

Brachyura (Crustacea: Decapoda) from the Northern Mariana Islands, Micronesia

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Abstract Sixty-two species of 13 families of brachyuran crabs were collected from the northern Mariana Islands. They are species of families Dromiidae, Dynomenidae, Majidae, Parthenopidae, Atelecyclidae, Portunidae, Xanthidae, Menippidae, Pilumnidae, Trapeziidae, Ocypodidae, Grapsidae, and Gecarcinidae, and 61 species among them are recorded from the northern Marianas for the first time.

Key words: Brachyura, Crustacea, rocky intertidal, subtidal, northern Marianas, Micronesia.

In May and June 1992, the Natural History Museum and Institute, Chiba (NHMIC) organized the expedition to the northern Mariana Islands in cooperation with the Department of the Natural Resources (Commonwealth of the Northern Mariana Islands) and the University of Guam Marine Laboratory. In this report, the brachyuran crabs collected by the research members are recorded, being 62 species of 13 families.

The crustacean brachyuran fauna of the northern Mariana Islands has so far been very poorly studied. The recorded species are *Calappa hepatica* (L.) of the Calappidae, *Grapsus tenuicrustatus* (Herbst) of the Grapsidae, and *Haplocarcinus marsupialis* Stimpson of the Cryptochiridae from Maug (Eldredge *et al.*, 1977) and *Homola orientalis* Henderson of the Homolidae from off the east coast of Pagan (Eldredge, 1980). During the present expedition, many specimens of semiterrestrial grapsid crab *Grapsus tenuicrustatus* (Herbst) were also collected, though other 3 species were not obtained probably because of peculiar habit and habitat. Most of 62 recorded species are widely distributed in the coral reefs of the

West Pacific islands, but the *Trapezia* and *Tetralia* species of Trapeziidae wait for the comparative study and revisional work based on the specimens from many localities in wide geographical range.

Methods

The islands investigated are, from north to south, Uracas, Maug North, Maug East, Maug West, Asuncion, Agrihan, Pagan, Alamagan, Guguan, Sarigan, and Anatahan. Most of the specimens were collected in the rocky intertidal areas of the islands, such collection sites being abbreviated as RI in the following list. Collections were also made by SCUBA diving in the subtidal areas, and depth of the collection site was recorded. Collectors (and their initials used in the list) were Akira Asakura (AA) and Taiji Kurozumi (TK) of the NHMIC, and Todd Pitlick (TP) of the University of Guam Marine Laboratory. All of the specimens are deposited in the NHMIC. ZC is the registration code for crustaceans. Identifications were made by M. Takeda for the families Dromiidae, Dynomenidae, Majidae, Parthenopidae, Atelecyclidae, Portunidae, Xanthidae, Menippidae,

Pilumnidae and Trapeziidae, by K. Wada for Ocypodidae, and by Y. Fukui for Grapsidae and Gecarcinidae. The carapace of each crab was measured to the nearest 0.1 mm with dial calipers, being given in the text as (breadth $\times$ length) in mm. See Asakura *et al.* (1994) for detailed information on each sampling site.

List of Collected Species

Family Dromiidae

1. *Cryptodromia canaliculata* Stimpson

Specimen examined. 1 ♀ (6.0 $\times$ 5.7), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1366.

Family Dynomenidae

2. *Dynomene hispida* Desmarest

Specimens examined. 1 ♀ (7.9 $\times$ 6.6), 3 juv. (3.7 $\times$ 3.1, 4.3 $\times$ 3.7, 5.3 $\times$ 4.1), MAUG EAST-st.A, RI, 2 June, AA, ZC-1294, 1295, 1304, 1305; 1 ecdysis (7.5 $\times$ 6.2), MAUG EAST-st.A, RI, on *Pocillopora* sp., 2 June, AA, ZC-1309; 1 ♂ (5.2 $\times$ 4.5), 1 juv. (4.0 $\times$ 3.4), MAUG NORTH-st.F, RI, on coral, 3 June, AA, ZC-1324.

Family Majidae

3. *Menaethius monoceros* (Latreille)

Specimen examined. 1 juv. (1.8 $\times$ 2.7), GUGU-AN-st.A-st.A, RI, 17 May, AA, ZC-1260.

