GALATHEIDS OBTAINED FROM ŌSHIMA, PROV. KII

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ONE PLATE AND THREE TEXT-FIGURES

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The galatheids here dealt with were collected in July, 1937 at Ōshima, near Shio-no-misaki in Prov. Kii by the staff of the Seto Marine Biological Laboratory, of the Kyoto Imperial University, and forwarded to me for identification through the courtesy of Mr. Fujio Hiro, to whom I wish to express my hearty thanks. The collection has been found to contain three forms, two of which are commensals living with crinoids. I am greatly obliged to Prof. Hiroshi Ohshima who has kindly revised the manuscript.

1. Galathea elegans White

(Pl. 2, Figs. 1, A—C)


— Adams and White, 1848, Pl. 12, fig. 7—Luzon; Borneo.

— Balss, 1913, p. 4—Sagami Bay. Commensal with a crinoid.

— Potts, 1915, p. 83, fig. 4, A and Pl. 1, fig. 5—Torres Straits. Commensal with Comanthus annulatum.

Habitat. Commensal with crinoids. Ōshima, Kii, Wakayama-Ken.

Material examined.

1 male, S.M.B.L. Cat. No. 23, IX, J; July 25, 1937.

1 ovig. female, S.M.B.L. Cat. No. 24, IX, J; July 25, 1937.

1 male, 1 ovig. female and 1 female, S.M.B.L. Cat. No. 26, IX, J; July 24, 1937.

1 female, S.M.B.L. Cat. No. 27, IX, J; July 24, 1937.

The materials of this series are all collected at Ōshima, Kii, Wakayama-Ken.

Remarks. Potts and Clark unite the elegans form with the longirostris Dana or deflexifrons Haswell. Potts gives the following
diagnosis:—"Rostrum rather more than half the length of the re­mainder of the carapace with from 5 to 9 small denticulations on each side; with about half the length; sometimes deflexed; carapace some­what pear-shaped; about a dozen indentations on each side; surface transversed by many narrow horizontal furrows, from which spring thick lines of short fine hairs, through these may be absent or nearly so. The rostrum is covered with hairs rather longer than those on the carapace, arranged in distinct crescents posteriorly. Dorsum and limbs covered with dark pigment, but these are generally pigment-free longitudinal bands of variable width. Chelae long and slender, cylindrical in section, thicker in the male, varying in length in the latter. Often, if not always, commensal with crinoids."

Fig. 1. *Galathea elegans.*
A. Outer maxilliped of No. 23, ×20.
B. Merus of outer maxilliped of No. 24, ×20.
C. The same of No. 26, ×20.

In our Ōshima specimens, I have observed so much variations in important characters, as are given in the following table. I cannot adopt with certainty the specific names already given, but all of these forms fall into Potts' diagnosis.
### Galatheids Obtained from Ōshima, Prov. Kii

<table>
<thead>
<tr>
<th></th>
<th>No. 23</th>
<th>No. 24</th>
<th>No. 26</th>
<th>No. 27</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of rostrum, in mm</strong></td>
<td>5.5</td>
<td>4.1</td>
<td>5</td>
<td>4</td>
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<tr>
<td><strong>Width of rostrum, in mm</strong></td>
<td>3</td>
<td>3</td>
<td>2.3</td>
<td>2</td>
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<tr>
<td><strong>Length of carapace, in mm</strong>&lt;br&gt;<strong>(including rostrum)</strong></td>
<td>11.3</td>
<td>10</td>
<td>11.2</td>
<td>9.5</td>
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<tr>
<td><strong>Width of carapace, in mm</strong></td>
<td>6</td>
<td>7</td>
<td>5.3</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Left Number of rostral spines</strong>&lt;br&gt;<strong>(Fig. 1, A)</strong></td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td><strong>Right Number of rostral spines</strong>&lt;br&gt;<strong>(Fig. 1, B)</strong></td>
<td>8</td>
<td>6</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td><strong>Number of lateral spines of carapace</strong></td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>Number of spines on inner margin of merus of outer maxilliped</strong>&lt;br&gt;<strong>(as in Fig. 1, C)</strong>&lt;br&gt;<strong>(No. 23)</strong></td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Length of carapace</strong>&lt;br&gt;<strong>(as in No. 23)</strong>&lt;br&gt;<strong>(Fig. 1, A)</strong></td>
<td>1.88</td>
<td>1.45</td>
<td>2.08</td>
<td>1.98</td>
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<tr>
<td><strong>Width of carapace</strong>&lt;br&gt;<strong>(as in No. 23)</strong>&lt;br&gt;<strong>(Fig. 1, A)</strong></td>
<td>2.05</td>
<td>2.5</td>
<td>2.24</td>
<td>2.11</td>
</tr>
<tr>
<td><strong>Length of carapace</strong>&lt;br&gt;<strong>(as in No. 23)</strong>&lt;br&gt;<strong>(Fig. 1, A)</strong></td>
<td></td>
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<tr>
<td>Coloration. Many forms of colour scheme are observed as shown in Plate.</td>
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</table>

