

## Preliminary List of Intertidal Gammaridean Amphipoda (Crustacea: Peracarida) from the Northern Mariana Islands, Micronesia

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**Abstract** Twelve species belonging to six families and eight genera of gammaridean Amphipoda are recognized and listed. All of them are recorded from the northern Mariana Islands for the first time.

**Key words:** Gammaridean Amphipoda, northern Mariana Islands.

The gammaridean amphipod fauna of the northern Mariana Islands remains poorly studied. Among the materials collected during the expedition conducted by the Natural History Museum and Institute, Chiba, in 1992, 12 species belonging to the six families and eight genera of gammaridean Amphipoda are recognized. None of them have been recorded previously from the northern Mariana Islands. Due to lack of literature, the identification is incomplete, and each species is enumerated as "sp." under the generic assignment made by use of the handbook of Barnard and Karaman (1991). The size of specimens is indicated by body length (abbreviation BL), measured from the tip of the rostrum to the tip of the telson. All of the specimens were collected by Akira Asakura of the Natural History Museum and Institute, Chiba (CBM) and are deposited in the museum. CBM-ZC is the registration code for Crustacea. For detailed information on sampling sites, see Asakura *et al.* (1994).

### List of Collected Species

#### Family Amphilochidae

##### 1. *Gitanopsis* sp.

**Material.** CBM-ZC-232, 8 males (BL 2.2–2.5 mm), 5 ovig. females (BL 2.7–3.4 mm), MAUG EAST-st.A, 3 June 1992; CBM-ZC-218, 14 females (16 ovig.) (BL 1.8–2.9 mm), 12 males (BL 1.8–2.7 mm), MAUG NORTH-st.F, 3 June 1992; CBM-ZC-233, 2 males (BL 1.5, 2.0 mm), MAUG

WEST-st.E, 4 June 1992.

**Remarks.** This species was associated with coral, *Pocillopora* sp. in the rocky intertidal zones.

#### Family Ampithoidae

##### 2. *Ampithoe* sp. 1

**Material.** CBM-ZC-227, 9 females (6 ovig.) (BL 4.9–5.4 mm), MAUG EAST-st.A, 2 June 1992; CBM-ZC-219, 17 females (14 ovig.) (BL 3.0–5.2 mm), 2 males (BL 3.5, 5.0 mm), MAUG NORTH-st.F, 3 June 1992.

**Remarks.** *Ampithoe* sp. 1 differs from both *Ampithoe* sp. 2 and *Ampithoe* sp. 3 in having a stout body with a relatively large, globular head, more setose antennae, and weakly prehensile pereopods 5–7. This species was associated with coral *Pocillopora* sp. in the rocky intertidal zones.

##### 3. *Ampithoe* sp. 2

**Material.** CBM-ZC-217, 2 females (BL 6.9, 9.0 mm), GUGUAN, associated with sea weed in rocky intertidal zone, 17 May 1992.

**Remarks.** *Ampithoe* sp. 2 apparently resembles *Ampithoe* sp. 3, particularly in its strongly prehensile pereopods 5–7, but it is distinguishable from the latter in its relatively shorter distal article of antenna 2, which is equal in length to the head rather than being distinctly longer than it, and the absence of a spur on the peduncle of uropod 1. In *Ampithoe* sp. 3, the peduncle of uropod 1 bears a rudimentary spur.

**4. *Ampithoe* sp. 3**

*Material.* CBM-ZC-228, 8 males (BL 2.9–5.0 mm), 17 females (6 ovig.) (BL 2.1–4.9 mm), MAUG EAST, associated with sea weed, 2 June 1992.

*Remarks.* See under “Remarks” for *Ampithoe* sp. 2.

**5. *Paradusa* sp.**

*Material.* CBM-ZC-220, 8 females (2 ovig.) (BL 3.3–5.5 mm), 3 males (BL 3.3–4.5 mm), MAUG NORTH-st.F, rocky intertidal zone, 3 June 1992.

