko, 1996**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 181, p. 350, figs. 3-3–11; 4-1–5
Holotype: UMUT PM18505
Paratypes: UMUT PM18506, PM18507, PM18512–PM18517, PM19145–PM19151, HMNH-N098
Loc. FH-1, southern flank of Ozako Valley, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Lochkovian)

***Spyroceras melolineatum* Niko, 1996**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 181, p. 352, figs. 4-6–11; 5-1–5
Holotype: UMUT PM18493
Paratypes: UMUT PM18483–PM18490, PM18494, PM19163, PM19164, HMNH-N005
Loc. FH-1, southern flank of Ozako Valley, Fukuji, Yoshiki-gun, Gifu Prefecture
D1 Member, Fukuji Formation
Early Devonian (Lochkovian)

***Spyroceras orientale* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 425, pl. 31, fig. 8–11
Holotype: UMUT PM0666
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: ***Subspyroceras orientale***, new combination by Shimizu and Obata (1935).

***Spyroceras orientale* Endo, 1935**
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 205, pl. 15, figs. 12, 13
Holotype: IGPS 55561
Vicinity of Shan-kang-yao, 3 miles south of Yen-tai colliery, Liaotung, Manchoukuo [Northeast China]
Kangyao Formation
Early Ordovician

***Stenopoceras japonicum* Nakazawa, 1960**
Japan. Jour. Geol. Geog., vol. 31, nos. 2–4, p. 123, pl. 10, figs. 1a, b, 2
Holotype: JP30001 (Kyoto Univ.)
Tenjinnoki, Towa-cho, Miyagi Prefecture
Tenjinnoki Formation
Middle Permian (Wordian?)

***Stereoplasmoceras cylindricum* Kobayashi, 1936**
Japan. Jour. Geol. Geog., vol. 13, nos. 3, 4, p. 239, pl. 26, fig. 5
Holotype: UMUT PM0019
Tou-fang-kou, South Manchuria [Northeast China]
Toufangkou Limestone
Middle Ordovician

***Stereoplasmoceras schindewolfi* Kobayashi, 1936**
Japan. Jour. Geol. Geog., vol. 13, nos. 3, 4, p. 238
Syntypes: UMUT PM0017, PM0224
Niu-shin-tai and Tung-yüeh-yang, South Manchuria [Northeast China]
Toufangkou Limestone
Middle Ordovician

***Stereoplasmoceras subcentrale* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 188, pl. 20, figs. 5a, b
Holotype: UMUT PM0022
Niu-shin-tai, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)

***Stereoplasmoceras submarginale* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 188, pl. 20, figs. 3a, b, 4

Syntypes: UMUT PM0020, PM0021 and two specimens (registration numbers unknown)
To-fan-go and Niu-shin-tai, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)
Remarks: ***Ormoceras submarginale***, new combination by Chao *et al.* (1965).

***Stereoplasmoceras teicherti* Kobayashi, 1936**
Japan. Jour. Geol. Geog. vol. 13, nos. 3, 4, p. 239, pl. 26, figs. 3, 4
Holotype: UMUT PM0223
North of Hichihyo-ri, Kosho-gun, North Heian-do, North Chosen [North Korea]
Toufangian limestone
Middle Ordovician

***Stereoplasmoceras tofangioides* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 433, pl. 24, fig. 1
Holotype: UMUT PM0670
Komei, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)

***Stereoplasmoceras tofangoense* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 172, pl. 19, figs. 7a–c
Holotype: UMUT PM0132
Tou-fang-kou, South Manchuria [Northeast China]
Toufangkou Limestone
Middle Ordovician
Remarks: ***Stereoplsmocerina tofangoense***, new combination by Kobayashi (1936). ***Stereoplasmoceras tofangoense***, retroactive combination by Sweet (1964).

***Stereoplasmoceras uedai* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 172, pl. 19, fig. 11
Holotype: UMUT PM0133
Tou-fang-kou, South Manchuria [Northeast China]
Toufangkou Limestone
Middle Ordovician

***Stereoplasmoceras yabei* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 434, pl. 20, figs. 1, 2, pl. 24, figs. 2, 3
Holotype: UMUT PM0671
Paratypes: UMUT PM0672, PM0673
Komei, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: ***Euhuronia yabei***, new combination by Shimizu and Obata (1936). ***Orthonybyoceras yabei***, new combination by Teichert (1964).

***Stereoplasmocerina* Kobayashi, 1936 n. gen.**
Japan. Jour. Geol. Geog., vol. 13, nos. 3, 4, p. 241
Type-species: *Stereoplasmoceras tofangoense* Kobayashi, 1931
Remarks: Sweet (1964) synomymized the genus with ***Stereoplasmoceras* Grabau, 1922.**

***Subvaginoceras* Shimizu and Obata, 1936 n. gen.**
Jour. Shanghai Sci. Inst., sec. 2, vol. 2, p. 13
Type-species: *Kotoceras typicum* Kobayashi, 1934
Remarks: The genus is invalid, see Kobayashi (1936).

