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Amphipoda (Crustacea) from Palau, Micronesia: Families Melphidippidae, Oedicerotidae, Photidae, Pleustidae, Podoceridae, Stenothoidae, Synopiidae and Talitridae

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Abstract

Eleven species belonging to the families Melphidippidae, Oedicerotidae, Photidae, Pleustidae, Podoceridae, Stenothoidae, Synopiidae and Talitridae are recorded from Palau, Micronesia. Eight species are figured. One species is new to science and is described and figured. One species was previously known only from Australia, one only from Madagascar and one only from Fiji.

Key words: Crustacea, Amphipoda, taxonomy, new species, Melphidippidae, Oedicerotidae, Photidae, Pleustidae, Podoceridae, Stenothoidae, Synopiidae, Talitridae, Palau, Micronesia

Introduction

During the 2002 Oxford University Museum Expedition to Palau, amphipods were collected and kindly made available to the author for study by Dr Sammy De Grave. The collection consisted of almost 50 species in 20 families. This third contribution provides information on 11 species belonging to the families Melphidippidae, Oedicerotidae, Photidae, Pleustidae, Podoceridae, Stenothoidae, Synopiidae and Talitridae. One species is new to science and is described, *Latigammaropsis akhenateni* sp. nov. One species was previously known only from Australia, one only from Madagascar and one only from Fiji.

Material and methods

The main collecting methods employed were direct removal of potential host taxa for symbiotic shrimps and coral rubble collecting. Other collecting methods deployed were baited traps, light traps (Cyalume) and sweep netting of algae and seagrass. Amphipoda were incidental to the main target, i.e. shrimps and were removed from the sorting trays in which samples were processed when observed. No targeted collecting for Amphipoda was carried out. Specimens were dissected in alcohol and mounted on slides in glycerol for study. Drawing was accomplished using a drawing tube attached to a compound microscope. Type material is deposited in the Zoological Collection of the Oxford University Museum of Natural History (OUMNH.ZC).

Abbreviations used in figures. Hd = Head; Lab = Labium; Md = mandible; Mxp = maxilliped; G1, G2 = gnathopods 1,2; P3 = pereopod 3; U1–U3 = uropods 1–3; T = telson; M = male; F = female.

Systematic Section

Family Melphidippidae Stebbing, 1899

Family Synopiidae Dana, 1852

Synopia ultramarina Dana, 1853

Synopia ultramarina Dana, 1853: 995, pl. 68 fig. 6a–h.—Bovallius, 1886: 613, pl. 1, figs 1–21.—Stebbing, 1906: 271.—Spandl, 1924: 47, fig. 17 (part).—Schellenberg, 1926: 341.—K.H. Barnard, 1930: 367.—Shoemaker, 1933: 11.—Pirlot, 1936: 301.—Shoemaker, 1945: 195, fig. 8.—Nagata, 1965: 171.—J.L. Barnard, 1972: 51.—Ortiz, 1978: 9.—Ledoyer, 1986: 990, fig. 391.—Hirayama, 1988: 55, figs 279–282.—J.L. Barnard & Thomas, 1989: 363, figs 1–4 (part).—J.L. Barnard & Karaman, 1991: 716.—Lowry & Stoddart, 2003: 124 (catalogue).—Hughes, 2009: 880–891, figs 1, 2.
Synopia scheeleana.—Ledoyer, 1979b: 137, fig. 88(II).

Material examined. 2 males, 4 females (OUMNH.ZC.2002.24.139) outside Risong channel, light trap sample, 15 m; 07°17.903'N, 134°28.544'E; leg. S. De Grave & C. Burras, night 25th–26th May 2002; 2 females, 1 male (OUMNH.ZC.2002.24.140) Risong Cove, WWII wreck; light trap, 2m depth, sandy bottom; 07°17.987'N, 134°28.756'E; leg. S. De Grave & C. Burras, 28th–29th May 2002.

Distribution. Australia: Queensland: Lizard Island (Hughes 2009), Lowe Isles (K.H. Barnard 1930), Heron Island and One Tree Island (Hughes 2009); Palua (present study); Indonesia: Borneo (Pirlot 1936). Japan: Seto Inland Sea (Nagata 1965), Tomioka Bay (Hirayama 1988); Madagascar (Ledoyer 1986); Indian Ocean. (Dana 1853); Red Sea (Spandl 1924); West Atlantic (Dana 1853, Stebbing 1906); Bermuda (Shoemaker 1945); Caribbean (Shoemaker 1933, Ortiz 1978, J.L. Barnard & Thomas 1989); Brazil (Dana 1853).

Family Talitridae Rafinesque, 1815

Floresorchestia palau Lowry & Myers, 2013

Floresorchestia palau Lowry & Myers, 2013: 577, figs 1, 2.

Material examined. Holotype, male, 3.5 mm (OUMNH.ZC.2002.24.0118) inside Pinchers Lagoon, western edge of Malakal Harbour, Malakal Island, Koror, Palau, Micronesia, (07°20.407'N 134°25.755'E), light trap sample, sandy callianassid flat, 3 m depth, S. De Grave & C. Burras, night 27–28 May 2002.

Remarks. This species was recently published elsewhere.

Distribution. Known only from Palau.

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