

# SCORPIONS OF CUBA

ROLANDO TERUEL ET FRANTIŠEK KOVAŘÍK



*Rhopalurus junceus* (yellow morph), female with juveniles after first ecdysis

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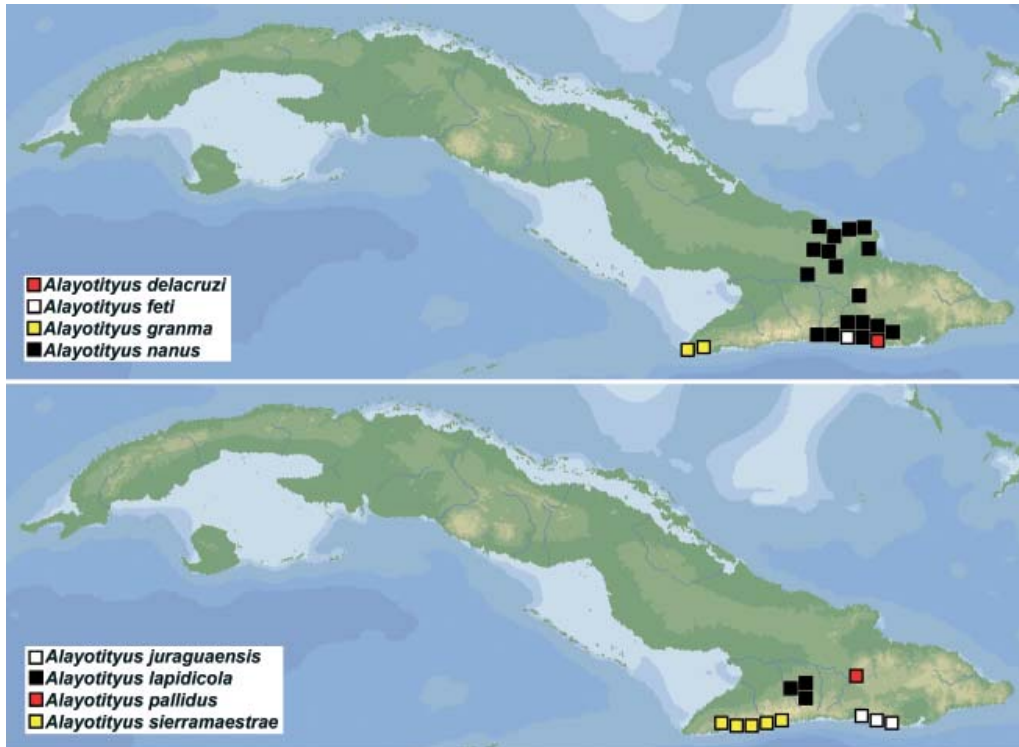
***Alayotityus* Armas, 1973**  
(Figs. 1–2, 25, 32–33, 44, 50–101, 401–432)