***Sueroceras nishimurai* Niko, 1990**
Trans. Proc. Palaeont. Soc. Japan, N.S., no. 159, p. 558, figs. 1-6; 3-1–6
Holotype: OCM G234
Paratypes: OCM G235, G236
Onimaru Quarry, Hikoroichi, Iwate Prefecture
H2 Member, Hikoroichi Formation
Early Carboniferous (Visean)

***Tainoceras abukumaense* Hayasaka, 1957**
Sci. Rep. Yokohama Nat. Univ., sec. 2, no. 6, p. 24, pl. 8, figs. 1–3
Holotype: no record
Eastern slope of almost N-S trending ridge including Mt. Takakura-yama, Yotsukura, Iwaki City, Fukushima Prefecture; 37°08'34''N, 140°55'21''E
Kashiwadaira Formation
Middle Permian (Wordian or Capitanian)

***Tainoceras carinatum* Ehiro and Araki, 1997**
Paleont. Res., vol. 1, no. 1, p. 57, figs. 3-2a, b
Holotype: IGPS 103114
Loc. B-1 of Kurosawa River, Kamiyasse, Kesennuma City, Miyagi Prefecture; 38°58'29''N, 141°32'10''E
Upper part of the Ochiai Formation
Middle Permian (Capitanian)

***Tainoceras kitakamiense* Hayasaka, 1962**
Bull. Nat. Sci. Mus., vol. 6, no. 2, p. 140, pl. 12, figs. 1, 2, text-fig. 2
Holotype: NSM No. 5261
Imo, Yahagi-machi, Rikuzen-takata City, Iwate Prefecture
Kanokura Formation
Middle Permian (Wordian?)

***Tofangoceras* Kobayashi, 1927 n. gen.**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 189
Type-species: *Tofangoceras pauciannulatum* Kobayashi, 1927

***Tofangoceras endoi* Kobayashi, 1936**
Japan. Jour. Geol. Geog., vol. 13, nos. 3, 4, p. 241
Holotype: IGPS 55541 [?]
Tao-fang-kou, 2.5 miles northwest of Pen-hsi-hu, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician

***Tofangoceras huroniforme* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 435, pl. 27, figs. 9–11, 14
Holotype: UMUT PM0675
Paratype: UMUT PM0674
Farani, South Chosen [South Korea]
Tsuibon Beds
Late Ordovician (early Caradoc)
Remarks: ***Kogenoceras huroniforme***, new combination by Shimizu and Obata (1936).

***Tofangoceras irregulare* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 190, pl. 20, fig. 7
Holotype: UMUT PM0024
To-fan-go near Pen-hsi-hu, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)

***Tofangoceras pauciannulatum* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 189, pl. 20, fig. 6
Syntypes: UMUT PM0023 and a specimen (registration number unknown)
To-fan-go near Pen-hsi-hu and Hui-yao near Yen-tai, South Manchuria [Northeast China]
Tofango fossil bed
Ordovician (Caradoc?)

***Tofangocerina nanpiaoensis* Kobayashi and Matumoto, 1942**
Japan. Jour. Geol. Geog., vol. 18, no. 4, p. 313, pl. 31, figs. 10–12
Holotype: UMUT PM1902 (=PM1903)
Nantanchinkou, eastern Jehol, South Manchuria [Northeast China]
Chosen Group
Middle Ordovician
Remarks: ***Kogenoceras nanpiaoense***, new combination by Stait and Burrett (1987).

***Trocholites ammonioides* Kobayashi, 1934**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 8, p. 428, pl. 26, figs. 1–3
Holotype: UMUT PM0669
Makkol, South Chosen [South Korea]
Chikunsan Beds
Middle Ordovician (late Llandeilo)
Remarks: ***Schroederoceras? ammonioides***, new combination by Shimizu and Obata (1935). Furnish and Glenister (1964) synonymized ***Schroederoceras* Hyatt, 1894** with ***Discoceras* Barrande, 1867**.

***Tylonautilus permicus* Hayasaka, 1957**
Sci. Rep. Yokohama Nat. Univ., sec. 2, no. 6, p. 26, pl. 9, figs. 1, 2
Holotype: no record
Eastern slope of almost N-S trending ridge including Mt. Takakura-yama, Yotsukura, Iwaki City, Fukushima Prefecture; 37 08' 34''N, 140 55'21''E
Kashiwadaira Formation
Middle Permian (Wordian or Capitanian)

***Ukhtoceras hidense* Niko, 1998**
Paleont. Res., vol. 2, no. 2, p. 145, figs. 1-1–9
Holotype: UMUT PM27325
Loc. FH-1, Fukuji,. Kamitakara Village, Yoshiki-gun, Gifu Prefecture
Fukuji Formation
Early Devonian (Lochkovian)

***Vaginoceras frechi* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 179, pl. 18, figs. 3a, b
Holotype: UMUT PM0003
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Makkol Limestone
Ordovician (Caradoc?) [Early or Middle Ordovician]
Remarks: ***Kotoceras frechi***, new combination by Kobayashi (1934).

***Vaginoceras grabaui* Kobayashi, 1927**
Japan. Jour. Geol. Geog., vol. 5, no. 4, p. 178, pl. 18, figs. 1a–c, 2
Syntypes: UMUT PM0001, PM0002
Makkol, Sandon-myon, Neietsu Prefecture, Kogen-do, Corea [South Korea]
Chikunsan Shale
Ordovician (Caradoc?) [Middle Ordovician (late Llandeilo)]
Remarks: ***Kotoceras grabaui***, new combination by Kobayashi (1934).