- No. 23: Blackish purple with narrow yellowish bands (Fig. C).
- No. 24: Darkish red uniformly (Fig. E).
- No. 26: Alternate longitudinal stripes of blackish purple and yellow (Figs. A, B).
- No. 27: Stripes broader than in No. 26, the lateral bands being blackish purple and central one yellowish (Fig. D).

#### 2. *Galathea acanthomera* Stimpson

*(Fig. 2, A—B)*


*Galathea orientalis* Miers, 1879, p. 51—Corea Strait.

- Ortmann, 1892, p. 252, Pl. 11, figs. 10a and 10i—Sagami Bay; Maizuru; Kagoshima.
- Doflein, 1902, p. 644—Sagami Bay.

*Galathea acanthomera* de Man, 1907, p. 402, Pl. 31, figs. 14—15—Inland Sea.

- Stimpson, 1907, p. 232—No new record.
- Balss, 1913, p. 2, fig 1—Boshu; Uraga-Canal; Misaki; Zushi.
- Yokoya, 1933, p. 55—Omaezaki; Shikoku; Tanabe; Atsumi; Iki Island; Tottori-Ken.

**Habitat.** Commensal with a crinoid.

**Material examined.**

- Off Tonda, 100 m in depth; 1 female, S.M.B.L. Cat. No. 21; Apr. 13, 1937.
- Tanabe Bay; 1 female, S.M.B.L. Cat. No. 21; Aug. 5, 1935.
- Ōshima, 1 female, S.M.B.L. Cat. No. 21, July 25, 1937.
- Ōshima, 1 male, S.M.B.L. Cat. No. 28, July 24, 1937.
Remarks. As far as I am aware, there is no record of occurrence of this species on crinoids. I may give the following diagnosis.

Rostrum with four acuminate teeth on each side. Basal tooth smaller than anterior three. Lateral borders of carapace armed with eight spines. The first three spines are in front of the cervical groove. Behind it lateral border carries five other spines. Upper surface of carapace smooth. Gastric region ornamented with two spines. Outer margin of ischium of external maxilliped is terminating in an acute spine. Merus armed with two spines which are larger than those of outer margin. Outer margin of carpus with two spines, except one specimen which has three. Chelipeds subequal. Dactylus has no spine. Often found incidentally on crinoids.

3. *Galathea subsquamata* Stimpson

(Fig. 3, A—B)

*Galathea subsquamata* Stimpson, 1907, p. 233—Amami-Ōshima.
— Henderson, 1888, p. 118, Pl. 12, fig. 4—Philippines.
— Yokoya, 1933, p. 58—Inubo-zaki.
Habitat. Collected on massive coral, 6 m in depth. Ōshima, Kii, Wakayama-Ken.

Material examined. Ōshima, Kii, Wakayama-Ken; 1 ovig. female; S.M.B.L. Cat. No. 25; July 25, 1937.

Remarks. Carapace depressed, scarcely narrowed anteriorly. Upper surface of carapace hairless and smooth. There are only three strigae on the cardiac region. Regions are not distinct. Carapace is ornamented with a few spinules on the antero-lateral regions. Lateral margin armed with seven teeth. Rostrum four-toothed being acute and equal-sized. Chelipeds subequal, the right one being larger. Carpus and merus armed with three spines on the inner margins; hand with four or five teeth on the inner margin. The outer margin of cheliped ornamented with spinules standing regularly at an equal distance: Fingers parallel, depressed, not gaping nor toothed. Ambulatory legs ornamented with long hairs sparsely. Merus armed with spinules on both upper and lower margins. On the upper margin carpus and propodus armed with spinules. Dactylus with a short stout tooth on the lower margin.


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**PLATE**

*Galathea elegans* White

A. Male, S.M.B.L. Cat. No. 26, ×2.3.

B. Ovig. female, No. 26, ×2.5.

C. Male, No. 23, ×2.3.

D. Female, No. 27, ×2.5.

E. Ovig. female, No. 24, ×2.3.
S. MIYAKE: GALATHEIDS OBTAINED FROM ŌSHIMA