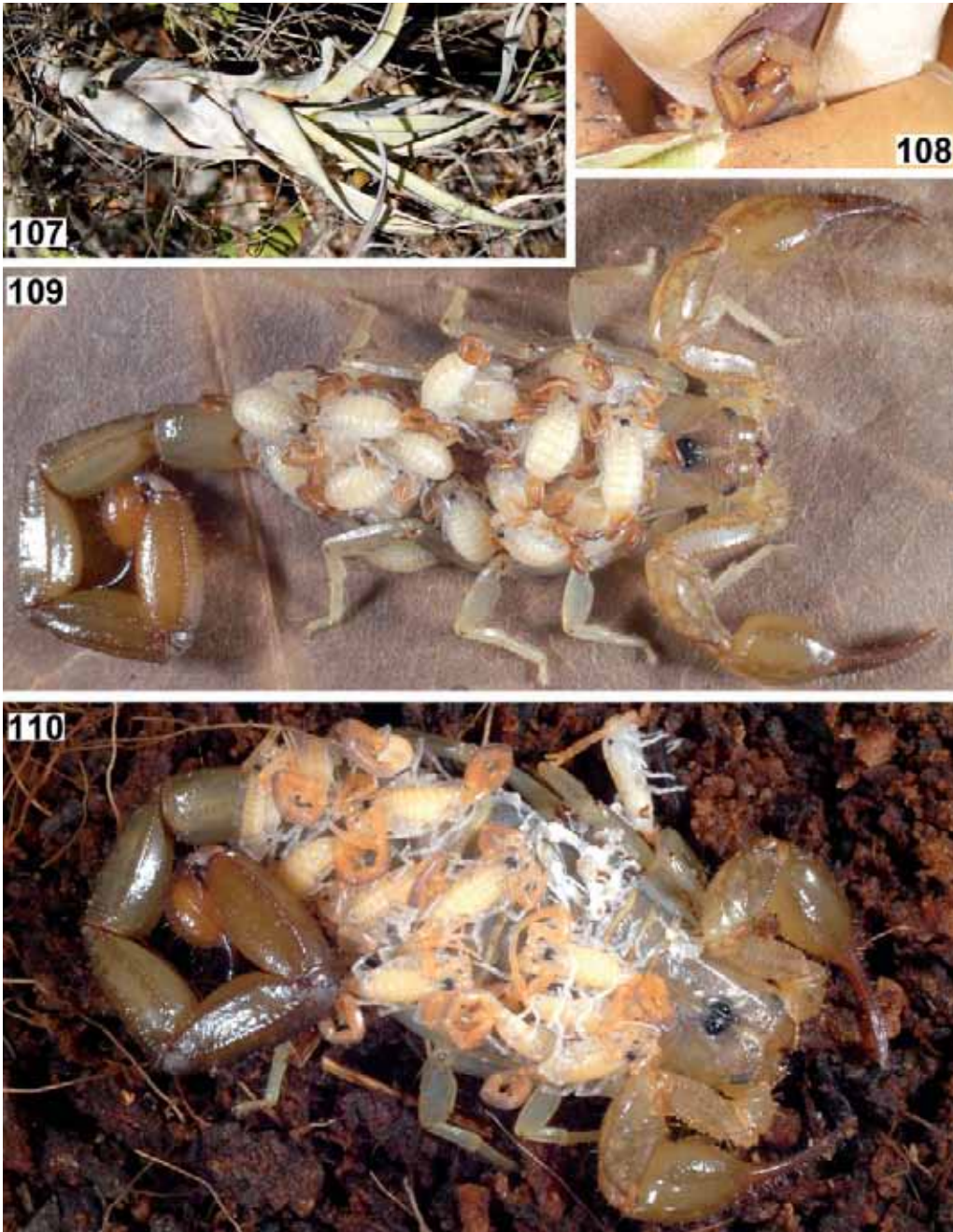
*Alayotityus* Armas, 1973b: 1–23.

TYPE SPECIES. *Alayotityus nanus* Armas, 1973.

DIAGNOSIS. Dorsal trichobothria on femur arranged in *alpha*-configuration (Fig. 13), neobothriotaxic reduced;  $d_2$  always absent from femur and patella, *esb* frequently absent from fixed finger (Figs. 50–52). Pedipalp fingers without accessory granules and with 9–10 slightly overlapping principal rows of granules, all subequal (Figs. 1–2), basal lobe/notch combination absent. Carapace with 1–3 (usually 2) of lateral eyes on each side. Tergites I–VI with three longitudinal carinae (Fig. 25). Sternum subpentagonal. Female pectines with basal plate unmodified, basal intermediate lamella enlarged and angular (Fig. 44). Sternite III without stridulatory organ or deep furrows, but with two deep lateral depressions (Fig. 44); sternite V with two conspicuous smooth patches in both sexes - very large and transverse in males, small and conical in females (Figs. 32–33). Metasoma unmodified in both sexes.

DISTRIBUTION. Endemic to eastern Cuba (Granma, Holguín and Santiago de Cuba Provinces, see Maps below).





**Figures 107–110.** *Centruroides anchorellus*. **107.** Bromeliaceae is often sought by scorpions of the genus *Centruroides*. **108.** Female with juveniles inside Bromeliaceae shown in the preceding photo. **109.** Female with newborns before first ecdysis. **110.** Female with juveniles after first ecdysis.



Figure 207. *Isometrus maculatus*, female with newborns before first ecdysis.



Distribution map showing summary of all Cuban finds of *Isometrus maculatus* with years of the most recent collection.