***Wanwanoceras* Kobayashi, 1933 n. gen.**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 271
Type-species: *Wanwanoceras peculiare* Kobayashi, 1933

***Wanwanoceras peculiare* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 271, pl. 1, figs. 6, 10, pl. 2, fig. 12, pl. 4, fig. 9
Holotype: UMUT PM0267

Paratypes: UMUT PM0266, PM0268
Wan-wan-kou, Niuhsintai Basin, South Manchuria [Northeast China]
Wanwankou Dolomite
Early Ordovician (late Ozarkian) [Late Cambrian]

***Wolungoceras* Kobayashi, 1931 n. gen.**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 166
Type-species: *Wolungoceras foerstei* Kobayashi, 1931

***Wolungoceras chiushuense* Kobayashi, 1933**
Jour. Fac. Sci., Imp. Univ. Tokyo, sec. 2, vol. 3, pt. 7, p. 275, pl. 3, fig. 4
Holotype: UMUT PM0276
Chiu-shu-kou, Niuhsintai Basin, South Manchuria [Northeast China]
Wanwankou Limestone proper
Early Ordovician (late Ozarkian) [Late Cambrian]

***Wolungoceras foerstei* Kobayashi, 1931**
Japan. Jour. Geol. Geog., vol. 8, no. 3, p. 166, pl. 18, figs. 1a–c
Holotype: UMUT PM0117
Lao-hu-ting-kou, South Manchuria [Northeast China]
Wolung Limestone
Early Ordovician

***Wolungoceras minor* Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 40, pl. 6, figs. 1a, b, 2, 4a, b, pl. 8, fig. 6
Syntypes: UMUT PM0197–PM0199
Shorinri near Kenjiho, Koshu-gun, Kokai-do, North Korea
Shorin Bed
Early Ordovician (Wolungian)

***Yabeites* Endo, 1934 n. gen.**
Geology and Mining Products of Manchuria, p. 88 [1934, nom. nud.].
Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 216 [1935]
Type-species: Yabeites orientaris Endo, 1934
Remarks: Shimizu and Obata (1936) synonymized the genus with ***Armenoceras* Foerste, 1924**.

***Yabeites orientalis* Endo, 1934**
Geology and Mining Products of Manchuria, p. 88, fig. 65 [1934, nom. nud.], Sci. Rep., Tohoku Imp. Univ., ser. 2, vol. 16, p. 216, pl. 12, figs. 19, 20, pl. 15, fig. 22 [1935]
Holotype: IGPS 55539
Near Wu-hu-tsui colliery, Liaotung, Manchoukuo [Northeast China]
Ssuyen Formation
Middle Ordovician
Remarks: Shimizu and Obata (1936) renamed the species as ***Armenoceras wuhutsuiense***, because *A. orientale* was preoccupied by Endo (1932).

Paleozoic Bivalvia

Tomoki Kase

Department of Geology and Paleontology, National Science Museum, Tokyo 169-0073, Japan

***Acanthopecten onukii* Murata, 1964**
Trans. Proc. Pal. Soc. Japan, N. S., no. 54, p. 222, pl. 35, figs. 1a, b
Holotype: IGPS no. 85745
Paratype: IGPS no. 85756
Shigejizawa, Kamiyasse, Kesennuma City, Miyagi Prefecture
Lower part of Kanokura Formation
Middle Permian

***Acanthopecten spinosus* Hayasaka, 1925**
Sci. Rept. Tohoku. Imp. Univ., ser. 2, vol. 8, no. 2, p.10, pl.8, fig. 6
Lectotype: IGPS no. 22378
Imo, Yahagi-cho, Kesen-gun, Iwate Prefecture
Lower part of Kanokura Formation
Middle Permian

***Actinodontophora katsurenais* Ichikawa, 1951**
[typographical error of ***katsurensis***] see ***Actinodontophora katsurensis* Ichikawa, 1951**

***Actinodontophora katsurensis* Ichikawa, 1951**
Jour. Fac. Sci. Univ. Tokyo, ser. 2, vol. 7, nos. 6–10, p. 327, pl. 1, figs. 17a, b
Holotype: UMUT PM5306
Paratypes: UMUT PM5307-5309
Katsura, Sakawa-cho, Kochi Prefecture
Katsura Formation
Middle and Upper Permian

***Alula elegantissima* (Hayasaka, 1925)**
Sci. Rept. Tohoku. Imp. Univ., ser. 2, vol. 8, no. 2, p.21, pl.9, figs. 1, 1a, 2, 2a, 3–7
Syntypes: IGPS no. 8203, at least seven specimens
Kinshozan, Akasaka-cho, Gifu Prefecture
"Kuro zone", Akasaka Limestone
Middle Permian

***Annuliconcha kitakamiensis* Murata, 1964**
Trans. Proc. Pal. Soc. Japan, N. S., no. 54, p. 227, pl. 34, figs. 12a, b
Holotype: IGPS no. 22389
Paratype: IGPS no. 85735
Imo, Yahagi-cho, Kesen-gun, Iwate Prefecture
Lower part of Kanokura Formation
Middle Permian

***Anthracomya* (?) *jidoensis* Kobayashi, 1933** see ***Anthracosia? jidoensis* (Kobayashi, 1933)**

***Anthracosia? jidoensis* (Kobayashi, 1933)**
Japan. Jour. Geol. Geogr., vol. 10, nos. 3–4, p. 176, pl. 16, fig. 4
Syntypes: UMUT PM0432, two individuals on slab
Ritzuji-ri, Bitan-men, Heisho-gun, Kangwon-do (Kogen-do), South Korea
Jido Group
Lower? Permian

***Astartella toyomensis* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., Ser. Geol. Mineral, vol. 35, no. 1, p. 98, pl. 10, fig. 3
Holotype: UK, not registered
Kitazawa, Toyoma-cho, Miyagi Prefecture
Toyoma Formation
Upper Permian

