

PSEUDOSCORPIONS FROM FLORIDA AND THE
CARRIBBEAN AREA. 9. *TYPHLOORONCUS*, A NEW GENUS
FROM THE VIRGIN ISLANDS (IDEORONCIDAE)¹

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ABSTRACT

The genus *Typhloroncus* is defined with *T. coralensis* Muchmore, new species, from St. John, U.S. Virgin Islands, as the type species. This is the first ideoroncid pseudoscorpion reported from the West Indies.

Among pseudoscorpions which I collected recently on St. John, U. S. Virgin Islands, was a single specimen of a new genus and species belonging to the Ideoroncidae. As this family has not heretofore been reported from the West Indies, it seems appropriate to describe the new taxa at this time.

Typhloroncus Muchmore, NEW GENUS

TYPE SPECIES: *Typhloroncus coralensis* Muchmore, NEW SPECIES.

DIAGNOSIS: The genus is defined by the characters of the type species (female only) as described below. It is typical of the family Ideoroncidae except that it has no eyes. Tergites and sternites entire, middle ones bearing 8 or 9 setae. Both fingers of chelicera bear marginal teeth; flagellum of 4 dentate setae; galea a long, slender stylet. Venom apparatus well developed in both fingers of palpal chela; chela bearing many more than 12 trichobothria, with 5 on dorsum of hand, the 3 more proximal ones close together at the base of a slight elevation and describing an obtuse triangle (Fig. 2), and with 3 on lateral side of hand in a vertical row (Fig. 3). Pedal tarsi with subterminal setae dentate near tip; arolia undivided and shorter than claws.

In being eyeless, *Typhloroncus* differs from all other genera in the Ideoroncidae, which typically have 2 well developed eyes with bulging corneas. This character is considered very important, because the eyes are retained (though reduced) even in otherwise distinctly modified cavernicolous ideoroncids such as *Negroroncus aelleni* Vachon (1958) and *Albiorix bolivari* Beier (1963). Aside from the lack of eyes, the new genus appears most similar to *Negroroncus* Beier (1932) from Africa and *Dinoroncus* Beier (1932) from Chile, especially in the close grouping of 3 trichobothria on the dorsum of the chelal hand; however, in neither of these genera are the trichobothria accompanied by an elevation of the surface of the hand as in *Typhloroncus*. Geographically the nearest reported representatives of the family are species of *Albiorix* in Mexico and Central America (Hoff 1945); from these *Typhloroncus* differs particularly in having the arolia on pedal

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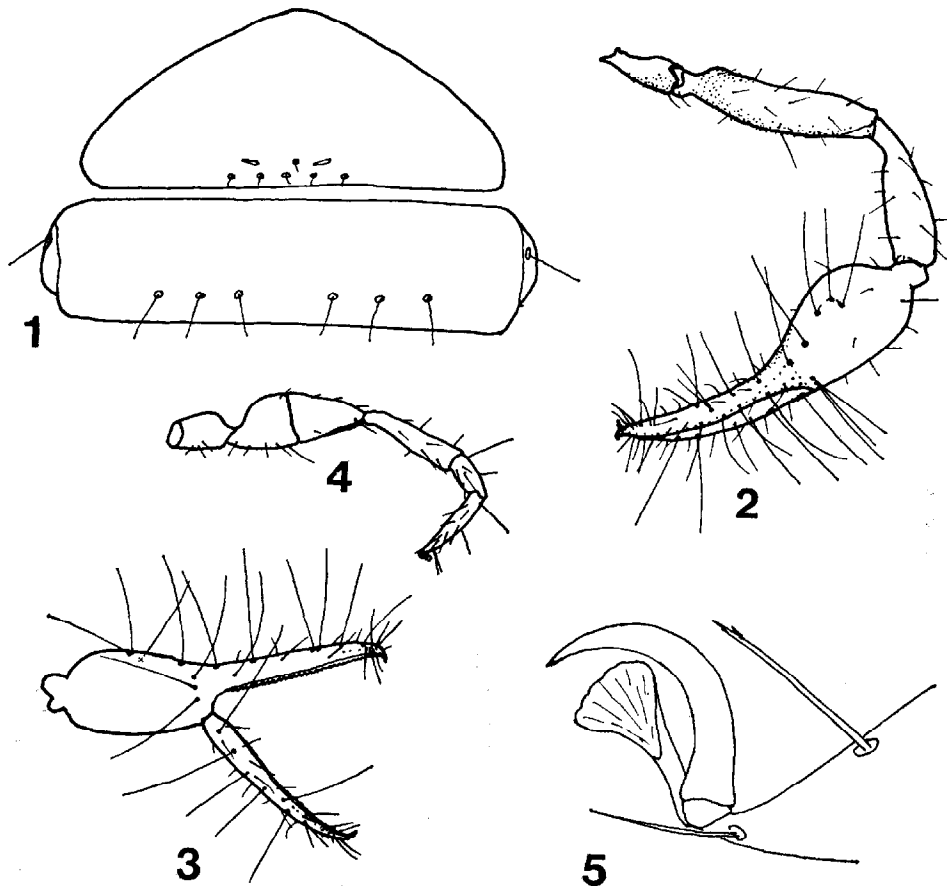
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tarsi shorter than the claws rather than longer, and entire rather than bifid (Hoff 1956).

Typhloroncus coralensis Muchmore, NEW SPECIES

MATERIAL: Holotype female (WM 4982.03001), found under a rock on a wooded hillside above Coral Bay, St. John, U. S. Virgin Islands, 12-III-1978, by the author. The type is deposited in the Florida State Collection of Arthropods, Gainesville.