4. *Perinea tumida* Dana

Specimens examined. 2 ♂ (4.9 $\times$ 4.5, 6.1 $\times$ 6.6), MAUG NORTH-st.F, RI, on coral, 3 June, AA, ZC-1323, 1335; 1 ♂ (5.3 $\times$ 5.9), MAUG WEST-st.E, RI, on coral, 4 June, AA, ZC-1358; 1 ♂ (5.9 $\times$ 6.0), 2 ovig. ♀ (6.2 $\times$ 6.4, 6.3 $\times$ 6.4), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1371.

5. *Tiarinia spinigera* Stimpson

Specimen examined. 1 ♂ (8.7 $\times$ 12.1), AGRIHAN-st.C, 3 m deep, 30 May TK, ZC-1275.

Family Parthenopidae

6. *Daira perlata* (Herbst)

Specimens examined. 1 juv. (3.3 $\times$ 2.4), GUGU-AN-st.A, RI, 17 May, AA, ZC-1258; 2 carapaces (29.9 $\times$ 21.1, 26.3 $\times$ 18.1), PAGAN-st.A, RI, 24 May, AA, ZC-1265; 8 carapaces (22.5 $\times$ 15.2, 25.2 $\times$ 16.6, 36.1 $\times$ 25.0, 36.4 $\times$ 25.3, 37.0 $\times$ 24.8, 41.1 $\times$ 27.6, 42.8 $\times$ 29.5, 44.1 $\times$ 30.4), ALAMA-

GAN-st.B, RI, 9 June, AA, ZC-1391.

Family Atelecyclidae

7. *Kraussia rugulosa* (Krauss)

Specimen examined. 1 ovig. ♀ (12.6 $\times$ 10.7), ALAMAGAN-st.B, RI, 9 June, AA, ZC-1397.

Family Portunidae

8. *Charybdis erythrodactyla* (Lamarck)

Specimens examined. 1 carapace (75.8 $\times$ 50.1), AGRIHAN-st.C, RI, 30 May, AA, ZC-1274.

9. *Thalamita admete* (Herbst)

Specimens examined. 1 juv. (3.9 $\times$ 2.6), GUGU-AN-st.A, RI, 17 May, AA, ZC-1257; 1 ♂ (14.5 $\times$ 9.3), 1 ♀ (7.6 $\times$ 4.5), 1 ovig. ♀ (12.4 $\times$ 7.9), MAUG EAST-st.A, RI, 2 June, AA, ZC-1289, 1290, 1298; 2 juv. (3.1 $\times$ 2.2, 4.1 $\times$ 3.0), URACAS-st.A, RI, 6 June, AA, ZC-1379, 1387.

10. *Thalamita picta* Stimpson

Specimen examined. 1 juv. (5.6 $\times$ 4.6), ALAMAGAN-st.A, RI, 19 May, AA, ZC-1263.

Family Xanthidae

11. *Chlorodiella cytherea* (Dana)

Specimens examined. 1 ♀ (6.6 $\times$ 4.5), PAGAN-st.A, RI, 24 May, AA, ZC-1264; 1 ovig. ♀ (4.3 $\times$ 2.9), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1376.

12. *Forestia depressa* (White)

Specimens examined. 1 ecdysis (11.0 $\times$ 9.1), PAGAN-st.A, RI, 24 May, AA, ZC-1267; 1 juv. (4.5 $\times$ 4.0), PAGAN-st.C, 3 m deep, boulders, 26 May, TK, ZC-1269; 2 juv. (4.2 $\times$ 3.7, 7.1 $\times$ 6.0), MAUG EAST-st.A, RI, 2 June, AA, ZC-1286, 1291; 1 ♂ (16.9 $\times$ 12.6), 4 juv. (5.4 $\times$ 4.9, 7.0 $\times$ 5.8, 7.2 $\times$ 5.7, 9.3 $\times$ 6.5), MAUG WEST-st.E, RI, 4 June, AA, ZC-1343, 1344, 1346, 1350, 1351.

13. *Lachnopodus rodgersi* Stimpson

Specimens examined. 1 ovig. ♀ (43.2 $\times$ 26.8), 1 ♂ (10.5 $\times$ 6.9), MAUG EAST-st.A, RI, 2 June, AA, ZC-1283, 1285.

