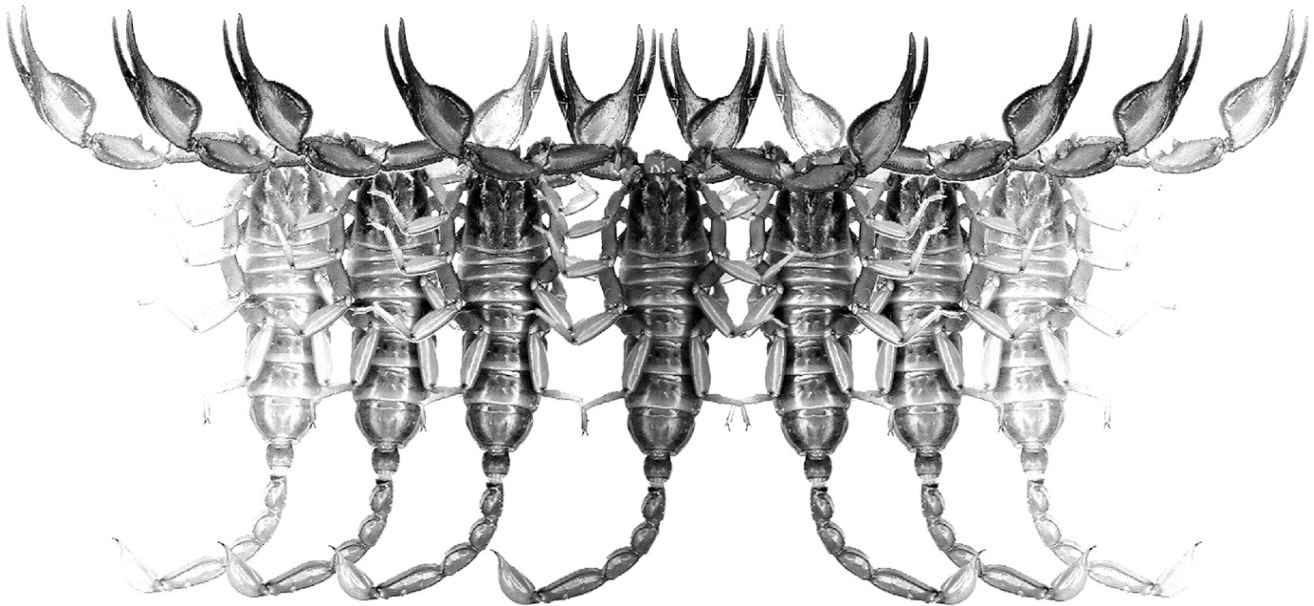


Euscorpium

Occasional Publications in Scorpiology



**First record of *Didymocentrus sanfelipensis*
(Scorpiones: Diplocentridae) from
Turiguanó Island, Ciego de Ávila, Cuba**

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First record of *Didymocentrus sanfelipensis* (Scorpiones: Diplocentridae) from Turiguanó Island, Ciego de Ávila, Cuba

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Summary

The diplocentrid scorpion *Didymocentrus sanfelipensis* Armas, 1976 is recorded for the first time from Turiguanó Island, Morón municipality, northwest of Ciego de Ávila Province, central region of Cuba. This is the northernmost locality for the species and also the easternmost record for the genus, as well as the first time that this species is found in a non-serpentine soil.

Introduction

The genus *Didymocentrus* Kraepelin, 1905 is represented in Cuba by three species, which are restricted to the central region of this Antillean country (Teruel & Rodríguez, 2008; Teruel & Kovařík, 2012; Rodríguez Cabrera, 2016). A fourth species, *D. armasi* Teruel & Rodríguez, 2008, was described from the east of the Cienfuegos Bay, but Rodríguez Cabrera (2016) considered that it should be regarded as a junior synonym of *D. trinitarius* (Franganillo, 1930), which ranges from the Trinidad municipality in Sancti Spíritus Province to near Cienfuegos Bay, Cienfuegos Province, south of central Cuba (Fig. 1). The northernmost Cuban species is *D. jaumei* Armas, 1976, that inhabits coastal and subcoastal areas of the north of Villa Clara Province and northeastern Matanzas Province (Teruel & Rodríguez, 2008; Teruel & Kovařík, 2012). Having the most central distribution, *D. sanfelipensis* Armas, 1976, ranges from Sabanas de San Felipe (northwestern Ciego de Ávila Province and northeastern Sancti Spíritus Province) to near Santa Clara in the Villa Clara Province (Fig. 1), always on ultrabasic soils (Armas, 1976; Teruel & Rodríguez, 2008; Teruel & Kovařík, 2012).

