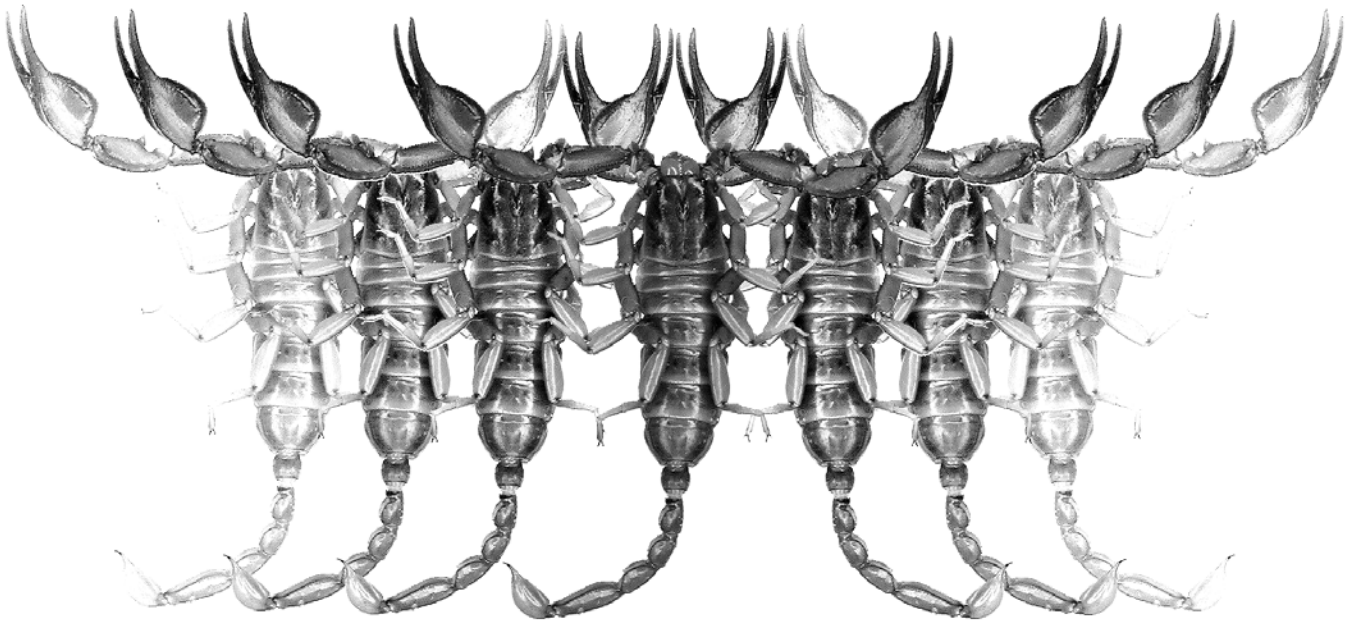


# *Euscorpilus*

Occasional Publications in Scorpiology



**Antillean Scorpions Deposited at the Montana State  
University (Arachnida: Scorpiones)**

Luis F. de Armas

January 2005 – No. 18

# *Euscorpilus*

## Occasional Publications in Scorpiology

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*Euscorpilus* is the first research publication completely devoted to scorpions (Arachnida: Scorpiones). *Euscorpilus* takes advantage of the rapidly evolving medium of quick online publication, at the same time maintaining high research standards for the burgeoning field of scorpion science (scorpiology). *Euscorpilus* is an expedient and viable medium for the publication of serious papers in scorpiology, including (but not limited to): systematics, evolution, ecology, biogeography, and general biology of scorpions. Review papers, descriptions of new taxa, faunistic surveys, lists of museum collections, and book reviews are welcome.

### Derivatio Nominis

The name *Euscorpilus* Thorell, 1876 refers to the most common genus of scorpions in the Mediterranean region and southern Europe (family Euscorpilidae).

*Euscorpilus* is located on Website '<http://www.science.marshall.edu/fet/euscorpilus/>' at Marshall University, Huntington, WV 25755-2510, USA.