***Aviculopecten hataii* Murata, 1964**
Trans. Proc. Pal. Soc. Japan, N. S., no. 54, p. 221, pl. 34, figs. 10a, b
Holotype: IGPS no. 85732
Toyozawa, Kamishishiori, Kesennuma City, Miyagi Prefecture
Shigejizawa member, Kanokura Formation
Middle Permian

***Aviculopecten hayasakai* Murata, 1964** see ***Etheripecten? hayasakai* (Murata, 1964)**

***Aviculopecten minöensis* Hayasaka, 1925** see ***Hayasakapecten minoensis* (Hayasaka, 1925)**

***Aviculopecten? onukii* Murata, 1969**
Saito Ho-on Kai Mus., Res. Bull., no. 38, p. 17, figs. 1a–d, 2a, b
Holotype: IGPS no. 91380
Paratypes: IGPS no. 91381-91383
Senmatsu, Fujisawa-cho, Iwate Prefecture
Upper Permian

***Aviculopecten reticularis* Hayasaka, 1925** see ***Hayasakapecten reticularis* (Hayasaka, 1925)**

***Aviculopecten sasakii* Murata, 1964** see ***Hayasakapecten sasakii* (Murata, 1964)**

***Aviculopecten shiroshitai* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., Ser. Geol. Mineral, vol. 35, no. 1, p. 66, pl. 4, figs. 1, 2
Holotype: UK, not registered
Gujo, Oe-cho, Kyoto Prefecture

Gujo Formation
Upper Permian

***Aviculopinna rectangularis* (Hayasaka, 1920)**
Jour. Geol. Soc. Tokyo, vol. 27, no. 327, p. 87, text-figs. 1–3
Holotype: IGPS, not registered
Imo, Yahagi-cho, Iwate Prefecture
Lower part of Kanokura Formation
Middle Permian

***Bakevellia* (*Bakevellia*) *gujoensis* Nakazawa, 1959**
Mem. Coll. Sci. Kyoto Univ., ser. B, vol. 26, no. 2, p. 198, pl. 3, figs. 5a, b
Holotype: UK JP10044
Gujo, Oe-cho, Kyoto Prefecture
Upper part of Gujo Formation
Upper Permian

***Cenipecten kesenensis* Hayasaka, 1925** see ***Euchondria? kesenensis* (Hayasaka, 1925)**

***Chaenomya* (*Vacunella*) *rostrata* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 102, pl. 10, fig.7
Lectotype: UK, not registered
Gujo, Oe-cho , Kyoto Prefecture
Gujo Formation
Upper Permian

***Cleionychia oviformis* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 352, pl. 3, fig. 14
Holotype: UMUT PM0553
Kochi-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Tsuibon beds, Chosen Group
Middle Ordovician

Clionychia oviformis* Kobayashi, 1934** [error of ***Cleionychia] see ***Cleionychia oviformis* Kobayashi, 1934**

***Conularia rectangularis* Hayasaka, 1920** see ***Aviculopinna rectangularis* (Hayasaka, 1920)**

***Costatoria katsurensis* Nakazawa, 1967** [new name for ***Schizodus? radiatus* Ichikawa, 1951**]
Contr. Celebr. Prof. I. Hayasaka's 76th Birthday, p. 169, pl. 6, fig. 11
Holotype: UMUT PM5320
Katsura, Sakawa-cho, Kochi Prefecture
Katsura Formation
Upper Permian

***Costatoria kobayashii* (Kambe, 1951)**
Trans. Proc. Pal. Soc. Japan, N. S., no. 2, p. 54, pl. 4, figs. 7a, b
Lectotype: UMUT MM6477
Gujo, Oe-cho, Kyoto Prefecture
Gujo Formation
Upper Permian

***Ctenodonta corbuliformis* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 349, pl. 3, figs. 7, 22, 23
Syntypes: UMUT PM0546–0548
Makkol and Kochi-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan and Tsuibon beds, Chosen Group
Middle Ordovician

***Ctenodonta coreanica* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 347, pl. 3, fig. 16
Holotype: UMUT PM0540
Paratypes: UMUT PM0541, 0542
Makkol, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan bed, Chosen Group
Middle Ordovician

***Ctenodonta dotensis* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 347, pl. 4, fig.18
Holotype: UMUT PM0539
Doten-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Tsuibon beds, Chosen Group
Middle Ordovician

***Ctenodonta nasutaformis* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 346, pl. 4, figs. 13–14
Holotype: UMUT PM0537
Paratype: UMUT PM0538
Doten-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Tsuibon beds, Chosen Group
Middle Ordovician

***Ctenodonta nipponica* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 345, pl. 3, figs. 1–3
Holotype: UMUT PM0535
Paratype: UMUT PM0536
Makkol, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan bed, Chosen Group

Middle Ordovician

***Ctenodonta oblongata* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 350, pl. 4, fig. 12
Holotype: UMUT PM0549b
Paratype: UMUT PM0549a
Makkol, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan bed, Chosen Group
Middle Ordovician

***Ctenodonta samenoha* Kobayashi, 1934** see ***Palaeoconcha? samenoha* (Kobayashi)**

***Ctenodonta* (?) *striata* Kobayashi, 1934** see ***Ctenodonta? striata* Kobayashi, 1934**

***Ctenodonta? striata* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 351, pl. 4, fig. 11
Lectotype: UMUT PM0550
Kochi-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Tsuibon beds, Chosen Group
Middle Ordovician

***Ctenodonta subsymmetrica* Kobayashi, 1934** see ***Palaeoconcha? subsymmetrica* (Kobayashi, 1934)**

***Cyrtodonta? prima* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 9, p. 532, pl. 7, fig. 10
Holotype: UMUT PM0812
Doten, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Clarkella zone, Chiktong Limestone, Chosen Group
Middle Ordovician