Didymocentrus sanfelipensis Armas, 1976
(Figures 1–5, Table 1)

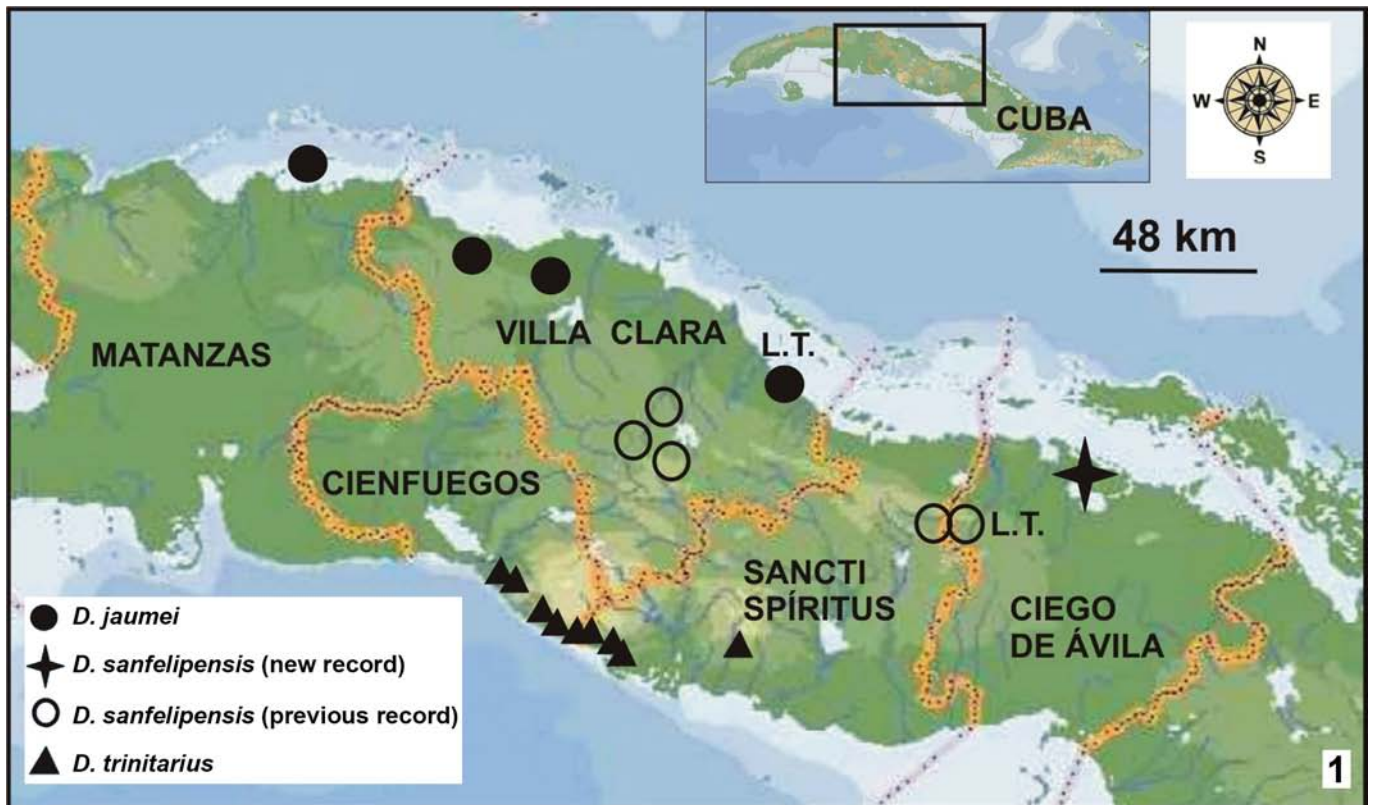
Didymocentrus sanfelipensis Armas, 1976: 18; Armas, 2006: 10; Teruel & Rodríguez, 2008: 65; Teruel & Kovařík, 2012: 183.

TYPE LOCALITY AND TYPE REPOSITORY. Cuba, Sancti Spíritus Province, Jatibonico Municipality, Arroyo Blanco, Sabanas de San Felipe; IESC (Instituto de Ecología y Sistemática, La Habana, Cuba, No. CZACC-3.169).