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- **LC**, Library of Congress, Washington, DC, USA
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- **AMNH**, American Museum of Natural History, New York, USA
- **CAS**, California Academy of Sciences, San Francisco, USA
- **FMNH**, Field Museum of Natural History, Chicago, USA
- **MCZ**, Museum of Comparative Zoology, Cambridge, Massachusetts, USA
- **MNHN**, Museum National d'Histoire Naturelle, Paris, France
- **NMW**, Naturhistorisches Museum Wien, Vienna, Austria
- **BMNH**, British Museum of Natural History, London, England, UK
- **MZUC**, Museo Zoologico "La Specola" dell'Universita de Firenze, Florence, Italy
- **ZISP**, Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia
- **WAM**, Western Australian Museum, Perth, Australia
- **NTNU**, Norwegian University of Science and Technology, Trondheim, Norway

## Antillean scorpions deposited at the Montana State University (Arachnida: Scorpiones)

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### Summary

A total of 71 specimens of Antillean scorpions belonging to three families [Liochelidae, Scorpionidae (Diplocentrinae), and Buthidae] and seven genera are deposited at the Montana Entomology Collection (MTEC) of the Montana State University. The most represented genus is *Tityus* C. L. Koch, 1836, which contains seven species from Dominican Republic. Those materials are from the following countries: Cuba, Dominican Republic, U.S. Virgin Islands, British Virgin Islands, Montserrat, and St. Kitts. The male of *Tityus septentrionalis* Armas & Abud Antun, 2004 is described for the first time.

### Resumen

En la Colección Entomológica de Montana (MTEC), Universidad Estatal de Montana (Bozeman, Montana, EE.UU.) están depositados 71 especímenes de escorpiones antillanos que pertenecen a tres familias [Liochelidae, Scorpionidae (Diplocentrinae) y Buthidae] y siete géneros. *Tityus* C. L. Koch, 1836 es el género mejor representado en cuanto a cantidad de especies (siete) y de especímenes, todos de República Dominicana. Los escorpiones antillanos de esta colección proceden de Cuba, República Dominicana, Islas Vírgenes, Montserrat y St. Kitts. Se describe por primera vez el macho de *Tityus septentrionalis* Armas & Abud Antun, 2004.

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### Introduction

The Antillean islands have received the attention of numerous scorpologists during more than two centuries (Armas, 2001). Particular studies have been carried out on the Antilles as a whole (Pocock, 1893; Armas, 1982, 1988; Lourenço, 1992), the Greater Antilles (Armas, 2001), the Lesser Antilles (Lourenço, 1987) or some particular islands: Cuba (Franganillo, 1936; Moreno, 1939, 1940; Jaume, 1954; Armas, 1981), Hispaniola (Santiago-Blay, 1990), Puerto Rico (Santiago-Blay, 1983; Armas, 1984), Virgin Islands (Francke & Sissom, 1980), and Dominica (Santiago-Blay, 1987). On the other hand, Francke (1978) revised the diplocentrine scorpions of the Caribbean area, and Lourenço (1984), the genus *Tityus* C. L. Koch, 1836 in the Lesser Antilles, whereas Lourenço (1999) worked on some biogeographic aspects of the Greater Antillean buthids.

Recently, I had an opportunity of studying the collection of Antillean scorpions deposited at the Montana Entomology Collection (MTEC), Montana State University (Bozeman, Montana, U.S.A.), which contains several valuable specimens, mainly from Hispaniola and the

northern group (Leeward Islands) of the Lesser Antilles. In the present communication, I provide a survey of those interesting materials.

Suprageneric classification follows Soleglad & Fet (2003).

### List of Specimens

#### Family Liochelidae Fet & Bechly, 2001

*Opisthacanthus lepturus* (Palisot de Beauvois, 1805).

One immature, DOMINICAN REPUBLIC: Prov. Hato Mayor, Parque Nacional Los Haitises, W of Sabana de la Mar, tropical rain forest, 16 April 1992, M. A. Ivie, D. S. Sikes, W. Lanier.