14. *Leptodius sanguineus* (H. Milne Edwards)

Specimens examined. 1 ♂ (16.9 $\times$ 11.2), ANATAHAN-st.A, RI, 11 May, AA, ZC-1428; 1 ♂ (19.7 $\times$ 13.0), 1 ♀ (16.1 $\times$ 10.7), ANATAHAN-st.B, RI, 12 May, AA, ZC-1249; 2 ♂ (30.6 $\times$ 19.2, 23.5 $\times$ 15.0), GUGUAN-st.A, RI, 17 May, AA, ZC-1253; 1 ♀ (14.7 $\times$ 10.2), GUGUAN-st.A, 3 m deep, 17 May, TK, ZC-1262; 2 ♂ (33.3 $\times$ 20.2, 19.0 $\times$ 12.4), 1 ♀ (15.5 $\times$ 10.0), PAGAN-st.D, RI,

27 May, AA, ZC-1270; 1 ♂ (20.0×12.9), PAGAN-st.D, 3 m deep, 27 May, TK, ZC-1271; 1 ♂ (13.4×9.0), AGRIHAN-st.B, RI, 29 May, AA, ZC-1273; 1 ♂ (39.3×24.3), MAUG EAST-st.A, RI, 2 June, AA, ZC-1287; 4 ♂ (20.7×13.1, 21.8×13.7, 26.7×12.3, 27.7×12.4), 3 ♀ (10.6×7.2, 18.0×10.7, 24.1×15.3), MAUG WEST-st.E, RI, 4 June, AA, ZC-1338, 1348; 5 ♂ (10.4×7.3, 10.7×7.6, 11.9×12.1, 18.6×12.7, 25.0×16.0), 1 ♀ (21.3×13.5), 1 ovig. ♀ (19.0×12.0); 1 ♂ (18.2×12.0), ALAMAGAN-st.B, RI, 9 June, AA, ZC-1389.

15. *Liomera rugata* (H. Milne Edwards)

Specimens examined. 1 ♀ (9.3×5.4), PAGAN-st.A, RI, 24 May, AA, ZC-1266; 1 ♂ (8.4×4.6), MAUG EAST-st.A, RI, 2 June, AA, ZC-1299.

16. *Lophozozymus pulchellus* A. Milne Edwards

Specimen examined. 1 ♂ (6.8×4.7), AGRIHAN-st.C, 3 m deep, 30 May, TK, ZC-1276.

17. *Lybia tessellata* (Latreille)

Specimen examined. 1 ♀ (5.4×4.4), MAUG EAST-st.B, 3 m deep, on coral, 5 June TK, ZC-1378.

18. *Macromedaeus nudipes* (A. Milne Edwards)

Specimen examined. 1 ♀ (15.0×10.2), MAUG EAST-st.A, RI, 2 June, AA, ZC-1288.

19. *Paraxanthias notatus* (Dana)

Specimens examined. 1 ♂ (6.7×4.7), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1301; 1 ♂ (3.8×2.9), MAUG NORTH-st.F, RI, on coral, 3 June AA, ZC-1330.

20. *Phymodius* sp.

Specimens examined. 2 juv. (3.2×2.5, 3.3×2.6), MAUG WEST-st.E, RI, on coral, 4 June, AA, ZC-1360.

21. *Pilodius harmsi* Balss

Specimens examined. 11 juv. (2.2×1.7, 2.4×1.7, 2.5×2.0, 2.5×2.1, 2.9×1.9, 3.0×2.1, 3.0×2.2, 3.4×2.4, 3.9×2.8, 4.2×3.4, 4.3×3.0), GUGUAN-st.A, RI, 17 May, AA, ZC-1259; 1 ♂ (5.5×3.7), MAUG WEST-st.E, RI, 4 June, AA, ZC-1345.

22. *Pilodius paumotensis* Rathbun

Specimens examined. 2 ♀ (6.2×4.3, 6.6×4.7), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1312, 1317.

23. *Pseudoliomera granosimana* (A. Milne Edwards)

Specimen examined. 1 juv. (7.5×4.9), MAUG

EAST-st.A, RI, 2 June, AA, ZC-1284.