***Ensipteria onukii* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 65, pl. 3, figs. 12a, b
Holotype: UK, not registered
Tenjinnoki, Towa-cho, Miyagi Prefecture
Tenjinnoki Formation, Maiya Group
Middle Permian

***Etheripecten? hayasakai* (Murata, 1964)**
Trans. Proc. Pal. Soc. Japan, N. S., no. 54, p. 219, pl. 34, figs. 4a, b
Holotype: IGPS no. 85737
Paratypes: IGPS no. 85738, 85739, 85741
Toyazawa, Kamishishiori, Kesennuma City, Miyagi Prefecture
Shigejizawa member of Kanokura Formation
Middle Permian

***Euchondria? kesenensis* (Hayasaka, 1925)**
Sci. Rept. Tohoku. Imp. Univ., ser. 2, vol. 8, no. 2, p.11, pl. 8, figs. 8, 8a
Holotype: IGPS no. 22383
Imo, Yahagi-cho, Kesen-gun, Iwate Prefecture
Lower part of Kanokura Formation
Middle Permian

***Goniophora orientalis* Kobayashi, 1934** see ***Goniophora* (*Cosmogoniophora*) *orientalis* Kobayashi, 1934**

***Goniophora* (*Cosmogoniophora*) *orientalis* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser.2, vol. 3, no. 8, p. 357, pl. 3, fig. 4
Holotype: UMUT PM0562
Paratype: UMUT PM0563
Kochi-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Tsuibon beds, Chosen Group
Middle Ordovician

***Guizhoupecten miyamoriensis* (Murata, 1967)**
Trans. Proc. Pal. Soc. Japan, N. S., no. 54, p. 229, pl. 35, figs. 14a, b
Holotype: IGPS no. 85733
Southeastern slope of Hiryuyama, Miyamori-mura, Iwate Prefecture
Hiryuyama Formation
Middle Permian

***Gujocardia oviformis* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 91, pl. 9, fig. 1
Holotype: UK, not registered
Gujo, Oe-cho , Kyoto Prefecture
Gujo Formation
Upper Permian

***Hayasakapecten minoensis* (Hayasaka, 1925)**
Sci. Rept. Tohoku. Imp. Univ., ser. 2, vol. 8, no. 2, p. 5, pl. 8, fig. 1
Lectotype: IGPS no. 8204
Kinshozan, Akasaka-cho, Gifu Prefecture
"Upper Dairi zone", Akasaka Limestone
Middle Permian

***Hayasakapecten reticularis* (Hayasaka, 1925)**
Sci. Rept. Tohoku. Imp. Univ., ser. 2, vol. 8, no. 2, p. 5, pl. 8, fig. 2
Holotype: IGPS no. 22227

Kinsho-zan, Akasaka-cho, Gifu Prefecture
"Upper Dairi zone", Akasaka Limestone
Middle Permian

***Hayasakapecten sasakii* (Murata, 1964)**
Trans. Proc. Pal. Soc. Japan, N. S., no. 54, p. 218, pl. 34, figs. 1a, b
Holotype: IGPS no. 85730
Paratype: IGPS no. 85731
Shigejizawa, Kamiyose, Kesennuma City, Miyagi Prefecture
Lower part of Kanokura Formation
Middle Permian

***Hayasakapecten shimizui* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 70, pl. 5, fig. 8
Holotype: UK, not registered
Tenjinnoki, Towa-cho, Miyagi Prefecture
Tenjinnoki Formation, Maiya Group
Middle Permian

***Limipecten bandoi* Murata, 1969**
Saito Ho-on Kai Mus., Res. Bull., no. 38, p. 18, figs. 1a–c
Holotype: IGPS no. 91384
Nagahata, Towa-cho, Tome-gun, Miyagi Prefecture
The lower part of Toyama Formation
Upper Permia

***Lopha*? *murakamii* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 82, pl. 7, fig. 8a, b
Holotype: UK, not registered
Gujo, Oe-cho, Kyoto Prefecture
Gujo Formation
Upper Permian

***Lopha*? *teranosawensis* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 83, pl. 7, fig. 9
Holotype: UK, not registered
Teranosawa, Towa-cho, Miyagi Prefecture
Tenjinnoki Formation, Maiya Group
Middle Permian

***Megalodon* (*Megalodon*) *yanceyi* Nakazawa, 2002**
Paleont. Res., vol. 6, no. 1, p. 69, figs. 3, 4a–f
Holotype: KUGM100025
Paratype: KUGM100026
H. S. Lee No. 8 Mine, Perak, Malaysia
H. S. Lee Formaton
Permian

***Modiolopsis elongata* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 356, pl. 4, figs. 9, 10
Holotype: UMUT PM0559
Makkol, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan beds, Chosen Group
Middle Ordovician

***Modiolopsis hinomotoensis* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 356, pl. 3, figs. 12, 13
Holotype: UMUT PM0560
Saisho-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan beds, Chosen Group
Middle Ordovician

***Modiolopsis kogenensis* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 354, pl. 3, figs. 18, 19
Holotype: UMUT PM0556
Paratype: UMUT PM0557
Makkol, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan beds, Chosen Group
Middle Ordovician

***Modiolopsis reedi* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 355, pl. 4, fig. 21
Holotype: UMUT PM0558
Makkol, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan beds, Chosen Group
Middle Ordovician

***Modiolopsis rugosa* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 357, pl. 4, fig. 22
Holotype: UMUT PM0561
Saisho-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan beds, Chosen Group
Middle Ordovician