#### Family Scorpionidae Latreille, 1802 (subfamily Diplocentrinae Karsch, 1880)

*Oiclus purvesii* (Becker, 1880). One female, MONTSERRAT: Cassara Ghant, 31 May 2002, K. Marske. ST. KITTS: One subadult female, St. Thomas Middle Island Parish, Wingfield National Park, Peter Manning Trail, 4 July 2003, M. A. Ivie, in rotten log.

*Cazierius* sp. One female, DOMINICAN REPUBLIC: Prov. La Vega, near Buena Vista, Hotel La Montaña, 3 April 1992, at night, M. A. Ivie, P. S. Sikes, W. Lanier.

#### Family Buthidae C. L. Koch, 1837

*Centruroides griseus* C.L.Koch, 1845. BRITISH VIRGIN ISLANDS: One female, Guana, 20 October 2002, M.A. Ivie, top palm. One immature (nymph II or III), Guana, 20 October 2002, Grand Gut Trail, M. A. Ivie. U.S.VIRGIN ISLANDS: One female and two males, St. John, Cancel Bay, 27 July 1994, Buker & Backlin, flight intercept trap.

*Centruroides guanensis* Franganillo, 1930. CUBA: One female and one immature female, Pinar del Rio, Cajalbana (363 m), 30 June 1990, M.A. Ivie, under bark.

*Centruroides pococki* Sissom & Francke, 1983. One immature male, MONSERRAT: Rendezvous Bluff, 07 January 2002, M.A. Ivie, K.A. Marske & K.P. Puliafico.

*Centruroides* sp. (*marcanoi*?). DOMINICAN REPUBLIC: one very immature, Prov. Pedernales, 14 km N Cabo Rojo, 19 August 1988, 157 m, thorn, scrub/tropical dry forest, M. A. Ivie, T. K. Philips & K. A. Johnson. This specimen was identified as *Centruroides marcanoi* Armas, 1981 by J. A. Santiago-Blay (undetermined date).

*Microtityus consuelo* Armas & Marcano Fondeur, 1987. DOMINICAN REPUBLIC: One female, Prov. Hato Mayor, W. of Sabana de la Mar, Parque Nacional Los Haitises, 01 July 1992, M.A. & R.O. Ivie, at night.

*Tityopsis inexpectata inaequalis* (Armas, 1974). CUBA: one immature, Pinar del Rio, Cajalbana (363 m), 30 June 1990, M.A. Ivie, under bark.

*Tityus abudi* Armas, 1999. DOMINICAN REPUBLIC: Two males, Prov. Santiago, Parque Nacional Armando Bermúdez, N. of Pico del Yaque (2425 m), 05 April 1992, in rotten pine. M.A. Ivie, D.S. Sikes, W. Lanier.

*Tityus altiethronus* Armas, 1999. DOMINICAN REPUBLIC: Five females, two males (most of the specimens are much damaged), Prov. Santiago, Pico Duarte/Yaque, Parque Nacional Bermúdez, Agüita Fría, flight intercept trap, 24 July 1993–December 1993, Rosenfelikes, R.P. One male, Prov. Santiago, Par. Nac. Armando Bermúdez, N. side La Pelona (19° 02' N, 71° 00' W 2865 m), 07 April 1992, M. A. Ivie, P. S. Sikes, W. Lanier, under rocks. One female, three males, four subadult females, and one immature, Parque Nacional Armando Bermúdez, Agüita Fría, 08 April 1992, flight intercept trap, M.A. Ivie. Five females, one male, one immature. Trail below Pico Duarte (2900–2940 m) 04 April 1992, M. A. Ivie, P. S. Sikes, W. Lanier, under pine bark. One female, Prov. San Juan, La Compartación to Agüita Fría (19° 02' N, 70° 57' W, 2485 m), 08 April 1992, M. A. Ivie, P. S. Sikes, W. Lanier, under pine bark. One female, two males, and one very immature,

Cordillera Central at summit of La Pelona (3160 m), 09 July 1992, M.A. & R. O. Ivie, under rocks.