24. *Pseudoliomera helleri* (A. Milne Edwards)

Specimens examined. 1 ♀ (11.8×8.0), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1316; ♀ (12.2×8.5, 13.3×9.3), MAUG NORTH-st.F, RI, on coral, 3 June AA, ZC-1319; 1 juv. (5.0×3.9), MAUG WEST-st.E, RI, on coral, 4 June, AA, ZC-1356; 2 ♂ (6.1×4.4, 8.1×5.5), 3 juv. (2.2×1.7, 3.7×3.0, 3.9×3.0), URACAS-st.A, RI, 6 June, AA, ZC-1384, 1385, 1386.

25. *Pseudoliomera remota* (Rathbun)

Specimens examined. 1 ♀ (7.1×4.7), 4 juv. (3.6×2.5, 3.7×2.5, 3.7×2.4, 3.7×2.5), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1296, 1297, 1306, 1311, 1318; 1 ♂ (6.2×4.4), MAUG WEST-st.E, RI, on coral, 4 June, AA, ZC-1357; 1 ♀ (7.1×5.0), 7 juv. (2.1×1.4, 2.5×1.9, 3.3×2.2, 3.3×2.5, 3.5×2.1, 4.6×3.5, 4.7×3.2), 1 carapace (6.4×4.4), URACAS-st.A, RI, 6 June, AA, ZC-1381, 1382, 1388, 1395.

26. *Pseudoliomera speciosa* (Dana)

Specimens examined. 1 juv. (4.0×3.0), 1 ovig. ♀ (7.5×5.7), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1308, 1314; 1 ♂ (4.6×3.4), 1 juv. (3.6×2.6), URACAS-st.A, RI, 6 June, AA, ZC-1380, 1383.

27. *Xanthias gilbertensis* Balss

Specimens examined. 1 juv. (4.2×3.0), 1 ♂ (8.7×5.9), 1 ♀ (9.9×6.9), MAUG NORTH-st.F, RI, on coral, 3 June, AA, ZC-1329, 1334.

28. *Xanthias lividus* (Lamarck)

Specimen examined. 1 ♂ (46.6×29.4), MAUG EAST-st.A, RI, 2 June, AA, ZC-1282.

Family Menippidae

29. *Dacryopilumnus eremita* Nobili

Specimen examined. 1 ♂ (3.0×2.3), MAUG NORTH-st.F, RI, on coral, 3 June, AA, ZC-1321

30. *Epixanthus corrosus* A. Milne Edwards

Specimens examined. 1 ♂ (12.7×7.6), 1 ♀ (18.6×11.0), MAUG WEST-st.E, RI, 4 June, AA, ZC-1342, 1353.

31. *Eriphia scabricula* Dana

Specimen examined. 1 ecdysis (12.1×8.1), ALAMAGAN-st.B, RI, 9 June, AA, ZC-1393

32. *Lydia annulipes* (H. Milne Edwards)

Specimen examined. 1 ♂ (24.1×15.8), ANATAHAN-st.C, RI, 13 May, AA, ZC-1250.

33. *Ozium tuberculosus* H. Milne Edwards

Specimens examined. 1 ♂ (38.1×26.8), ANA-

TAHAN-st.D, RI, 14 May, TK, ZC-1251; 1 ♂ (49.5×33.5, 52.3×36.8), GUGUAN-st.A, RI, 17 May, AA, ZC-1254, 1255; 1 ♀ (49.7×34.9), AGRIHAN-st.A, RI, 28 May, AA, ZC-1272; 1 ♂ (69.2×47.9), ASUNCION-st.A, RI, AA, 1 June, ZC-1277.

34. *Pseudozius caystrus* (Adams et White)

Specimens examined. 1 juv. (4.7×3.3), SARIG-AN-st.A, RI, 16 May, TK, ZC-1252; 1 ♂ (17.0×10.5), GUGUAN-st.A, RI, 17 May, TK, ZC-1261; 1 ♂ (17.4×10.6), 1 ♀ (15.6×9.8), 1 ovig. ♀ (9.0×6.4), MAUG NORTH-st.F, RI, on coral, 3 June, AA, ZC-1320, 1333; 4 ♂ (6.7×4.3, 7.9×5.4, 10.4×6.3, 11.0×7.1), 8 ♀ (7.6×5.0, 8.2×5.5, 9.3×5.4, 10.5×6.5, 11.2×6.7, 13.1×8.2, 14.4×8.3, 18.3×10.8), 1 ovig. ♀ (19.4×12.4), MAUG WEST-st.E, RI, 4 June, AA, ZC-1339, 1352; 1 ♀ (14.0×9.7), URACAS-st.A, RI, 6 June, AA, ZC-1390.

