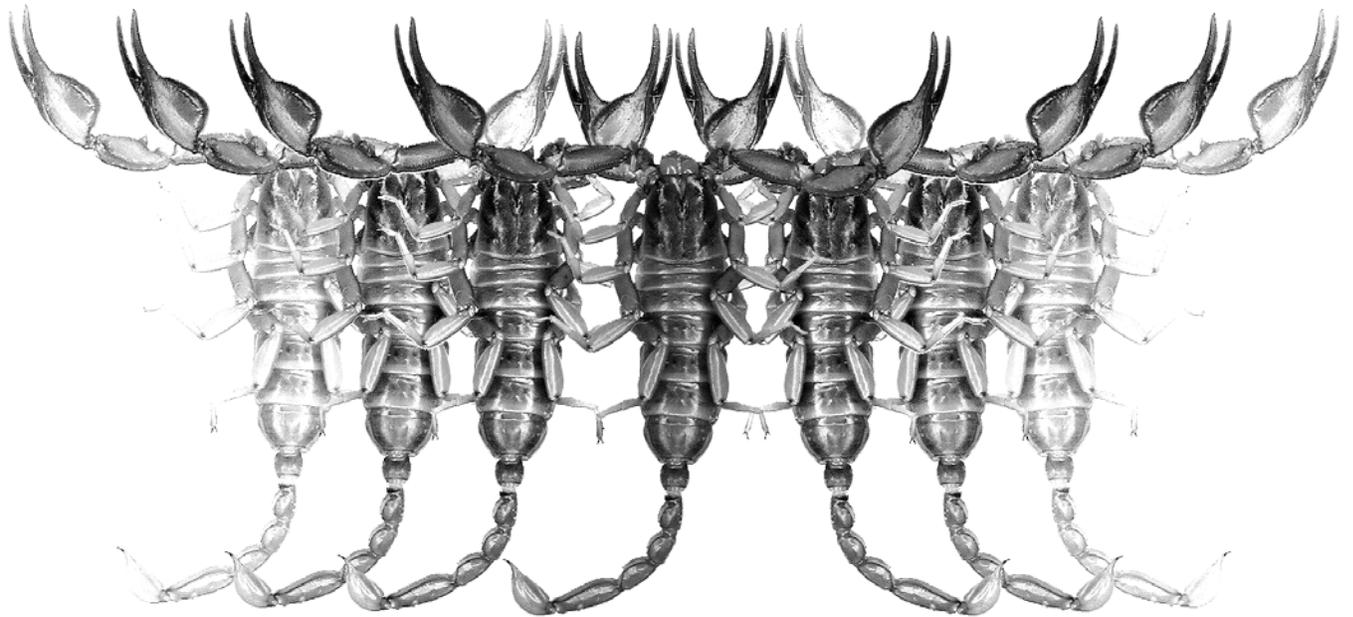


Euscorpium

Occasional Publications in Scorpiology



**On the Adult Female of *Oiclus nanus* Teruel et Chazal, 2010
(Scorpiones: Scorpionidae: Diplocentrinae)**

Rolando Teruel & Léonard Chazal

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On the adult female of *Oiclus nanus* Teruel et Chazal, 2010 (Scorpiones: Scorpionidae: Diplocentrinae)

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Summary

The adult female of *Oiclus nanus* Teruel et Chazal, 2010 is herein described for the first time, on the basis of a topotypic specimen. Taxonomic diagnosis of this species endemic from Guadeloupe is emended, and the comparison to its closest relative is also improved.

Introduction

Very recently, Teruel & Chazal (2010) described a tiny species of diplocentrine scorpion from mainland Guadeloupe under the name *Oiclus nanus*, on the basis of four male specimens: three adults (including the holotype) and one small juvenile.

As a part of the ongoing revision of the Diplocentrinae scorpions of the Antilles by one of us (R. Teruel, in progress), new field trips were conducted in this island and more specimens of *O. nanus* were found, including the first adult females and a new locality record for this species. This paper aims to present recent results obtained during the last field trips in Guadeloupe.

Methods

Specimens were studied, measured and photographed under a Zeiss Stemi 2000-C stereomicroscope, equipped with a line scale ocular micrometer and a Canon PowerShot A620 digital camera. Digital images were slightly processed with Adobe Photoshop® 8.0, only to optimize bright and contrast features. Nomenclature and measurements follow Stahnke (1970), except for trichobotriotaxy (Vachon, 1974), metasomal carinae (Francke, 1977), and sternum (Soleglad & Fet, 2003). All measurements are given in millimeters as length/width/depth except for the carapace, where these correspond to length/posterior width. Unless otherwise stated, specimens are deposited in the first author's personal collection (RTO), with both collecting and identification labels originally written in Spanish, but translated to English in the text only for coherence purposes.

Systematics

Family Scorpionidae Subfamily Diplocentrinae

Oiclus nanus Teruel et Chazal, 2010

Figures 1–4; Table 1

Oiclus nanus Teruel & Chazal, 2010: 1–9, figs 1–5, tab. 1.

