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A New Bathynellid from the Southwestern Coast of Shikoku, Japan[1)]

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Bathynellid crustaceans are only imperfectly known in the Island of Shikoku. They have been found in the groundwaters at Matsuyama, Ôzu, Kôchi and Sakawa as well as in a stream that flows in a small limestone cave called Mizuidé-dô. These specimens are, however, not fully studied as yet.

In October of 1958, Mr. Shun-Ichi UÉNO, who visited the southwestern coastal areas of Shikoku, observed that an area around the towns of Mishô-chô and Jôhen-chô might support an interesting subterranean fauna. At that time, however, he was too busy to search for those animals by himself, and requested Mr. Shôzô YANO to take labour of collecting well waters for him. In January of 1959, examining the samples of well waters sent from Mr. YANO, Mr. UÉNO found two specimens of the genus *Bathynella*, which came from a driven well at Hirajô in the town of Mishô-chô. He kindly permitted the writer of examining the specimens, which proved to have some features resembling *B. yezoensis* UÉNO (1954, p. 529) but appeared to belong to a new species. It will be named in honour of Mr. YANO and will be described below.

The writer wishes herewith to express his hearty thanks to Prof. Masuzo UÉNO for his kind supervision, to Mr. Shun-Ichi UÉNO for his kind aid during the course of the present study and to Mr. Shôzô YANO for his kindness in taking such a laborious work as pumping up well waters.

Bathynella yanoi Y. MORIMOTO, sp. nov.

Body elongated cylindrical; head longer than wide and nearly as long as first two thoracic somites together; thorax a little longer than abdomen; cuticle thin and translucent. Eyes entirely wanting. Antennules of 7 joints, last joint of peduncle with a vestige of endopodite, terminating with a long seta. Antennae of 7 joints, a little shorter than antennule; exopodite with 2 setae, one of which is large and bifurcate. Maxillulae armed with 6 spines, 1 outer, 2 apical and 3 inner.

Pereiopods biramous; each exopodite of pairs 1–7 unijointed, with 4 setae, of which apical 2 are long; each endopodite of pairs 1–7 composed of 4 joints; each

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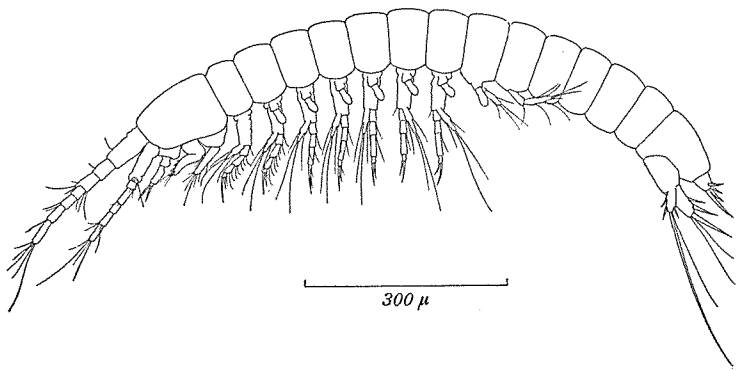


Fig. 1 *Bathynella yanoi* sp. nov., ♀, of Hirajô in Mishô-chô, Shikoku.

coxopodite of pairs 2–8 with an epipodite. Pereiopod 8 biramous, with exopodite twice as long as endopodite, both exopodite and endopodite unijointed; exopodite with 2 apical setae, endopodite with 1 apical seta; basipodite slightly longer than coxopodite, which bears a seta. Pleopod uniramous, consisting of 2 joints; joint 1 with 1 seta; joint 2 laminar, with 6 setae, 4 of which are on the sides and 2 at apex.

Uropod stout; peduncle short and broad, with 3 subequal spines at apical margin; exopodite with 5 setae, 2 outer, 1 inner and 2 apical; apical 2 setae on exopodite very long, one of which is about three times as long as the other; endopodite with 8 setae, 2 outer, 3 apical and 3 inner; outer 2 setae minute, but 1 of apical 3 and 2 of inner 3 are spine-like.

Telson with 4 spine-like apical setae, increasing in length outwards, and 1 dorsal seta near the apical margin.

Length: 1.0 mm (exclusive of appendages).

Male unknown.

