

A New Coral Species from a Pebble in the Basal Limestone  
Conglomerate of the Triassic Adoyama Formation  
at Karasawa in the Kuzu Area, Tochigi  
Prefecture, Japan

By

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**Introduction**

Recently, the junior author has collected an interesting coral specimen from a pebble in the basal limestone conglomerate of the Triassic Adoyama Formation at Karasawa in the Kuzu area, Tochigi Prefecture, Japan. The present study is based on this specimen, and a new coral species, *Paraipciphyllum karasawense* is described.

**Systematic description**

Genus *Paraipciphyllum* WU 1963  
*Paraipciphyllum karasawense* n. sp.

Plate 1, figs. 1-3

Corallum is compound and massive. Corallites are polygonal, usually five or six sided and measure 4.0 to 6.0 mm in diameter in mature stage. Corallite wall is rather thin, partly vanishing. Septa are in two orders, major and minor in alternation, relatively thin and sinuous. These show the fibro-normal type under microscope. Major ones are usually 13 to 17 in number, and most of them extend near the axial structure. Counter one usually unites with the axial structure. Minor ones are short, almost less than 1/2 the length of the major. Dissepiments are arranged in concentric, angulo-concentric or irregular patterns. Lonsdaleoid dissepiments rarely present. Axial structure shows the arachnoid type in transverse section in mature stage and measures 1.0 to 1.2 mm across in mature stage. It is composed of septal lamellae, axial tabellae and a distinct long median plate.

In longitudinal section, dissepimentarium occupies about 1/2 the width of a corallite, consists of globose and elongate dissepiments. Globose ones are usually arranged

in three rows, convex sides facing upwards and inwards. Elongate ones convex facing inwards; these not well developed. Horizontal and clino tabulae are seen in tabularium. Dome-like axial tabellae and a median plate present.

*Remarks:* The present form is similar to the species of the genus *Ipciphyllum* in having thin corallite wall, lacking canal and without tertiary septa. However, the present authors consider that it may be included into the genus *Paraipiphyllum* than the genus *Ipciphyllum* in having partly vanishing corallite wall. It resembles *Paraipiphyllum eleganteum* WU (1963, p. 501, pl. 1, figs. 1–5; MINATO & KATO, 1965, p. 161; COTTON, 1973, p. 143) from the Middle Permian in the Tongling district, Anhui, China and *P. hudsoni* MINATO & KATO (1965, p. 161; HUDSON, 1958, p. 185, pl. 34, figs. 3–4, pl. 35, figs. 3, 5–6, 8, textfigs. 4f, fb) from the Middle Permian in northern Iraq in having partly vanishing corallite wall, less numerous septa and size of corallites. However, the former one distinctly differs from the latter two in having shorter minor septa. It is also related to *Ipciphyllum elegans* (HUANG, 1932, p. 61, pl. 4, figs. 3–4, pl. 5, fig. 3; MINATO & KATO, 1965, p. 154) from the Chihhsia limestone in northern Kueichow, China in its minor septa, less numerous septa and size of corallites. The median plate of the former is distinct, but the latter's one indistinct. Besides, the former differs from the latter in having partly vanishing corallite wall.

*Occurrence and geological age:* The present form was obtained from a pebble in the basal limestone conglomerate of the Triassic Adoyama Formation at Karasawa in the Kuzu area, Tochigi Prefecture. Judging from the above-mentioned paleontological data, the original rock containing the present one may indicate a middle Permian age.

*Collector:* Hiroji TSUDA.

*Repository:* Reg. no. NSM-PA12063 (holotype) (National Science Museum, Tokyo).

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**Explanation of plate 1**

Figs. 1–3. *Paraipciphyllum karasawense* n. sp.

- Fig. 1 Transverse section ..... ×4.0 (NSM-PA12063a)
- Fig. 2 Transverse section (somewhat oblique) ..... ×4.0 (NSM-PA12063b)
- Fig. 3 Longitudinal section ..... ×4.0 (NSM-PA12063c)