*Tityus crassimanus* (Thorell, 1876). DOMINICAN REPUBLIC: One immature, Prov. Pedernales, Parque Nacional Sierra Baoruco, Las Abejas (1290 m), 22 July 1999, in rotten log and beating, M. A. Ivie. Two immatures (female and male), Prov. Pedernales, 18 km from Cabral, off Polo Rd., 1.5 km SE Monteada Nueva (18° 06.452' N, 71° 14.717 W), 26 July 1999, M.A. Ivie, under bark.

*Tityus elii* Armas & Marcano Fondeur, 1992. DOMINICAN REPUBLIC: Four females, two males, two subadults, and two very young (some are in bad condition), Prov. Santiago, Par. Nac. Armando Bermúdez, Los Tablones, on Rio Izquierdo (19° 03' N, 70° 50' W 1295 m), 09 April–07 July 1992, flight intercept trap. M.A. Ivie. One female, one male, Prov. La Vega, Par. Nac. Armando Bermúdez, Los Tablones (1245 m, 19° 03' N, 70° 54' W), 07 July–25 August. 1992. D. S. Sikes, M. A. Ivie, flight intercept trap. One female, Prov. La Vega, La Ciénaga (1100 m), 04 April 1992, M. A. Ivie, D. S. Sikes, W. Lanier. One female, Prov. La Vega, near Buena Vista, Hotel La Montaña, 03 April 1992, at night, M. A. Ivie, P. S. Sikes, W. Lanier.

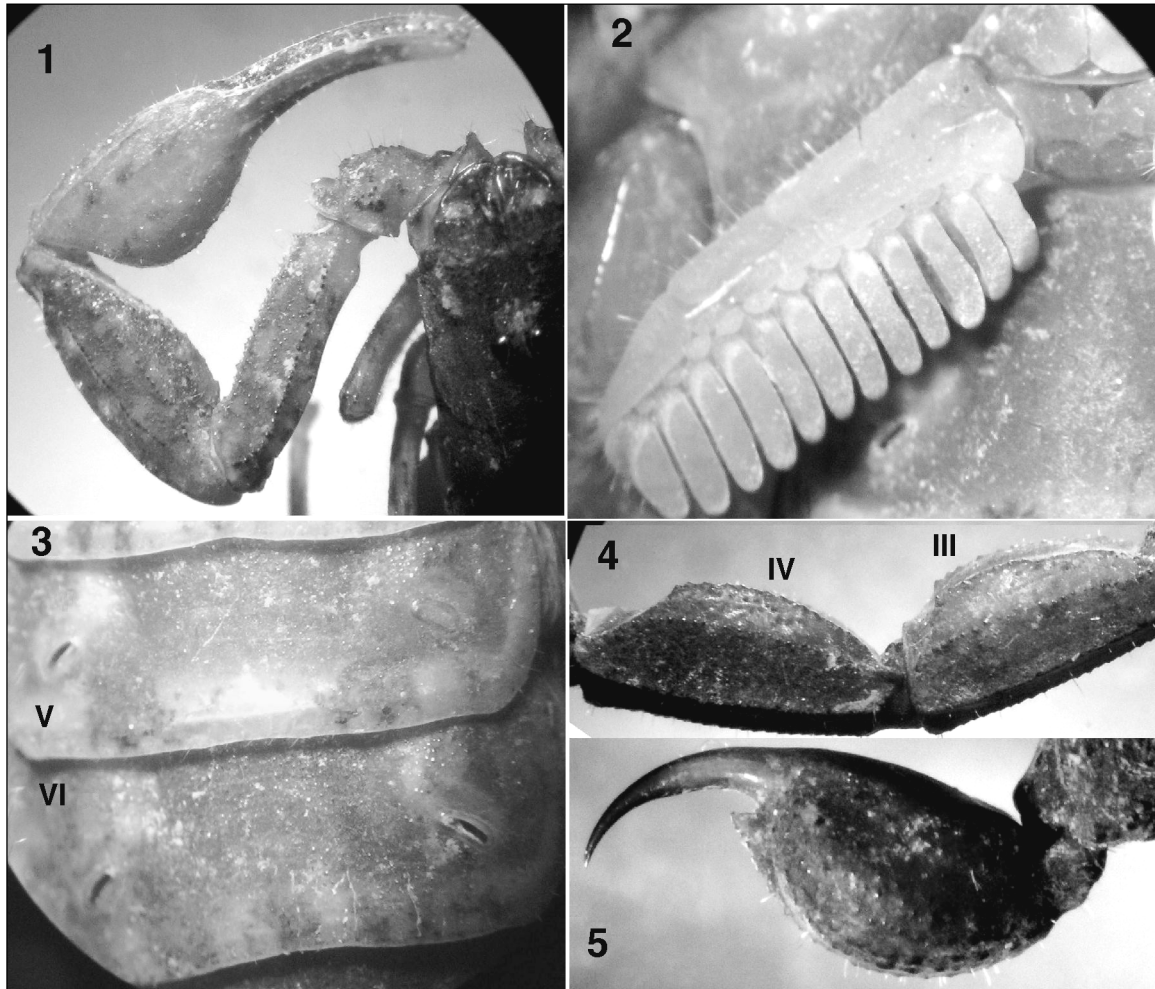
*Tityus othenwalderi* Armas, 1999. DOMINICAN REPUBLIC: One male, La Ciénaga (1140 m, 19° 04.07' N 70° 75.68' W), 29 July 1999, M. A. Ivie & K. A. Guerrero, hand collecting at night. This is a rare species.