Family Pilumnidae

35. *Nanopilumnus coralliophilus* (Takeda et Miyake)

Specimen examined. 1 ovig. ♀ (3.4×2.3), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1364.

36. *Parapilumnus* sp.

Specimen examined. ♀ (3.1×2.4), GUGUAN-st.A, RI, 17 May, TK, ZC-1256.

Family Trapeziidae

37. *Domecia glabra* Alcock

Specimen examined. 1 ♂ (4.1×3.6), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1372.

38. *Domecia hispida* Eydoux et Souleyet

Specimen examined. 1 ♀ (4.3×3.2), ASUNCION, westside, 3 m deep, on coral, 1 June, TP, ZC-1279.

39. *Tetralia glaberrima* (Herbst)

Specimens examined. 2 ♂ (3.8×3.1, 3.7×3.1), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1302.

40. *Tetralia glaberrima obscura* Patton

Specimens examined. 1 ovig. ♀ (8.3×7.7), 1 ♂ (5.3×4.5), ASUNCION, westside, 3 m deep, on coral, 1 June, TP, ZC-1278.

41. *Trapezia areolata* Dana

Specimens examined. 1 ♀ (5.2×4.0), 1 ♂ (4.4×3.8), MAUG EAST-st.A, RI, on coral, 2

June, AA, ZC-1303; 3 ♂ (3.5×2.7, 4.1×3.8, 4.8×4.1), ♀ (4.9×4.2), MAUG NORTH-st.F, RI, on coral, 3 June AA, ZC-1336, 1340; 1 ♂ (4.4×3.7), MAUG WEST-st.E, RI, on coral, 4 June, AA, ZC-1359.

42. *Trapezia "areolata" sensu Forest et Guinot (1961)*

Specimens examined. 3 ♂ (4.6×4.1, 4.9×4.2, 5.2×4.3), 3 ♀ (4.1×3.6, 4.4×3.9, 5.6×4.5), 1 ovig. ♀ (5.5×4.7), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1293, 1310, 1313; 3 ♂ (4.1×3.6, 4.3×4.0, 5.0×4.3), 1 ♀ (4.7×4.0), 1 ovig. ♀ (3.9×3.2), MAUG NORTH-st.F, RI, on coral, 3 June AA, ZC-1322, 1325, 1327, 1328; 1 ovig. ♀ (5.1×4.8), MAUG WEST-st.E, RI, on coral, 4 June, AA, ZC-1355.

43. *Trapezia cymodoce* (Herbst)

Specimens examined. 5 ♂ (6.2×5.4, 8.5×7.2, 13.5×11.7), 1 ovig. ♀ (9.3×7.2), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1367, 1377.

44. *Trapezia digitalis* Latreille

Specimens examined. 1 ♀ (4.8×3.9), MAUG EAST-st.A, RI, 2 June, AA, ZC-1300; 1 ♀ (5.2×4.5), MAUG NORTH-st.F, RI, on coral, 3 June AA, ZC-1322.

45. *Trapezia ferruginea* Latreille

Specimens examined. 1 ♀ (6.7×5.7), ASUNCION, westside, 3 m deep, on coral, 1 June, TP, ZC-1280; 1 ♀ (6.5×5.0), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1315; 2 ♂ (6.8×6.2, 7.5×6.2), MAUG EAST-st.A, 3 m deep, on coral, 5 June, TK, ZC-1365, 1373.

46. *Trapezia flavopunctata* Eydoux et Souleyet

Specimen examined. 1 ♂ (6.3×5.8), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1361.