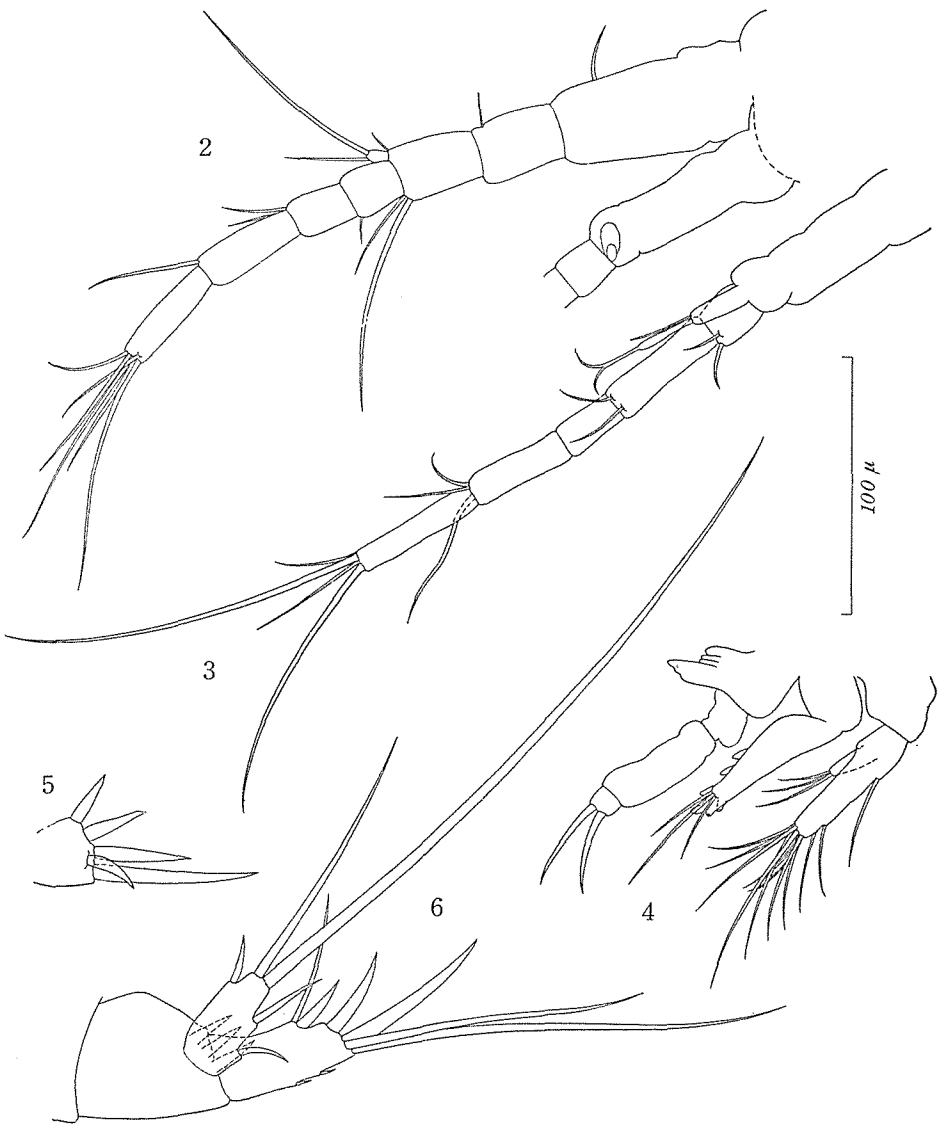
Type-specimens: Holotype: ♀, paratype: 1 ♀ (22-I-1959, collected by S. YANO, and deposited in the collection of Otsu Hydrobiological Station).

Type-locality: A driven well at Hirajô in the town of Mishô-chô, Ehimé Prefecture, on the southwestern coast of the Island of Shikoku.