←  
**Figures 202–206. *Isometrus maculatus*.** 202. Guantánamo Province, Maisi Municipality, Sabana, 194 m a.s.l. 203. Male. 204. Interior of house shown in Fig. 202, which produced specimens of *I. maculatus*. 205. Female. 206. A corner of the same house, where the small and slender *I. maculatus* inhabits only the wooden walls inside narrow fissures and between closely attached planks, while the much larger and heavier *Rhopalurus junceus* occupies walls, roof, and furniture, but in wider spaces.

*MICROTITYUS*

Metasoma with 10-10-8-8-5 finely serrate carinae; telson robust and smooth. Pectinal tooth count 12–15 in males, 10–14 in females.

COMMENTS. Because of the possession of femoral trichobothrium  $d_2$ , this species could be confused only with *M. guantanamo*, which can be distinguished by its telson more slender and granulose, pedipalp fingers only subtly infusate and lower pectinal tooth count.

Herein we present the first record of *M. farleyi* from the Baracoa Municipality (Figs.214–215).

ECOLOGICAL NOTES. This species lives in coastal desert, subcoastal scrub, and semicaducifolious forest from the sea level up to an altitude of 150 m. It occurs under rocks and in leaf litter. It preys upon soft-bodied arthropods such as small spiders, cockroaches and crickets.

DISTRIBUTION. Cuba, Guantánamo Province (see Map on page 92).



Figure 211. *Microtityus farleyi*, female.

Figures 212–215. *Microtityus farleyi*. 212. Male. 213. Juvenile consuming a Lycosidae spider. 214–215. Locality of *M. farleyi*, Guantánamo Province, Baracoa Municipality, Boca de Miel, 5–16 m a.s.l. (see also Figs. 343–344). Also found *Centruroides baracoae*, *C. robertoi*, *Rhopalurus junceus* (black and typical morphs), and *Cazierius torrei*.



Figures 277–279. 277. Female *Rhopalurus junceus* (typical morph) feeding upon female *Cazierius gundlachii* under a large rock at Granma Province, Pílon Municipality, El Macío. 278. Juvenile from Cuba, Camagüey Province, Sierra de Cubitas Municipality, Limones-Tuabaquey Ecological Reserve. 279. Locality of *R. junceus* (typical morph), Santiago de Cuba Province, Guamá Municipality, Río La Mula, 19°56'55"N 76°45'40"W. Also found *Alayotityus sierramaestrae*, *Centruroides anchorellus*, *C. arctimanus*, *C. nigropunctatus* (topotypes), *Microtityus pusillus* sp. n. (types), and *Cazierius gundlachii*.

Figures 280–281. *Rhopalurus junceus* (yellow morph). 280. Female. 281. Male.



Figures 285–286. *Rhopalurus junceus* (black morph). 285. Male. 286. Female.

Figures 287–288. *Rhopalurus junceus* (black morph). 287. Female with newborns before first ecdysis. It is interesting that in the wild around Baracoa we found more often the black morph and rarely the typical morph. In litters the black female in laboratory gave birth to both morphs (Figs. 287–294); there were also several light juveniles (the typical morph). However, in captivity the mortality was high and none of the light-colored specimens survived to reach maturity. This aspect needs further study that could be helped by amateur breeders. 288. Female with juveniles after first ecdysis.



