

TAHITIAN AND OTHER RECORDS OF HAPLOCHERNES FUNAFUTENSIS (WITH)^{1 2} (ARACHNIDA: CHELONETHIDA)

By

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Since my statement of January 1934 [B. P. Bishop Mus., Occ. Pap. 10 (22), 1934] that no false scorpions had been recorded from the Society Islands, I have had the opportunity of examining some specimens of *Haplochernes funafutensis* (With) collected in Tahiti by A. M. Adamson. This species, hitherto known in the literature from a single female collected on the island of Funafuti in the Ellice Islands, has also been taken by E. H. Bryan, Jr., in Fiji.

Haplochernes funafutensis (With) (fig. 1).

Chelifer funafutensis With, Linn. Soc. London, Jour. Zool. 30:57, 1907.

Haplochernes funafutensis (With) Beier, Das Tierreich 58:113, 1932.

Haplochernes funafutensis (With) Chamberlin, Ann. Mag. Nat. Hist., XI, 2: 275, 1938.

Diagnosis (emended). For both male and female unless otherwise noted. Carapace 1.2-1.3 times as long as broad; eye spots present but indistinct; anterior carapacial furrow well defined, distad of median; posterior furrow typical in position, less prominent than anterior furrow. Carapace, tergites, and palps smooth and almost "polished" except for lateral margins of carapace and anterior face of femur, which are weakly and sparsely granulate (a few scattered granules may occur on tibia as well). Tergites 1 and 11 entire, 2-4 generally partially divided (in some specimens 2 and 3 entire), 5-10 with an obscure linear impression and complete (sometimes partial) scutal division; tergites 1-3 uniseriate bordered by 8-10 setae, tergites 4-10 biseriate with 4 discal and 10-14 marginal setae. Sternites 4-10 with partial to complete linear division; median sternites biseriate with 4 discal and 14-18 marginal setae; tergite 10 with a submedian discal pair of unusually slender but scarcely pseudotactile setae; tergite 11 with a shorter median and longer lateral pair of discal pseudotactile setae; sternite 10 with a median and lateral semi-tactile discal seta on each scutum; sternite 11 with a median pseudotactile and a lateral pair of pseudotactile setae. Chelicerae normal; setae es, sb, and b terminally denticulate; serrula exterior with 17-20 ligulate teeth (generally 18), serrula interior with 3 dentate subapical lobes; galea variable but terminally 6-branched and equally developed in both sexes (fig. 1, C-H); flagellum with anterior blade denticulate, the others nearly acuminate, at most with 1 or 2 denticulations. Palps moderately attenuate (fig. 1, A); trochanter with a moderately developed sub-dorsal conical protuberance, 1.5-1.8 times as long as broad and only a little shorter than breadth of chela; femur 1.5-1.6 times as long as trochanter, slightly but distinctly shorter than tibia and 2.4-2.6 times as long as broad; tibia 2.25-2.34 times as long as broad; chela 1.6-1.9 times as long as tibia and 2.9-3.2 times as long as broad; chela slightly but distinctly broader than

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deep; hand 1.1-1.2 times as long as fingers, which are much shorter than femur; chela as illustrated (fig. 1 *B*); fixed finger with 58-67 and movable finger with 61-73 marginal teeth; accessory teeth poorly developed interiorly, with only a single terminal accessory tooth on fixed finger; exteriorly each finger bearing a series of 5-8 evenly spaced teeth (fig. 1, *B*); pattern of chaetotaxy as illustrated; two accessory pseudotactile setae on movable finger, one slightly ventrocaudad of T, the other submedian between T and finger tip; ISB and IB caudad of ESB and EB; EST nearly opposite IST; IT slightly proximad of median and slightly closer to EST than ESB is to ESB; nodus ramosus submedian between T and ST; duct of venom apparatus normal, not inflated. Linear cluster of 7-11 sense spots extending interiorly on fixed finger from between setae ISB and IB to distad of seta IST. One or two sense spots sometimes occurring exteriorly on fixed finger near setae ESB and EB and a similar pair occurring interiorly on movable finger opposite and distad of setae IB and ISB, none exteriorly on movable finger. Tibia of leg I with a subterminal sense dome; tarsus of leg IV with a sense dome proximad of tarsal pseudotactile seta, which is placed 0.29 to 0.33 of tarsal length from its base (fig. 1, *J*). Tibia of leg IV with a weakly differentiated, denticulate, submedian and subterminal pseudotactile seta (fig. 1, *J*). Leg I: femur (dorsal length of both subsegments) 2.8-3.0 as long as its greatest depth and 1.36-1.44 times as long as tibia; tibia 1.07-1.19 times as long as tarsus and 3.12-3.33 times as long as deep; tarsus 3.84-4.12 times as long as deep. Leg IV: femur (greatest length of both subsegments)

