
PSEUDOSCORPIOIONS FROM FLORIDA
AND THE CARIBBEAN AREA
11. A NEW PARACHELIFER FROM THE
VIRGIN ISLANDS (CHELIFERIDAE)1

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ABSTRACT

The new species, Parachelifer parvus, is the first cheliferid pseudoscorpion recorded from the Antilles east of Hispaniola.

Two specimens of a new species of Parachelifer Chamberlin were recently collected on St. John, U.S. Virgin Islands. These are the first cheliferid pseudoscorpions recorded from the Antilles east of Hispaniola.

Parachelifer parvus Muchmore, New Species

Fig. 1-8

MATERIAL: Holotype male (WM 5704.01001) and paratype tritonymph found under bark of black mangrove at Great Lameshur Bay, St. John, U.S. Virgin Islands, 9-VI-1980 (W. B. Muchmore). The types are in the Florida State Collection of Arthropods, Gainesville.

DIAGNOSIS: Generally similar to Parachelifer dominicanus Beier (1976) but with all tergites completely sclerotized, palpal segments more slender, movable chelal finger distinctly shorter than hand, trichobothria it and ist well separated, and tarsus of leg I of male with a prominent apical spine.

DESCRIPTION OF MALE (female unknown): Heavily sclerotized and dark reddish brown in color. Carapace heavily granulate, with 2 deep, transverse furrows; eyes large; small but distinct posterolateral keels; about 60

1Contribution No. 400, Bureau of Entomology, Division of Plant Industry, Florida Department of Agriculture and Consumer Service, Gainesville, FL 32602 USA. Support was provided in part by the Office of Naval Research under Contract N0014-76-C-0901 with the Center for Naval Analyses of the University of Rochester.
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Fig. 1-3. *Parachelifer parvus* Muchmore, new species. 1) dorsal view of left palp; 2) lateral view of right chela (base omitted); 3) posterior view of tarsus of leg 1 of male.

Clavodentate setae on low tubercles, 4 at anterior and 7 at posterior margin. All tergites and sternites completely and strongly sclerotized; tergites 5-10 and sternites 5-10 divided; surfaces of tergites granulate anteriorly to scaly posteriorly, sternites scaly; tergites 1-9 with lateral keels. Tergal chaetotaxy 10:11:12:12:12:12:13:12:12:14:2; sternal chaetotaxy 60:(0)2-2/13(0): (1)10(1):15:13:14:13:11:4T1T3:2T4T1:2; dorsal setae terminally clavate and dentate, ventral setae mostly acuminated. Genitalia mostly typical of the genus; statumen convolutum with a heavy median rod; many setae on anterior genital operculum unequally bifurcate near the end; the 4 setae on anterior edge of posterior operculum curved and denticulate near tip. Coxal area typical; coxa IV with prominent lateral spur and containing a coxal sac without an atrium.

Chelicera 0.3 as long as carapace; hand with 5 setae, b finely denticulate near tip, others acuminated; flagellum of 3 setae; galea short, slender, simple.

Palp rather short and robust for the genus (Fig. 1). Femur 1.15 and chela 1.55 times as long as carapace. Trochanter 1.9, femur 4.85, tibia 3.15, and chela (without pedicel) 3.5 times as long as broad; hand (without pedicel) 2.2 times as long as deep; movable finger 0.87 as long as hand. Surfaces granulate except for chelal fingers; few, low setiferous tubercles on trochanter, femur and medial side of tibia and chelal hand; setae vary from clavodentate to acuminated. Trichobothria as shown in Fig. 2; on movable finger st midway between t and sb; on fixed finger it well distad of ist, which in turn is proximal of est. Fixed finger with a row of 25 marginal teeth, well developed and cusped distally and becoming flattened proximally, then a short
hiatus followed by a row of 8 well developed teeth; movable finger similarly with a row of 24 teeth becoming flattened proximally, followed by a somewhat larger hiatus and 7 well developed teeth.

Legs fairly typical. Tarsus of leg I of male slightly thickened near middle and with a modest but distinct apical spine (Fig. 3); posterior claw with a small dorsolateral tooth. Claws of other legs all toothed. Subterminal setae dentate. Leg IV with entire femur 2.6 and tibia 3.4 times as long as deep.

**Measurements** (mm): Holotype male. Body length 1.9. Carapace length 0.63. Chelicera 0.185 by 0.095. Palpal trochanter 0.33 by 0.175; femur 0.725 by 0.15; tibia 0.585 by 0.185; chela (without pedicel) 0.96 by 0.275; hand (without pedicel) 0.52 by 0.235; pedicel 0.065 long; movable finger 0.45 long. Leg IV: entire femur 0.495 by 0.19; tibia 0.355 by 0.105; tarsus 0.28 by 0.065.

**Etymology:** The species is named *parvus* because of its small size compared to others in the genus.

**Remarks:** Within the genus the new species most closely resembles *P. dominicanus* from the Dominican Republic. Like the latter, it differs from others by its small size and less attenuated appendages. The nearest known typical members of the genus are *P. superbus* Hoff and *P. archboldi* Hoff (1964) from Florida.

This record represents the easternmost record of any cheliferid pseudoscorpion in the Antilles. However they may be dispersed, cheliferids apparently have spread rather slowly in this area; previously only 5 species, representing the genera *Cubachelifer* Hoff, *Parachelifer* Chamberlin, and *Tyrannochelifer* Chamberlin, were known, on Cuba and Hispaniola.

*Parachelifer parvus*, nueva especie, este es el primer pseudoscorpion de la familia Cheliferidae reportado en las Antillas al este de Hispaniola.

**Literature Cited**

