Fig. 4. 1 : *Lebbeus balssi* Hayashi associated with *Dofleinia armata*. (Photo taken at Izu Ocean Park at depth of about 60 m by T. Uryu).
2 : *Lebbeus grandimanus* (Brashnikov) associated with *Tealia asiatica*. (Photo taken off Akkeshi, Hokkaido, at depth of about 20 m by Y. Kitaguchi). The shrimp is slightly apart from the host, of which the yellow column is obscurely shown in the upper part.
3 : *Lebbeus comanthi* sp. nov., associated with a kind of crinoid. (Photo taken at Izu Ocean Park at depth of 10 m by Y. Kobayashi).

the host of this shrimp.

Remarks:

The present species is closely related to *L. miyakei* Hayashi[3], in which no ecological information was given. This species was established on the male type specimen only and no subsequent material has been collected. We directly compared the present materials of *L. comanthi* with the holotype of *L. miyakei*. The following differences are present between them: The new species has the spine on the pleuron of the fourth abdominal somite, which is rounded in *L. miyakei*. The posterior margin of the telson is armed with a median spine in the new species, but unarmed in *L. miyakei*. The merus of the fifth pereopod is provided with two spines in the new species and a single spine in *L. miyakei*.

Bruce[10] reviewed the data on the shrimps associated with Indo-West Pacific echinoderms, and presented 12 species of the subfamily Pontoniinae, six species of Alpheidae and one species of Stenopodidae as the shrimps commensal with crinoids. No species of the family Hippolytidae, however, were known to associate with crinoids, even with echinoderms, in the Indo-West Pacific region.[10]

A crinoid associated shrimp from the Izu Ocean Park previously reported as *Periclimenes commensalis*[6] is surely referred to the present new species.

There are three hippolytid shrimps associated with crinoids, all from the Atlantic. Nouvel[11] reported *Hippolyte huntii* (Gosse), commensal with the crinoid *Antedon bifida* from French coast near the Roscoff Biological Station. Criales[12] presented two examples of this association from Colombian Caribbean Sea: *Thor manningi* Chace and *Nemaster grandis*, and *Thor amboinensis* (De Man) and *Comactinia echinoptera*. *L. comanthi*, therefore, is the first lebbeid associated with crinoids and also the first representative of the association between the hippolytid and the crinoid from the Pacific.

Size:

The type specimens are all males, and nearly same size. The intact specimen is selected as the holotype, about 14 mm in BL, 2.7 mm in CL, and 1.8 mm in RL. In two paratypes BL and CL are the same as the holotype, but RL is different from each other, 1.7 mm in NFU-530-2-1876 and 1.1 mm in CBM-ZC-3335.

Distribution:

Three type specimens were collected by SCUBA from the Izu Ocean Park, Sagami Bay, and Kamogawa, Boso Peninsula, at depths of 10-23 m.

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共生生活をする日本産イバラモエビ属の2種類について

林　健一・奥野淳兒

本州の太平洋側から採集された無脊椎動物と共生生活をするイバラモエビ属(*Lebbeus*)の2種について，分類学的な研究を行った。ミヤケイバラモエビ*L. miyakei* Hayashiに近縁である新種のコマチイバラモエビ(新称)*L. comanthi* sp. nov. は，この属としてはウミシダ類と共生する最初のエビであり，第4腹節や尾節の形態に，ミヤケイバラモエビとの違いがみられる。もう1種はイソギンチャク類と共生するバルスイバラモエビ*L. balssi* Hayashiで，これまで生態や色彩についてはまったく知られていなかった。形態的には北太平洋の両側でやはりイソギンチャク類との共生が知られているヤドリイバラモエビ*L. grandimanus* (Brashnikov) に似ていたが，色彩をはじめ生態も酷似していることが判明した。*L. comanthi*のくわしい記載とこれら2種の生時の生態写真やカラー写真を添えて，類縁種との比較を行った。