***Myophoria goldfussi* v. Alberti var. *kobayashii* Kambe, 1951** see ***Costatoria kobayashii* (Kambe, 1951)**

***Myophoria japonicus* Hayasaka, 1925** see ***Schizodus japonicus* (Hayasaka, 1925)**

***Myophoria sub-elegans* Wagen var. *tobai* Hayasaka, 1923** see ***Schizodus tobai* (Hayasaka, 1923)**

***Neoschizodus permicus* Nakazawa, 1960** see ***Neoschizodus (Neoschizodus) permicus* Nakazawa, 1960**

***Neoschizodus (Neoschizodus) kitakamiensis* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 87, pl. 8, fig. 5a, b
Holotype: UK, not registered
Teranosawa, Maiya Towa-cho, Miyagi Prefecture
Tenjinnoki formation, Maiya Group
Middle Permian

***Neoschizodus (Neoschizodus) kobayashii* (Ichikawa, 1951)**
Jour. Fac. Sci. Univ. Tokyo, ser. 2, vol. 7, nos. 6–10, p. 325, pl. 1, fig. 4
Holotype: UMUT PM5317
Paratypes: UMUT PM5318-5319
Katsura, Sakawa-cho, Kochi Prefecture
Katsura Formation
Upper? Permian

***Neoschizodus (Neoschizodus) permicus* Nakazawa, 1960**
Japan. Jour. Geol. Geogr., vol. 31, no. 1, p. 55, pl. 6, fig. 5
Holotype: UK JP10001
Gujo, Oe-cho , Kyoto Prefecture
Gujo Formation
Upper Permian

***Nuculites ichikawai* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 35, pl. 1, fig. 1
Holotype: UK, not registered
Katsura, Sakawa-cho, Kochi Prefecture
Katsura Formation
Upper Permian

***Nuculites kimurai* Hayasaka, 1924**
Japan. Jour. Geol. Geogr., vol. 2, no. 4, p. 49, pl. 6, figs. 1, 2
Holotype: IGPS no. 22418
Myojinyama, Ogachi-cho, Miyagi Prefecture
Toyoma Formation
Upper Permian

***Nuculites? suboblongatus* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 351, pl. 4, fig. 20
Holotype: UMUT PM0551
Makkol, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan bed, Chosen Group
Middle Ordovician

***Nuculopsis (Nuculopsis) orientalis* Ichikawa, 1951**
Jour. Fac. Sci. Univ. Tokyo, sec. 2, vol. 7, nos. 6–10, p. 322, pl. 1, fig. 1
Holotype: UMUT PM5311
Katsura, Sakawa-cho, Kochi Prefecture
Katsura Formation
Upper Permian

***Nuculopsis (Palaeonucula) orientalis* Ichikawa, 1951** see ***Nuculopsis (Nuculopsis) orientalis* Ichikawa, 1951**

***Parallelodon obsoletiformis* Hayasaka, 1925** see ***Parallelodon (Parallelodon) obsoletiformis* Hayasaka, 1925**

***Parallelodon (Parallelodon) obsoletiformis* Hayasaka, 1925**
Sci. Rept. Tohoku. Imp. Univ. ser. 2, vol. 8, no. 2, p. 18, pl.9, figs. 15, 16, 16a
Lectotype: IGPS no. 22392
Kinshozan, Akasaka-cho, Gifu Prefecture
"Kuro" zone", Akasaka Limestone
Middle Permian

***Palaeoneilo ogachiensis* Hayasaka, 1924**
Japan. Jour. Geol. Geogr., vol. 2, no. 4, p. 49, pl. 6, figs. 8–12
Syntypes: IGPS not registered, two specimens
Myojinyama, Ogachi-cho, Miyagi Prefecture
Toyoma Formation
Upper Permian

***Palaeoconcha? samenoha* (Kobayashi)**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 348, pl. 3, figs. 10, 11
Syntypes: UMUT PM0544, 0545
Makkol, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Chikunsan bed, Chosen Group
Middle Ordovician

***Palaeoconcha? subsymmetrica* (Kobayashi, 1934)**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 348, pl. 4, figs. 7–8
Holotype: UMUT PM0543
Kochi-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Tsuibon beds, Chosen Group
Middle Ordovician

***Permophorus tenuistriatus* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 92, pl. 9, figs. 7–9
Syntypes: UK, not registered, at least two specimens
Gujo, Oe-cho , Kyoto Prefecture
Gujo Formation
Upper Permian

***Promytilus maiyensis* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 49, pl. 2, fig. 5
Holotype: UK, not registered
Tenjinnoki, Towa-cho, Miyagi Prefecture
Tenjinnoki Formation, Maiya Group
Middle Permian

***Pseudoactinodontophora yabei* Murata, 1971**
Trans. Proc. Pal. Soc. Japan, N. S., no. 82, p. 112, pl. 14, figs. 1a, b, 4
Holotype: IGPS no. 86885
Paratypes: IGPS no. 86886A, B
Motoiwazawa, southwest of Kawaguchi, Sumita-cho, Iwate Prefecture
Lower part of Motoiwazawa Sandstone Member, Sakamotozawa Formation
Lower Permian

***Pseudopermophorus uedai* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 94, pl. 9, figs. 10, 11
Syntypes: UK, not registered, least two seven specimens
Kitazawa, Toyoma-cho , Miyagi Prefecture
Toyoma Formation
Upper Permian