DESCRIPTION: A small species, generally light tan in color. Carapace longer than broad; anterior margin with a small triangular epistome; no eyes present; surface finely reticulated, especially at sides; a distinct transverse furrow near the posterior margin; with about 16 fine setae, 4 at both anterior and posterior margins. Coxal arca typical. Abdomen elongate; tergites and sternites entire, weakly sclerotized, smooth; pleural membranes smoothly, longitudinally striate. Tergal chaetotaxy 4:4:6:8:8:8:9:9:8:13: T1TT1TT2T:2; sternal chaetotaxy 6:(1)6(1):(1)7(1):9:8:9:8:11:14:T1T3 T1T:2; genital opercula as in Fig. 1.



Figs. 1-5. *Typhloroncus coralensis* Muchmore, new genus and new species. 1) Genital opercula of female; 2) Left palp, dorsal view; 3) Right chela, lateral view; 4) Leg IV, lateral view; 5) Tip of telotarsus showing arolium, and claw and subterminal seta on 1 side.

Chelicera a little more than half as long as carapace; hand with 6 setae, *es* very long, straight; flagellum of 4 subequal setae, all dentate along 1 edge; fixed finger with 8-10 and movable finger with 5-6 irregular teeth; galea long, slender, gently curved.

Palp fairly slender (Fig. 2); femur 1.2 and chela 1.95 times as long as carapace. Trochanter 2.3, femur 4.35, tibia 3.2 and chela (without pedicel) 3.5 times as long as broad; hand 1.75 times as long as deep; movable finger 1.32 times as long as hand. Surfaces are smooth except for small granulations over trochanter, on the proximal and medial parts of femur, medial side of tibia, and medial side of chelal hand and bases of fingers. Trichobothria of chela as shown in Fig 2 and 3; as there are many of varied sizes, it is difficult to distinguish between some trichobothria and some vestural setae and to make an exact count of the former; however, there are 5 prominent trichobothria on the dorsum of the hand and 3 on the lateral side of the hand; the 3 proximal ones on the dorsum are somewhat isolated, and describe an obtuse triangle around the base of a low, but distinct, elevation of the surface; movable finger with 46 low, flat, contiguous teeth, becoming obsolescent proximally; fixed finger with 54 contiguous teeth, low and rounded distally, but with distinct cusps proximally; both fingers with well developed venom apparatus, the nodus ramosus in each finger ca. 1/3 of the distance from the distal end.

Legs rather robust; leg IV with entire femur 2.6 and tibia 4.6 times as long as deep (Fig. 4); metatarsus and telotarsus each with a prominent tactile seta; subterminal tarsal setae dentate near tip; arolia not divided, shorter than claws (Fig. 5).

MEASUREMENTS (mm): Body length 2.37. Carapace length 0.59. Chelicera 0.33 by 0.16. Palpal trochanter 0.32 by 0.14; femur 0.695 by 0.16; tibia 0.56 by 0.175; chela (without pedicel) 1.14 by 0.325; hand (without pedicel) 0.49 by 0.28; pedicel 0.075 long; movable finger 0.65 long. Leg IV: entire femur 0.495 by 0.19; tibia 0.37 by 0.08; metatarsus 0.185 by 0.065; telotarsus 0.29 by 0.06.

ETYMOLOGY: The species is named for Coral Bay on St. John where it was found.

REMARKS: This is the 1st representative of the Ideoroncidae to be reported from the West Indies if *Bochica* Chamberlin is excluded from the family, as I believe correct. However, it might be expected that others will be found, because several species of *Albiorix* occur in Mexico and Central America, and an unidentified ideoroncid from Cuba is at hand.

Under similar rocks on the same hillside were found specimens of as yet unidentified species of *Olpium* and *Planctolpium* (Olpidae).

ACKNOWLEDGMENT

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ARID-GRASSLAND SOLPUGID POPULATION VARIATIONS IN SOUTHWESTERN NEW MEXICO^{1,2}

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ABSTRACT

This paper extends and corrects the arid-grassland solpugid population data for southwestern New Mexico. Can-trapping has been continuous, April through November, from 1972 through 1977. Data analysis indicates that solpugid populations vary in gross levels from year to year and seasonally within years. Such fluctuations may be the result of variations in the populations of 4 arid-grassland species of *Eremobates* which undoubtedly are influenced by abiotic factors such as temperature, rainfall, and humidity, and biotic factors such as seasonal adult activity, fall immature activity, and food supply.

Several studies have demonstrated solpugid population variations in North America. Muma (1963) tabulated seasonal variations of the abundance of specimens and species of adult solpugids at Mercury, Nevada, from 1960 through 1962 as estimated by pit traps (large, dry cans). He also cited apparent habitat associations of 8 common species. Allred and Muma (1971) tabulated seasonal and habitational variations on the abundance of specimens and species of immature and adult solpugids at the National Reactor Testing Station in Idaho for 15 months in 1966 and 1967 as estimated by pit traps. Brookhart (1972) cited abundance of adult specimens and species of solpugids in Colorado as estimated by pit traps and miscellaneous collecting. Muma (1974a) discussed seasonal and habitational variations of adult solpugids that affected reproductive isolation of common North American species, all estimated by pit traps, can traps (large cans containing a killing-preserving medium), and miscellaneous collecting. Muma (1974b, 1975a) tabulated and discussed seasonal, annual, and habitational variations of specimens and species of immature and adult solpugids in southern New Mexico during 1972 and 1973 as estimated by can traps.

Although not specifically stated, all of the above studies were conducted on the premise that solpugids actively running over the surface of the

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