*Tityus quisqueyanus* Armas, 1982. DOMINICAN REPUBLIC: Two females, Prov. Santiago, Valle de Bao (1850 m), 10 July 1992, M.A. & R.O. Ivie, under bark of pine log.

*Tityus septentrionalis* Armas & Abud Antun, 2004. DOMINICAN REPUBLIC: One male, Prov. Hato Mayor, W. of Sabana de la Mar, Parque Nacional Los Haitises, 16 April–01 July 1992, tropical rain forest, M.A. Ivie, flight intercept trap # 1. The differences of this male respect to the two known female specimens from Cordillera Septentrional (Duarte, and Espaillat provinces), seem to be of sexual nature only. The nearest of those localities is about 80 km from Los Haitises.

**Male** (Figs. 1–5). It is similar to the female in general coloration and measurements, but differs from it by having (1) a shorter carapace (pedipalp length/carapace length = 4.1 in male, and 3.6–3.7 in female; metasoma length/carapace length = 6.4 in male, and 5.4–5.6 in female), (2) smaller total length (33 mm in male, and 37–38 in female), (3) sternite V with a small subtriangular smooth area in the posterior submargin, and (4) metasomal segment II as wide as I (it is 0.93 times as wide as I in the female).

Measurements (mm) and meristics. Carapace: length/posterior width = 3.38/3.64. Sternum length/width = 0.68/0.68. Pedipalp: femur length/width = 3.59/0.94; patella length/width = 3.90/1.51; chelae



**Figures 1-5:** *Tityus septentrionalis* (male from Los Haitises, Dominican Republic). 1. left pedipalp, dorsal aspect. 2. right pecten. 3. sternites V-VI. 4. metasomal segments III-IV, lateral aspect. 5. telson, lateral aspect.

length/width/height = 6.45/1.72/1.62; handback length = 2.81; movable finger length = 3.85. Mesosoma length = 7.80. Metasoma: length = 21.54; I length/width/height = 2.60/1.92/1.72, II length/width = 3.28/1.92, III length/width = 3.59/1.89, IV length/width = 3.95/2.03, V length/width/height = 4.32/2.18/1.77, telson length = 3.80, vesicle length/width/height = 2.55/1.72/1.56. Pectinal tooth count = 12/12.

The female of this species has been described recently (Armas & Abud Antun, 2004).

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