***Pterinea? subasperula* Kobayashi, 1931**
Bull. Geol. Surv. Chosen (Korea), vol. 11, no. 1, p. 32, pl. 1, figs. 1a, b
Holotype: UMUT PM0180
Shorin-ri near Kenjiho, Koshu-gun, Huanghae-do (Kokai-do), North Korea
Shorin beds, Chosen Group
Lower Ordovician

***Pyramus planus* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 45, pl. 1, fig. 5
Holotype: UK, not registered
Gujo, Oe-cho , Kyoto Prefecture
Gujo Formation
Upper Permian

***Sanguinolites bisectus* Hayasaka, 1925** see ***Sanguinolites? bisectus* Hayasaka, 1925**

***Sanguinolites? bisectus* Hayasaka, 1925**
Sci. Rept. Tohoku. Imp. Univ., ser. 2, vol. 8, no. 2, p. 16, pl. 8, fig. 10
Holotype: IGPS no. 22414
Hikoroichi, Ofunato City, Iwate Prefecture
Lower Carboniferous

***Sanguinolites ishii* Nakazawa, 2002**
Paleont. Res., vol. 6, no. 1, p. 68, fig. 2
Holotype: KUGM HP100027
H. S. Lee No. 8 Mine, Perak, Malaysia
H. S. Lee Formaton
Permian

***Sanguinolites kamiyassensis* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 42, pl. 11, figs. 3, 4
Holotype: UK, not registered
Kamiyasse, Kesennuma City, Miyagi Prefecture
Shigejizawa member, Kanokura Formation
Middle Permian

***Schizodus japonicus* (Hayasaka, 1925)**
Sci. Rept. Tohoku. Imp. Univ., ser. 2, vol. 8, no. 2, p. 16, pl. 8, fig. 14
Lectotype: IGPS no. 22422
Kinshozan, Akasaka-cho, Fuwa-gun, Gifu Prefecture
"Kuro zone", Akasaka Limestone
Middle Permian

***Schizodus kobayashii* Ichikawa, 1951** see ***Neoschizodus (Neoschizodus) kobayashii* (Ichikawa, 1951)**

***Schizodus? radiatus Ichikawa,* 1951** see ***Costatoria katsurensis* Nakazawa, 1967**

***Schizodus tobai* (Hayasaka, 1923)**
Japan. Jour. Geol. Geogr., vol. 2, no. 4, p. 109, pl. 15, figs. 4–8
Syntypes: IGPS nos. 8403-8407, five specimens
Imo, Yaguchi-cho, Iwate Prefecture
Lower part of Kanokura Formation
Middle Permian

***Solenomorpha elegantissima* Hayasaka, 1925** see ***Alula elegantissima* (Hayasaka, 1925)**

***Streblochondria miyamoriensis* Murata, 1967** see ***Guizhoupecten miyamoriensis* (Murata, 1967)**

***Tambanella gujoensis* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 64, pl. 4, figs. 7, 8
Holotype: UK, not registered
Gujo, Oe-cho, Kyoto Prefecture
Upper part of Gujo Formation
Upper Permian

***Towapteria nipponica* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 59, pl. 3, fig. 8

Holotype: UK, not registered
Tenjinnoki, Towa-cho, Miyagi Prefecture
Tenjinnoki Formation, Maiya Group
Lower to Upper Permian

***Waagenoperna* (*Permoperna*) *hayamii* Nakazawa and Newell, 1968**
Mem. Fac. Sci. Kyoto Univ., ser. Geol. Mineral, vol. 35, no. 1, p. 62, pl. 3, fig. 11
Holotype: UK, not registered
Tenjinnoki, Towa-cho, Miyagi Prefecture
Tenjinnoki Formation, Maiya Group
Lower to Middle Permian

<Class Rostroconchia>

***Conocardium japonicum* Nishida, 1968**
Trans. Proc. Pal. Soc. Japan, N. S., no. 69, p. 208, pl. 23, fig. 1
Holotype: ASM no. 5501
The entrance of Shuchikujo, Isa-machi, Mine City, Yamaguchi Prefecture
Akiyoshi limestone Group
Upper Carboniferous

***Conocardium* (*Conocardium*) *japonicum* Nishida, 1968** see ***Conocardium japonicum* Nishida, 1968**

***Eopteria*? *trilobata* Kobayashi, 1934**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 8, p. 493, pl. 44, figs. 9, 10
Holotype: UMUT PA0784
Kochiri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Tsuibon beds, Chosen Group
Middle Ordovician

***Ribeiria* (?) *coreanica* Kobayashi, 1934** see ***Technophorus coreanicus* (Kobayashi, 1934)**

***Technophorus coreanicus* (Kobayashi, 1934)**
Jour. Fac. Sci. Imp. Univ. Tokyo, ser. 2, vol. 3, no. 9, p. 576, pl. 4, fig. 18
Holotype: UMUT PA0900
Saisho-ri, Taebaeksan (Taihakusan) area, Kangwon-do (Kogen-do), South Korea
Clarkella zone, Chiktong Limestone, Chosen Group
Lower Ordovician

Supplementry data

Crinoidea (Supplement)

Tatsuo Oji

Department of Earth and Planetary Science, University of Tokyo, Tokyo 113-0033, Japan

***Pernerocrinus hayasakai* (Minato and Minoura, 1977)**
Jour. Fac. Sci., Hokkaido Univ., Vol. 4, no. 22, (1987), p. 339-341, pl. 1, figs. 1-3, pl. 3, fig. 1
Ohno, Hikoroichi, Ofunato City, Iwate Prefecture
Ohno Formation
Lower Devonian
(Specimens assigned to this species were originally described as a tabulate coral *Ohnopora hayasakai*, but later Minoura (1987) transfered to a species of an inadunate crinoid genus *Pernerocrinus*)