MATERIAL EXAMINED. Cuba, Ciego de Ávila Province, Morón municipality (**first record**), Turiguanó Island, 2.2 km NW of Turiguanó town, 22°16'42.75"N 78°34'04.25"W, 50 m a.s.l., III.2019, 1♀, IESC, leg. L. A.-Lajonchere, under stone, in a fragment of secondary semideciduous forest.

Dimensions (MM)		<i>D. sanfelipensis</i> ♀
Carapace	L / W	5.15 / 5.00
Mesosoma	L	14.60
Tergite VII	L / W	3.15 / 4.50
Metasoma + telson	L	22.15
Segment I	L / W / D	2.75 / 3.00 / 2.00
Segment II	L / W / D	3.00 / 2.65 / 2.00
Segment III	L / W / D	3.25 / 2.55 / 2.00
Segment IV	L / W / D	3.65 / 2.35 / 1.85
Segment V	L / W / D	4.75 / 2.15 / 1.95
Telson	L / W / D	4.75 / 2.60 / 2.10
Pedipalp	L	15.75
Femur	L / W / D	3.50 / 1.75 / 1.50
Patella	L / W	3.75 / 1.80
Chela	L	8.50
Manus	W / D	2.70 / 3.95
Movable finger	L	4.30
Total	L	41.90

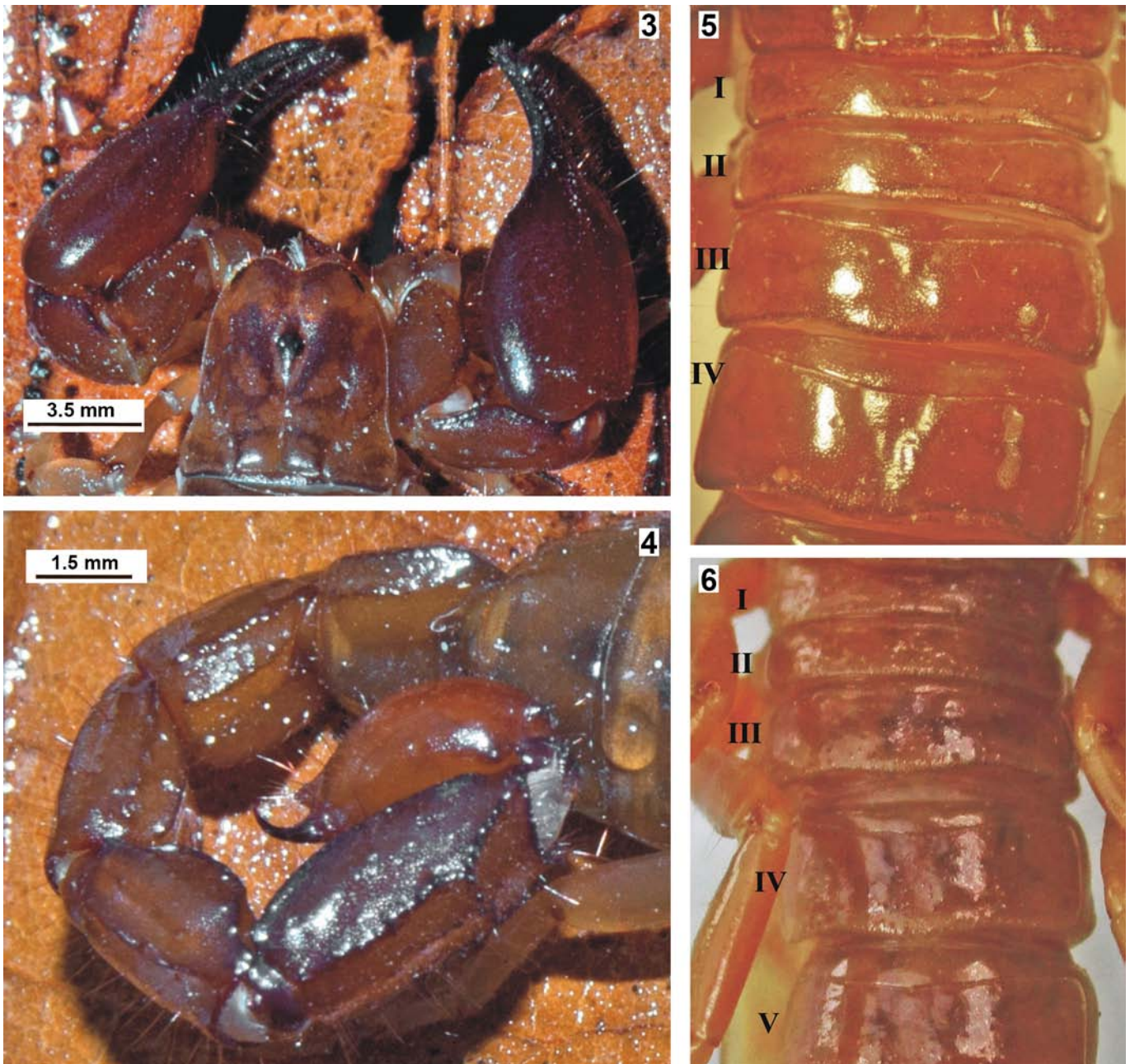
Table 1. Measurements (mm) of an adult female of *Didymocentrus sanfelipensis* from Turiguanó Island, Ciego de Ávila Province, Cuba. *Abbreviations:* length (L), width (W, in carapace it corresponds to posterior width), depth (D).