47. *Trapezia speciosa* Dana

Specimens examined. 1 ♂ (5.3×4.1), 2 ♀ (4.2×3.8, 5.5×4.7), MAUG EAST-st.A, RI, on coral, 2 June, AA, ZC-1292, 1307; 1 ♂ (4.0×3.6), 1 ♀ (3.7×3.0), 1 ovig. ♀ (5.0×4.1), MAUG NORTH-st.F, RI, on coral, 3 June AA, ZC-1326, 1340; 2 ♂ (5.4×4.4, 9.0×6.8), 1 ovig. ♀ (5.4×4.4), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1363, 1370, 1374.

48. *Trapezia tigrina* Eydoux et Souleyet

Specimens examined. 3 ♂ (5.2×4.3, 9.3×7.0, 11.1×8.9), (12.7×10.1), 1 ovig. ♀ (7.3×5.9), 2

juv.(3.5×2.8, 4.5×4.0), MAUG EAST-st.B, 3 m deep, on coral, 5 June, TK, ZC-1362, 1368, 1369, 1375.

49. *Trapezia* sp.

Specimens examined. 1 ♂ (3.8 × 3.3), 1 ♀ (3.9 × 3.2), 1 ovig. ♀ (4.5 × 3.9), MAUG NORTH-st.F, RI, on coral, 3 June AA, ZC-1337.

Family Ocypodidae

50. *Ocypode cordimana* Latreille

Specimens examined. 4 ♂ (9.8 × 7.6, 15.4 × 13.2, 18.8 × 17.0, 19.2 × 17.6), 1 ♀ (27.8 × 24.3), PAGAN-st.C, upper shore, sandy beach, 26 May, AA, ZC-1400.

51. *Ocypode ceratophthalma* (Pallas)

Specimen examined. 1 juv.(5.6 × 5.0), AGRIHAN-st.C, upper shore, sandy beach, 30 May, AA, ZC-1401.

Family Grapsidae

52. *Grapsus tenuicrustatus* (Herbst)

Specimens examined. 1 ♂ ecdysis (33.3 × 31.0), ANATAHAN-st.A, RI, 11 May, AA, ZC-1402; 1 ♂ (19.6 × 16.1), SARIGAN-st.A, RI, 15 May, AA, ZC-1403; 2 ♂ (46.7 × 44.4, 45.1 × 42.4), 2 ♂ ecdyses (36.6 × 34.1, 43.1 × ? broken), GUGUAN-st.A, RI, 17 May, AA, ZC-1405, 1406; 2 ♂ (41.3 × 36.8, 50.3 × 46.8), 3 ♀ (39.4 × 36.0, 47.3 × 46.3, 59.4 × 52.5), PAGAN-st.C, RI, 26 May, AA, ZC-1407, 1408; 2 ♂ (42.0 × 40.6, 62.1 × 60.1), AGRIHAN-st.A, RI, 29 May, AA, ZC-1409; 1 ♂ ecdysis, AGRIHAN-st.B, RI, 29 May, AA, ZC-1410; 1 ecdysis, sex unknown (20.5 × 18.1), AGRIHAN-st.C, RI, 30 May, AA, ZC-1411; 1 ecdysis, sex unknown (48.4 × 46.7), MAUG NORTH-st.F, RI, 3 June, AA, ZC-1412; 1 ecdysis, sex unknown (35.2 × 34.1), ALAMAGAN-st.B, RI, 9 June, AA, ZC-1413.

53. *Grapsus longitarsis* Dana

Specimens examined. 1 ♂ (15.3 × 12.8), ANATAHAN-st.B, RI, 12 May, AA, ZC-1414; 1 ♂ (33.0 × 30.1), AGRIHAN-st.B, RI, 29 May, AA, ZC-1415.

54. *Geograpsus grayi* (H. Milne Edwards)

Specimens examined. 2 ♂ (32.7 × 26.6, 42.4 × 33.6), ANATAHAN-st.A, RI, 11 May, AA, ZC-1416, 1417; 1 ♀ (33.6 × 28.6), 1 ovi. ♀ (32.1 × 27.0), GUGUAN-st.A, RI, 17 May, AA, ZC-1418, 1419; 1 ecdysis, sex unknown (29.1 × 24.2), URACAS-st.A, RI 1, 6 June, AA, ZC-1420.