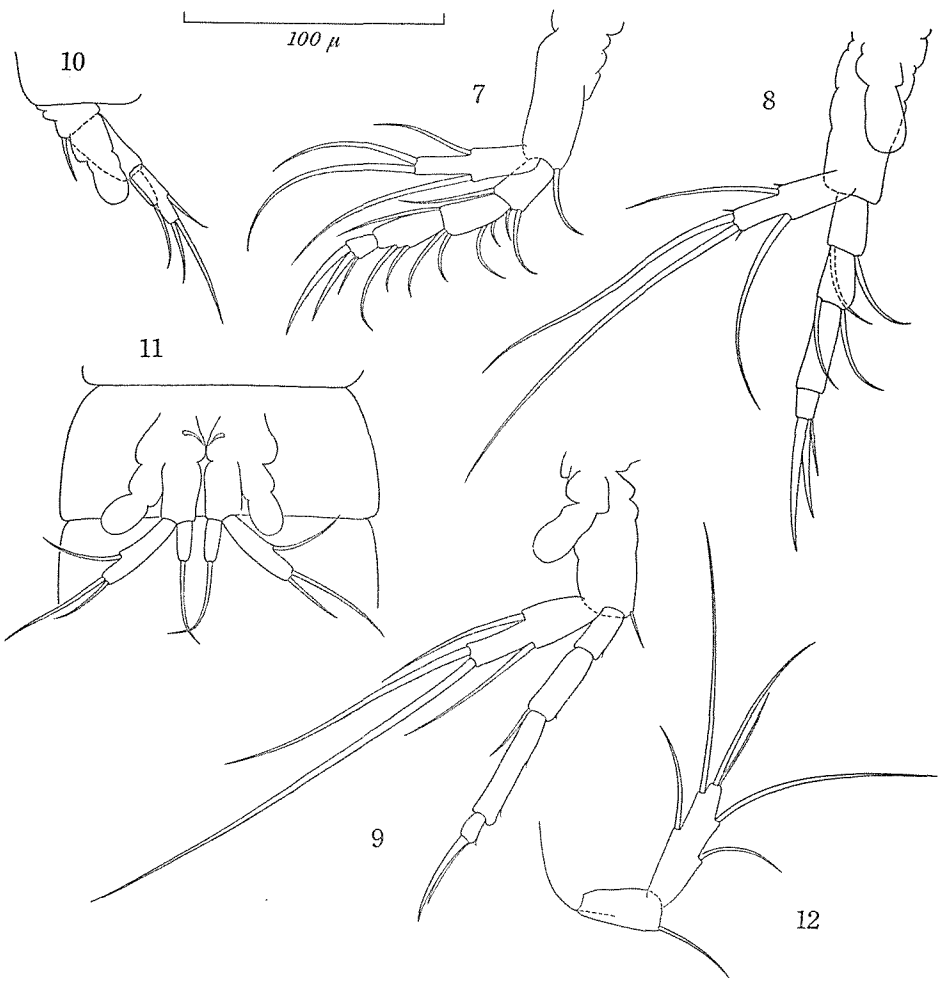
As mentioned already, this new species resembles *B. yezoensis* UÉNO known from Rikunbetsu, Obihiro and Asahikawa in Hokkaido, but differs from the latter in the characteristics of the antennal exopodite, maxillula, 6th and 8th pereiopods, pleopods and uropods.

In the present new species, the antennal exopodite bears 2 setae, of which the large one is bifurcate, the maxillula armed with 6 spines, the endopodite of the 6th pereiopod composed of 4 normal joints, the endopodite of the 8th pereiopod a half as long as the exopodite, the 2nd joint of pleopod sexsetose, the peduncle of uropod short and broad, being as long as the endopodite and bearing 3 spines, and the endopodite of uropod has 8 setae. In *B. yezoensis*, on the contrary, there is only a single simple seta on the antennal exopodite as usual, the maxillula has only 4 spines; the endopodite of the 6th pereiopod is composed of 3 aberrant joints;

the endopodite of the 8th pereiopod is similar to the exopodite in length; the 2nd joint of pleopod bears 9 setae; the peduncle of uropod is rather long, longer than the endopodite and with 4 spines, and the endopodite of uropod has 7 setae.



Figs. 2–6. *Bathynella yanoi* sp. nov., of Hirajô in Mishô-chô, Shikoku.—2. Left antennule, left lateral view.—3. Left antenna, left lateral view.—4. Mouth parts, left lateral view. —5. Left telson, dorsal view.—6. Uropod, left lateral view.



Figs. 7–12. *Bathynella yanoi* sp. nov., of Hirajô in Mishô-chô, Shikoku.—7. Pereiopod 1, left lateral view.—8. Pereiopod 5, left lateral view.—9. Pereiopod 7, left lateral view.—10. ♀ pereiopod 8, left lateral view.—11. ♀ pereiopod 8, ventral view.—12. Pleopod, left lateral view.

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