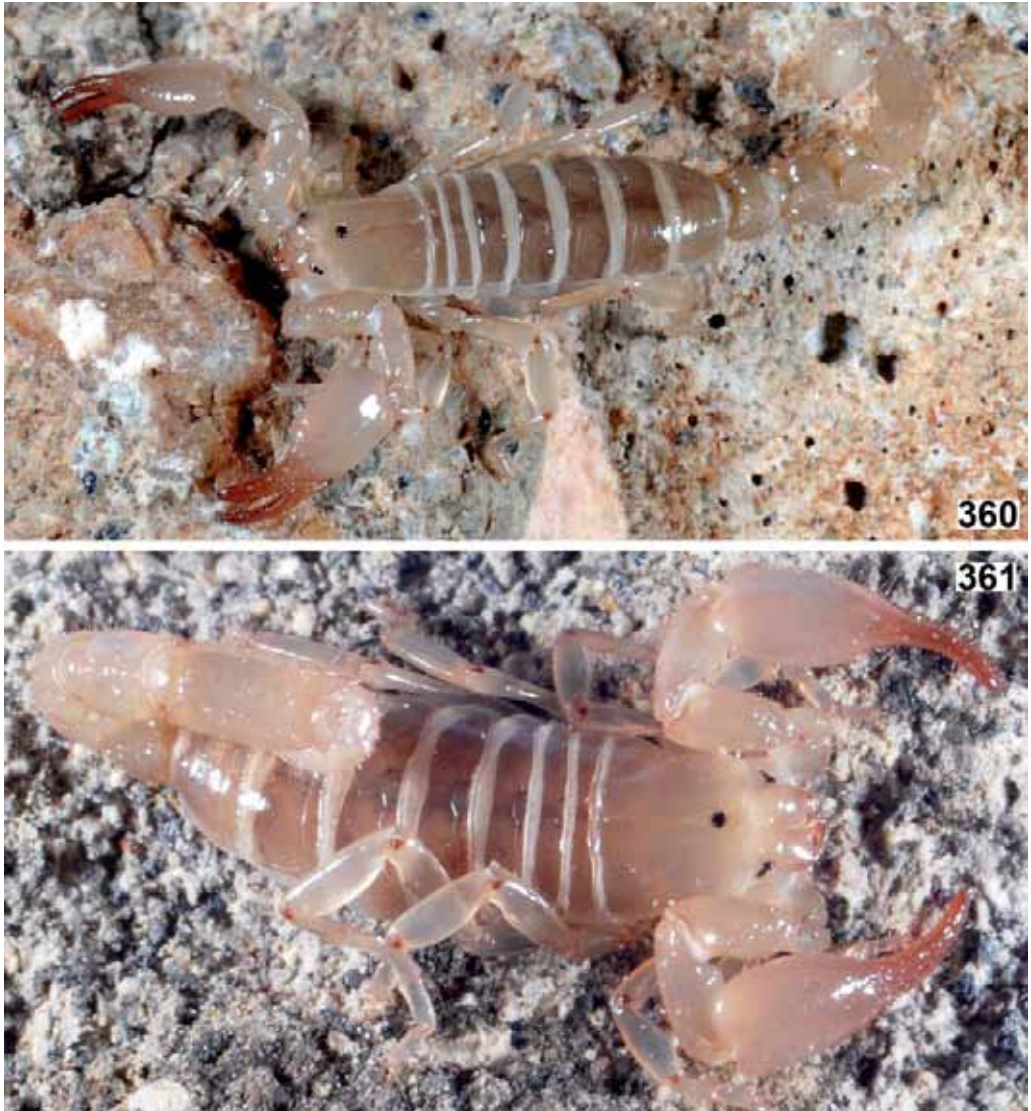
**Figures 321–322.** *Tityopsis inexpectata*. 321. Female with newborns before first ecdysis. 322. Female with juveniles after first ecdysis.



ECOLOGICAL NOTES. This species lives exclusively in interstitial spaces of soil, deep inside rocky taluses in cave entrances at the base of coastal limestone cliffs 10–52 m a. s. l.

In line with this peculiar habitat, live individuals kept under laboratory conditions approximating those in nature have never been observed digging burrows as all other Diplocentrinae, but instead quickly slipping through the rocky substratum.

DISTRIBUTION. Cuba, Guantánamo Province (see Maps).



Figures 360–361. *Cryptoiclus rodriguezi* gen. n. et sp. n.. 360. Juvenile male paratype (RTOC). 361. Juvenile male paratype (FKCP).

**Photographic atlas of preserved specimens of all Cuban species**

**Figures 401–404.** *Alayotityus delacruz* Armas, 1973, Cuba, Santiago de Cuba Province, Santiago de Cuba Municipality, Siboney, Cueva de Los Majáes, 09°57'38"N 75°42'37"W, 46 m a.s.l. **401–402.** Dorsal and ventral views, ♂(30 mm) topotype, FKCP. **403–404.** Dorsal and ventral views, ♀(33 mm) topotype, RTOC.

**Figures 405–408.** *Alayotityus feti* Teruel, 2004, Cuba, Santiago de Cuba Province, Santiago de Cuba Municipality, Santiago Bay, La Socapa, 19°58'10"N 75°52'33.4"W, 7 m a.s.l. **405–406.** Dorsal and ventral views, ♂(20 mm) paratype, FKCP. **407–408.** Dorsal and ventral views, ♀(30 mm) topotype, FKCP.