Diagnosis (emended): species of small size (males 20–23 mm, female 22 mm) for the genus. Body light brown, diffusely patterned with dark brown; legs yellowish; pedipalps and metasoma with carinae and fingers faintly infuscate. Entire body conspicuously hirsute in males (especially on pedipalps, mesosoma and metasoma), less densely hirsute in females and juveniles. Carapace polished in both sexes, in males with very finely and densely granulose areas symmetrically scattered, in females entirely smooth; tergites in males finely and densely granulose, in females with very subtle vestiges of coarse granules scattered over posterior region. Punctate tegument restricted to pedipalp patella and chela in adults, absent in juveniles. Pedipalp chela robust and with dorsoexternal surfaces granulose and strongly reticulate in males, slender and with dorsoexternal surfaces smooth in females. Metasoma moderately to weakly carinated in dorsal and lateral surfaces, intercarinal tegument smooth and polished. Pectines with fulcra variable from moderately well developed to essentially absent; tooth count 7/7 in males, 6/6 in females. Modal tarsal spine formula 3/3 : 4/4 : 5/5 : 5/5.

Adult Female: it differs from the holotype and paratype males by the following characters: **(1)** genital operculum completely fused by a membranous con-



Figure 1: Adult female topotype of *Oiclus nanus*: **a)** entire dorsal view; **b)** entire ventral view.

nection (Fig. 2d); (2) genital papillae absent (Fig. 2d); (3) pectines comparatively smaller, with 6/6 teeth (Fig. 2d); (4) pedipalp chela much more slender and with longer fingers (Fig. 2c; Tab. 1); (5) metasoma less densely hirsute, with all segments comparatively shorter and

wider, and with a much more enlarged telson (Figs. 1a–b, 2e–j, Tab. 1); (6) carapace and tergites polished, at most with subtle vestiges of large granules (Figs. 2a–b); (7) mesosoma comparatively larger and wider (Figs. 1a–b, 2b, Tab. 1).



Figure 2: Adult female topotype of *Oiclus nanus*: **a)** carapace and tergite I; **b)** tergites II–VI; **c)** pedipalp, dorsal view; **d)** sternopectinal region; **e)** metasomal segments I–III, dorsal view; **f)** metasomal segments I–III, lateral view; **g)** metasomal segments I–III, ventral view; **h)** metasomal segments IV–V and telson, dorsal view; **i)** metasomal segments IV–V and telson, lateral view; **j)** metasomal segments IV–V and telson, ventral view.



Figure 3: Live specimens of *Oicthus nanus*: a) adult female topotype; b) adult female from Anse-Bertrand; c) juvenile topotype.

Dimensions		♀ topotype	♂ holotype	♂ paratype
Carapace	L / Wp	3.05 / 2.90	2.70 / 2.70	3.20 / 3.10
Mesosoma	L	7.00	5.80	6.50
Tergite VII	L	1.50 / 2.70	1.20 / 2.30	1.50 / 2.80
Metasoma	L	11.65	11.60	13.50
Segment I	L / W	1.30 / 1.85	1.40 / 1.70	1.60 / 1.90
Segment II	L / W	1.50 / 1.70	1.60 / 1.55	1.80 / 1.75
Segment III	L / W	1.65 / 1.65	1.70 / 1.50	2.00 / 1.70
Segment IV	L / W	2.00 / 1.60	2.00 / 1.40	2.30 / 1.60
Segment V	L / W / H	2.55 / 1.45	2.50 / 1.35	2.90 / 1.55
Telson	L	2.65	2.40	2.90
Vesicle	L / W / H	1.90 / 1.50 / 1.10	1.70 / 1.20 / 1.00	2.10 / 1.40 / 1.10
Aculeus	L	0.75	0.70	0.80
Pedipalp	L	8.50	7.30	8.90
Femur	L / W	2.00 / 0.95	1.80 / 0.90	2.10 / 1.00
Patella	L / W	2.35 / 1.00	2.00 / 0.95	2.50 / 1.10
Chela	L	4.15	3.50	4.30
Hand	L / W / H	1.75 / 1.70 / 1.75	1.50 / 1.70 / 1.60	1.80 / 2.00 / 2.30
Movable finger	L	2.40	2.00	2.50
Total	L	21.70	20.10	23.20

Table 1: Measurements of *Oiclus nanus* adult female; those of two adult male types have been included for comparison. Abbreviations: length (L), width (W), posterior width (Wp), depth (H).



Figure 4: Mainland Guadeloupe, showing both confirmed (1–2) and putative (3–4) records for *Oiclus nanus*: 1) Pointe des Châteaux; 2) Anse-Bertrand; 3) Terre-de-Haut; 4) Bouillante. See details of putative records in Teruel & Chazal (2010: 8–9).

New Records: Guadeloupe, Grande-Terre, Saint François, Pointe des Châteaux (type locality); under rock in coastal forest, 16 February 2010, leg. L. Chazal, 1 ♀ topotype (RTO: Sco-0412), 5 juvenile topotypes. Anse-Bertrand (new record), under rock in coastal forest, 18 May 2010, leg. L. Chazal, 1 ♀ (kept alive in captivity by L. Chazal).

Remarks: the adult females now available allow improving the comparison of *O. nanus* to its morphologically closest relative *Oiclus questeli* Teruel, 2008, from Saint Barthélemy. Apart from adult male differences, already discussed in the original description (Teruel & Chazal, 2010), adult females of *O. nanus* can be easily separated by having a greatly reduced granulation on tergites (essentially absent on carapace), presence of pectinal fulcra, weaker metasomal carinae (especially on segments III–IV) and metasomal segment III as long as wide. As opposite, adult females of *O. questeli* are characterized by having carapace and tergites moderately covered by coarse granules, absence of pectinal fulcra, somewhat stronger metasomal carinae, and metasomal segment III wider than long (Teruel, 2008).

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