***Pernerocrinus perforatus* Minoura, 1978**
Jour. Fac. Sci., Hokkaido Univ., Vol. 4, no. 22 (1987), p. 341-344, pl. 2, figs. 1-3
Ohfunezawa, Okusakamotozawa, Hikoroichi, Ofunato City, Iwate Prefecture
Ohno Formation
Lower Devonian

Paleozoic and Mesozoic corals (Supplement)

Tetsuo Sugiyama[1] and Yoichi Ezaki[2]

[1]Department of Earth System Science, Faculty of Science, Fukuoka University, Fukuoka 814-0180, Japan
[2]Department of Geosciences, Faculty of Science, Osaka City University, Osaka 558-8585, Japan

***Heterophyllia kitakamiensis* Yabe and Sugiyama, 1940**
Jour. Geol. Soc. Japan, vol. 47, no. 557, p. 82, pl. 4 (1), figs. 1-7, text-fig. 1, 1-7
Holotype: IGPS no. 63272
Pass between Higuchi-zawa in Kawauchi and Onimaru in Omori, Ofunato City, Iwate Prefecture
Onimaru Formation
Visean, Early Carboniferous

Non-marine Mollusca (Supplement)

Keiji Matsuoka[1] and Hiroaki Ugai[2]

[1] Toyohashi Museum of Natural History, 1-238, Oiwa-cho, Toyohashi, Aichi 441-3147, Japan
[2] Goshoura Cretaceous Museum, Goshoura-cho 4310-5, Amakusa, Kumamoto Prefecture 866-0321, Japan

Non-marine Gastropoda

***Pachymelania kalewana* Kotaka and Uozumi, 1962**
Trans. Proc. Palaeont. Soc. Japan, N. S., no. 47, p. 303, Pl. 47, figs. 1-11
Syntype: IGPS coll. cat. nos. 79323-3, 79323-5, 79323-6, 79323-7, 79323-10, 79323-11, U. H. Reg. Nos. 13696(c), 13696(d), 13696(e), 13696(f), 13696(g)
Kalewa Coal Mine, Mawhataung area near the small tributary of the Mittha River, one of the tributaries of the Chindowin River, Northern Burma (Nyanmar)
Yaw Formation
Eocene (Late Eocene)

Non-marine Bivalvia

***Nippononaia carinata* Kobayashi, 1968**
Geol. Palaeont. Southeast Asia, vol. 4, p. 130, pl. 21, figs. 1a-b
Holotype: ? (pl. 21, figs. 1a-b)
Nam Phung dam site, Amphone Mukdahan, Changwat Sakon Nakhon in the northeastern part of the Khorat Plateau, Thailand
Phu Phan Formation
Cretaceous

***Nippononaia* (*Mekongiconcha*) *robusta* Kobayashi, 1968**
Geol. Palaeont. Southeast Asia, vol. 4, p. 132, pl. 21, figs. 3a-b
Holotype: ? (pl. 21, figs. 3a-b)
Nam Phung dam site, Amphone Mukdahan, Changwat Sakon Nakhon in the northeastern part of the Khorat Plateau, Thailand
Phu Phan Formation
Cretaceous

***Nippononaia* (*Mekongiconcha*) *subquadrata* Kobayashi, 1968**
Geol. Palaeont. Southeast Asia, vol. 4, p. 132, pl. 20, fig. 5
Holotype: ? (pl. 20, fig. 5)
Nam Phung dam site, Amphone Mukdahan, Changwat Sakon Nakhon in the northeastern part of the Khorat Plateau, Thailand
Phu Phan Formation

Cretaceous

***Plicatotrigonioides* (?) *subovalis* Kobayashi, 1968**
Geol. Palaeont. Southeast Asia, vol. 4, p. 128, pl. 20, figs. 1, 2
Holotype: ? (pl. 20, figs. 1a-b), Paratype : ? (pl. 20, fig. 2)
Nam Phung dam site, Amphone Mukdahan, Changwat Sakon Nakhon in the northeastern part of the Khorat Plateau, Thailand
Phu Phan Formation
Cretaceous

***Plicatotrigonioides* (?) *hoffeti* Kobayashi, 1968**
Geol. Palaeont. Southeast Asia, vol. 4, p. 129, pl. 20, figs. 1, 2
Holotype: ? (*Unio* cf. *reesidei* Hoffet, Bull. Serv. geol. l'Indochine, vol. 24, no. 1, p. 16, pl. 5, fig. 1)
Ban Na Gnom, North of Muong Phalane, Lower Laos
Cretaceous formation
Cretaceous

***Plicatounio namphungensis* Kobayashi, 1968**
Geol. Palaeont. Southeast Asia, vol. 4, p. 133, pl. 21, figs. 2a-c
Holotype: ? (pl. 21, figs. 2a-c)
Nam Phung dam site, Amphone Mukdahan, Changwat Sakon Nakhon in the northeastern part of the Khorat Plateau, Thailand
Phu Phan Formation
Cretaceous

***"Unio" sampanoides* Kobayashi, 1968**
Geol. Palaeont. Southeast Asia, vol. 4, p. 134, pl. 22, fig.s 2a-b
Holotype: ? (pl. 22, figs. 2a-b)
Nam Phung dam site, Amphone Mukdahan, Changwat Sakon Nakhon in the northeastern part of the Khorat Plateau, Thailand
Phu Phan Formation
Cretaceous

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