**Family Colophiidae**

**6. *Gammaropsis* (*Gammaropsis*) sp.**

*Material.* CBM-ZC-229, 40 females (27 ovig.) (BL 3.2–4.7 mm), 14 males (3.2–4.0 mm), MAUG EAST-st.A, 2 June 1992; CBM-ZC-223, 23 males (BL 2.8–3.3 mm), 14 females (12 ovig.) (BL 3.2–3.9 mm), MAUG NORTH-st.F, 3 June 1992.

*Remarks.* This species was associated with coral *Pocillopora* sp. in the rocky intertidal zones.

**Family Gammaridae**

**7. *Erasmops* sp.**

*Material.* CBM-ZC-221, 18 males (BL 3.1–5.1 mm), 3 females (BL 3.3–4.6 mm), MAUG NORTH-st.F, 3 June 1992.

*Remarks.* This species was associated with coral *Pocillopora* sp. in the rocky intertidal zones.

**8. *Maera* sp.**

*Material.* CBM-ZC-222, 1 male (BL 4.5 mm), MAUG NORTH-st.F, rocky intertidal zones, 3 June 1992.

**Family Hyalidae**

**9. *Hyale* sp. 1**

*Material.* CBM-ZC-230, 18 males (BL 3.7–5.7 mm), 10 females (BL 3.6–5.2 mm), MAUG EAST-st.A, associated with sea weed in the rocky intertidal zones, 2 June 1992.

*Remarks.* *Hyale* sp. 1 is immediately distinguishable from both *Hyale* sp. 2 and *Hyale* sp. 3 by the longer flagellum of antenna 2 (more than 2.0 times as long as the peduncle vs. less

than 1.5 times as long), the male gnathopod 2 bearing 2 rows of setae on its palmar margin, and the propodi of pereopods 5–7 armed with large, blunt spines on their ventral margin.

**10. *Hyale* sp. 2**

*Material.* CBM-ZC-224, 1 male (BL 6.1 mm), MAUG NORTH-st.F, 3 June 1992.

*Remarks.* The shorter flagellum of antenna 2 and less spinose propodi of pereopods 5–7 separate *Hyale* sp. 2 from *Hyale* sp. 1. *Hyale* sp. 2 differs from *Hyale* sp. 3 in the morphology of the male gnathopod 2 and pereopods 5–7. This species was associated with coral *Pocillopora* sp. in the rocky intertidal zones.

**11. *Hyale* sp. 3**

*Material.* CBM-ZC-225, 1 male (BL 3.5 mm), 1 female (BL 2.7 mm), MAUG NORTH-st. F, 3 June 1992.

*Remarks.* The presence of a strong thumb and 1 acute ventrodistal tooth on the male gnathopod 2 and strongly prehensile pereopods 5–7 distinguish *Hyale* sp. 3 from the other two species of *Hyale* listed here. This species was associated with coral *Pocillopora* sp. in the rocky intertidal zones

**Family Leucothoidae**

**12. *Leucothoe* sp.**

*Material.* CBM-ZC-231, 2 females (1 ovig.) (BL 4.1, 4.6 mm), MAUG EAST-st.A, 2 June 1992; CBM-ZC-226, 3 males (BL 2.5–3.6 mm), MAUG NORTH-st.F, 3 June 1992.

*Remarks.* This species was associated with coral *Pocillopora* sp. in the rocky intertidal zones.

**References**

- Asakura, A., T. Ohba, S. Miyano, T. Furuki, T. Kurozumi and H. Harada. 1994. Outline of the biological expedition to the northern Mariana Islands, Micronesia. In Asakura, A. and T. Furuki (eds.), Biological Expedition to the Northern Mariana Islands, Micronesia. Nat. Hist. Res., Special Issue (1): 1–11.
- Barnard, J. L. and G. S. Karaman. 1991. The families and genera of marine gammaridean Amphipoda (except marine Gammaroids). Rec. Aust. Mus., Suppl. 13: 1–866.