55. *Geograpsus stormi* De Man

Specimen examined. 1 ♂ (30.8 × 24.3), MAUG W, RI, 4 June, AA, ZC-1421.

56. *Geograpsus crinipes* (Dana)

Specimens examined. 1 ♂ (55.2 × 46.8), 1 ovi. ♀ (52.0 × 43.7), GUGUAN-st.A, RI, 17 May, AA, ZC-1422; 1 ♀ (51.5 × 43.3), MAUG EAST, RI, 2 June, AA, ZC-1423; 1 ♂ (43.9 × 36.5), MAUG EAST, RI, 3 June, AA, ZC-1424.

57. *Pachygrapsus minutus* A. Milne Edwards

Specimens examined. 1 ovig. ♀ (3.5 × 2.9), MAUG WEST-st.E, RI, 4 June, AA, ZC-1347; 3 ♂ (7.4 × 6.1, 6.2 × 4.8, 6.2 × 4.4), 1 ♀ (4.0 × 3.6), ALAMAGAN-st.B, RI, 9 June, AA, ZC-1425.

58. *Pachygrapsus plicatus* (H. Milne Edwards)

Specimen examined. 1 ♂ (12.2 × 10.2), ecdysis, PAGAN-st.A, RI, 24 May, AA, ZC-1426.

59. *Cyclograpsus integer* H. Milne Edwards

Specimens examined. 2 ♀ (7.3 × 5.8, 7.1 × 5.0), 1 juv.(4.9 × 4.4), MAUG WEST-st.E, RI, 4 June, AA, ZC-1427.

60. *Plagusia tuberculata* Lamarck

Specimens examined. 1 ♂ (13.2 × 12.9), 1 ♀ ecdysis (17.1 × 14.4), 1 ecdysis, sex unknown (21.8 × 19.2), AGRIHAN-st.C, RI, 30 May, AA, ZC-1428, 1429.

61. *Percnon planissimum* (Herbst)

Specimens examined. 1 juv.(6.7 × 7.2), ANATAHAN-st.C, RI, 13 May, AA, ZC-1430; 1 juv., ecdysis (6.4 × 7.0), PAGAN-st.A, RI, 24 May, AA, ZC-1431; 8 ecdyses, sex unknown (20.1 × 21.5, 18.4 × 18.8, 16.8 × 17.3, 14.5 × 15.8, 14.3 × 15.3, 14.1 × 15.0, 9.8 × 10.0, 13.1 × ?, broken, 16.0 × 17.2), AGRIHAN-st.C, RI, 30 May, AA, ZC-1432, 1433; 2 ecdyses, sex unknown (14.8 × 15.8, 11.6 × 12.1), AGRIHAN-st.C, RI, 30 May, AA, ZC-1434; 2 ♀ (9.9 × 10.0, 29.6 × 32.2), MAUG EAST, RI, 2 June, AA, ZC-1435, 1436; 1 ♂ (13.1 × 14.6), 1 ♀ (11.2 × 12.3), 20 juv.(7.2 × 8.2, 6.9 × 7.8, 7.5 × 7.6, 6.2 × 7.1, 5.9 × 6.7, 6.4 × 7.2, 6.6 × 7.0, 6.2 × 6.3, 6.1 × 6.2, 5.3 × 5.7, 6.0 × 6.2, 5.2 × 6.0, 5.1 × 6.1, 5.4 × 6.1, 5.1 × 5.7, 5.0 × 5.5, 5.1 × 5.6, 5.4 × 6.2, 5.2 × 6.0, 5.0 × 5.6), 1 megalopa (4.1 × 5.3), MAUG NORTH-st.F, RI, 3 June, AA, ZC-1437; 3 ♂ (12.4 × 12.9, 14.7 × 15.4, 18.0 × 19.4), 2 ♀ (8.9 × 9.8, 19.1 × 20.1), 2 juv. (5.5 × 6.0, 5.0 × 5.8), 1 carapace (5.3 × 5.8), MAUG WEST-st.E, RI, 4 June, AA, ZC-1354, 1438.

Family Gecarcinidae

62. *Cardisoma rotundum* (Quoy et Gaimard)

Specimen examined. 1 ♂ (59.1 × 46.2), MAUG EAST-st.A, alt. 10 m, 2 June, AA, ZC-1439.

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