Figures 1–2: **Figure 1.** Geographic distribution of the Cuban *Didymocentrus* species (L. T, type localities). **Figure 2.** *D. sanfelipensis*, a live female from Turiguanó Island.

RESULT. Recently, the Cuban malacologist Luis Álvarez-Lajonchere Ponce de León collected on Turiguanó Island, Ciego de Ávila Province, an adult female of this species (Figs. 2–5, Table 1). This is the northernmost locality for the species and also the easternmost record for the genus, as well as the

first time that this species is found in a non-serpentine soil. Of course, presence of *D. sanfelipensis* in this new locality was unexpected, because all the previously known places for this species correspond to the “cuabales” habitat (dry serpentine thorny scrub-woodland) (Armas, 1976; Teruel & Rodríguez,



Figures 3–6: **Figures 3–4.** *D. sanfelipensis*, a live female from Turiguanó Island, prosoma in dorsal aspect (3) and metasoma in dorsolateral aspect (4). **Figures 5–6.** Female tergites of *D. sanfelipensis* from Turiguanó Island (5) and *D. jaumei* Armas, 1976, holotype (6).

2008; Teruel & Kovařík, 2012; Rodríguez Cabrera, 2016). In an ecological analysis for predicting new possible habitats for the Cuban *Didymocentrus* species (Rodríguez Cabrera, 2016), Turiguanó Island and neighboring land areas appeared as potentially appropriate for *D. jaumei*, but not for *D. sanfelipensis*.

Turiguano Island (área 195 km²) lies at the northern coast of Ciego de Ávila Province. It is joined to the island of Cuba by a thin isthmus, while the Chicola Channel, the lagoons of La Leche and La Redonda, and the Manatí Channel act as barriers separating it from the mainland Cuba. The coastal areas of the Turiguano Island are mainly covered by mangrove forest and marsh vegetation, whereas its higher terrains, predominantly

with typical carbonalitic humid soil (Marrero Rodríguez et al., 1989), are devoted to agriculture and cattle-raising. The semideciduous forest there limited to scarce spots, which are highly degraded by anthropogenic factors (C.N.N.G., 2000; L. Álvarez-Lajonchere, pers. com., April 2019); the highest hill is only 105 m a.s.l.

Other scorpions recorded from Turiguanó Island are three buthid species: *Centruroides anchorellus* Armas, 1976, *C. guanensis* Franganillo, 1930, and *Heteroctenus junceus* (Herbst, 1800) (Armas, 1984: 20, 23; Teruel & Armas, 2012: 168). The first is frequent in the mangrove forest, whereas the other two are commonly found in the inner areas: *C. guanensis* on trees and *H. junceus* under rocks and fallen logs (pers. observ.).

REMARKS. In their revision of the genus *Didymocentrus* in Cuba, Teruel & Rodríguez (2008: 60) stated that both *D. sanfelipensis* and *D. jaumei* have not coarse and disperse granules on carapace and tergites. The same statement appears in Teruel & Kovařík (2012). Certainly, female specimens of *D. sanfelipensis* have tergites smooth, shiny, without evident granules (Fig. 5); nevertheless, in *D. jaumei* the female has tergites with feeble granules (Fig. 6), a character described by Armas (1976: 12–13) for this species and present in all the adult females of the type-series. Other characters that differentiate females of *D. jaumei* from those of *D. sanfelipensis* are a paler general coloration and sternites III–VI with faint punctation (well-defined in *D. jaumei*).

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