**Figures 409–412.** *Alayotityus granma* Armas, 1984, Cuba, Granma Province, Niquero Municipality, Desembarco del Granma National Park, El Guafe, 19°51'14"N 77°43'03"W, 28 m a.s.l., FKCP. **409–410.** Dorsal and ventral views, ♂ topotype (24 mm). **411–412.** Dorsal and ventral views, ♀ topotype (29 mm).

**Figures 413–416.** *Alayotityus juraguaensis* Armas, 1973. **413–414.** Dorsal and ventral views, ♂(30 mm), Cuba, Santiago de Cuba Province, Santiago de Cuba Municipality, Verraco beach, 21 m a.s.l., FKCP. **415–416.** Dorsal and ventral views, ♀(32 mm). Cuba, Santiago de Cuba Province, Santiago de Cuba Municipality, Siboney, FKCP.

**Figures 417–420.** *Alayotityus lapidicola* Teruel, 2002. **417–418.** Dorsal and ventral views ♂(21.5 mm) holotype, Cuba, Santiago de Cuba Province, Tercer Frente Municipality, La Pimienta, 1.5 km SW La Tabla, 20°11'29"N 76°24'26"W, RTOC. **419–420.** Dorsal and ventral views, ♀(25 mm), Cuba, Granma Province, Jiguaní Municipality, El Diamante, 3 km S Santa Rita, FKCP.

**Figures 421–424.** *Alayotityus nanus* Armas, 1973. **421–422.** Dorsal and ventral views, ♂(20 mm), Cuba, Santiago de Cuba Province, Santiago de Cuba city, campus of the Universidad de Oriente, 20°04'02"N 75°49'35"W, 50 m a.s.l., FKCP. **423–424.** Dorsal and ventral views, ♀(27 mm), Cuba, Santiago de Cuba Province, Santiago de Cuba Municipality, road to La Gran Piedra, 20°00'40.3"N 75°40'24.0"W, 531 m a.s.l., FKCP.

**Figures 425–428.** *Alayotityus pallidus* Teruel, 2002, Cuba, Santiago de Cuba Province, Julio Antonio Mella Municipality, La Cantera, 20°24'59"N 75°51'46"W, FKCP. **425–426.** Dorsal and ventral views, ♂(24 mm) topotype. **427–428.** Dorsal and ventral views, ♀(25 mm) topotype.

**Figures 429–432.** *Alayotityus sierramaestrae* Armas, 1973. **429–430.** Dorsal and ventral views ♂(23 mm), Cuba, Santiago de Cuba Province, Guamá Municipality, 4 km N Río Peladeros, 19°58'57"N 76°42'18"W, RTOC. **431–432.** Dorsal and ventral views, ♀(25 mm), Cuba, Santiago de Cuba Province, Guamá Municipality, Río La Mula, 19°57'16.5"N 76°45'24.0"W, 19 m a.s.l., FKCP.

**Figures 433–436.** *Centruroides spectatus* Teruel, 2006. **433–434.** Dorsal and ventral views, ♂(44.7 mm) holotype, Cuba, Santiago de Cuba Province, Segundo Frente Municipality, Sierra del Cristal, El Oro, 20°31'03"N 75°25'11"W, 540 m a.s.l., RTOC. **435–436.** Dorsal and ventral views, ♀(40 mm) paratype, Cuba, Santiago de Cuba Province, Segundo Frente Municipality, Sierra del Cristal, El Oro, 20°31'03"N 75°25'11"W, 540 m a.s.l., FKCP.

**Figures 437–440.** *Centruroides anchorellus* Armas, 1976, Cuba, Granma Province, Niquero Municipality, Las Coloradas campsite, 19°55'29"N 77°41'25"W, 2 m a.s.l., FKCP. **437–438.** Dorsal and ventral views, ♂(59 mm). **439–440.** Dorsal and ventral views, ♀(60 mm).

**Figures 441–444.** *Centruroides arctimanus* Armas, 1976, Cuba, Holguín Province, Holguín, FKCP. **441–442.** Dorsal and ventral views, ♂(41 mm). **443–444.** Dorsal and ventral views, ♀(35 mm).