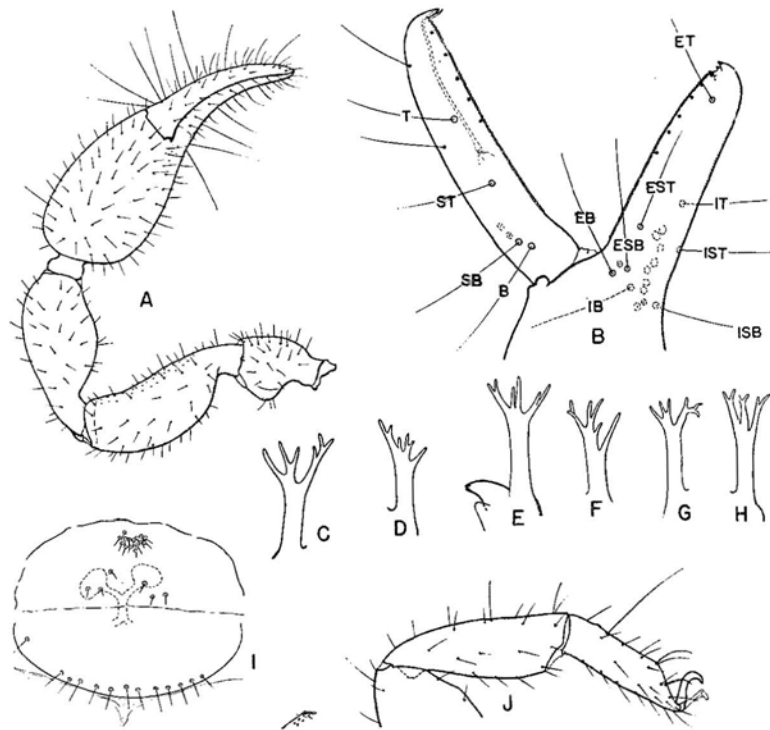


FIGURE 1.—*Haplochernes funafutensis* (With): *A*, ventral aspect of right palp, female; *B*, extero-lateral aspect of left chela, female; *C-H*, variations in galeal development (*C, E, F, H*, female; *D, G*, male); *I*, genital area, female; *J*, lateral aspect of tibia and tarsus IV, male. (*A, B, E, I*, JC-222.02001; *C*, JC-818.01001; *D*, JC-234.01001; *F*, JC-223.01001; *H*, JC-222.01002; *G*, JC-811.01001; *J*, JC-222.01001.)

1.39-1.46 times as long as tibia and 2.7-2.9 times as long as deep; tibia 1.28-1.43 times as long as tarsus and 3.2-3.5 times as long as deep; tarsus 1.17-1.29 times as long as fore tarsus and 3.7-4.0 times as long as deep. Genital area of male typical lamprochernetine type, almost as in *Lamprochernes samoanus* Chamberlin. Genital area of female typical, characterized by a compact median cluster of 14-16 microsetae (fig. 1, I).

Measurements (in millimeters). Below are listed the extremes of measurements in the smallest³ and largest specimens, respectively, of 3 males and 4 females:

Males (JC-811.01001 and JC-222.01001): Total length, indet. to 2.6. Abdominal breadth, 0.90*-0.98. Carapace, 0.72-0.84 long and 0.59-0.64 broad posteriorly. Palps: trochanter, 0.385-0.410 × 0.243-0.259; femur, 0.620-0.656 × 0.238-0.261; tibia, 0.640-0.677 × 0.273*-0.294; chela, 1.092-1.188 × 0.361-0.394 broad, and indet. to 0.369 deep; hand, 0.640-0.672 long; fingers 0.523-0.616 long. Leg I: femur (dorsal length of combined subsegments), 0.422-0.445 × 0.144*-0.155; tibia, 0.295-0.312 × 0.096*-0.099; tarsus, 0.262-0.288 × 0.067*-0.070. Leg IV: femur (greatest length of combined subsegments), 0.622*-0.653 × 0.221*-0.236; tibia, 0.424-0.453 × 0.127*-0.138; tarsus, 0.312-0.351 × 0.085*-0.092.

Females (JC-223.01001 and 222.02001): Total length, 2.90-3.25. Abdominal breadth, 1.15-1.31. Carapace, 0.82-0.95 long by 0.66-0.77 broad posteriorly. Palps: trochanter, 0.394-0.459 × 0.310-0.295; femur, 0.590-0.740 × 0.243-0.300; tibia, 0.609-0.770 × 0.268-0.332; chela, 1.150-1.340 × 0.362-0.465 broad and 0.339-0.443 deep; hand, 0.656-0.762 long; fingers, 0.538-0.670 long. Leg I: femur (as in male), 0.426-0.508 × 0.144-0.177; tibia, 0.312-0.370 × 0.099-0.114; tarsus, 0.276-0.314 × 0.072-0.077. Leg IV: femur (as in male), 0.630-0.779 × 0.228-0.276; tibia, 0.445-0.539 × 0.132-0.166; tarsus, 0.324-0.375 × 0.088-0.099.

Society Islands. Tahiti: Papeari, altitude 900 feet, November 9, 1928, on pandanus, male (JC-811.01001); Fautaua Valley, 2 miles from sea, September 13, 1928, on *Hibiscus tiliaceus*, 2 females and 1 nymph (JC-818.01001-3), A. M. Adamson. (Specimens JC-222.01001, JC-811.01001, JC-818.01002 in Bishop Museum; others in author's collection.)

Fiji. Viti Levu: Colo-i-Suva, June 29, 1924, male and female (JC-222.01001-2); June 21, 1924, female (JC-222.02001). Lau: Naitumba, September 30, 1924, male (JC-234.01001); Yathata, October 1, 1924, female (JC-223.01001). All collected by E. H. Bryan, Jr.

The palpal proportions and other measurements given by With (Linn. Soc. London, Jour. Zool. 30: 57, 1907) for the type specimen fall well within the limits of variation found in the present material.

³ Measurements indicated by the asterisk are indeterminable for the smallest specimen (JC-811.01001); hence corresponding measurements from specimen JC-234.01001 are substituted.