

Tityus lourençoi, a new species of scorpion from the Cordillera Oriental, Colombia (Scorpiones: Buthidae)

Eduardo Florez D.

Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Apartado aéreo 7495, Bogotá, Colombia.

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Abstract: *Tityus lourençoi*, a new species of scorpion belonging to the *Tityus melanostictus* group of species is described from Quetame, Department of Cundinamarca, in the Cordillera Oriental of Colombia. The new species is associated to *Tityus melanostictus* Pocock and *Tityus engelkei* Pocock, but can be distinguished from the first by morphometric values, and from the second by a smaller number of pectinal teeth.

Key words: *Tityus lourençoi*, new species, scorpion, Colombia, Cordillera Oriental.

In the series of studies on Colombian scorpions (Lourenço & Florez 1989, 1990 a,b) some specimens of *Tityus* (Buthidae) from the Departamento de Cundinamarca in the Cordillera Oriental, were examined and defined as a new species to this genus. The new species can be associated to the *Tityus melanostictus* group, as defined by Lourenço and Eickstedt (1987).

Tityus lourençoi, new species
(Figs. 1-9)

Type data: **Holotype** male from Quetame, Cundinamarca Departamento, 68 km SE of Bogotá, Colombia; 4° 20' 51''N, 73° 52' 31''W., 14- X 1972, 1400 m alt. (C.A. Medina leg) deposited in the Museo La Salle, Bogotá, Colombia.

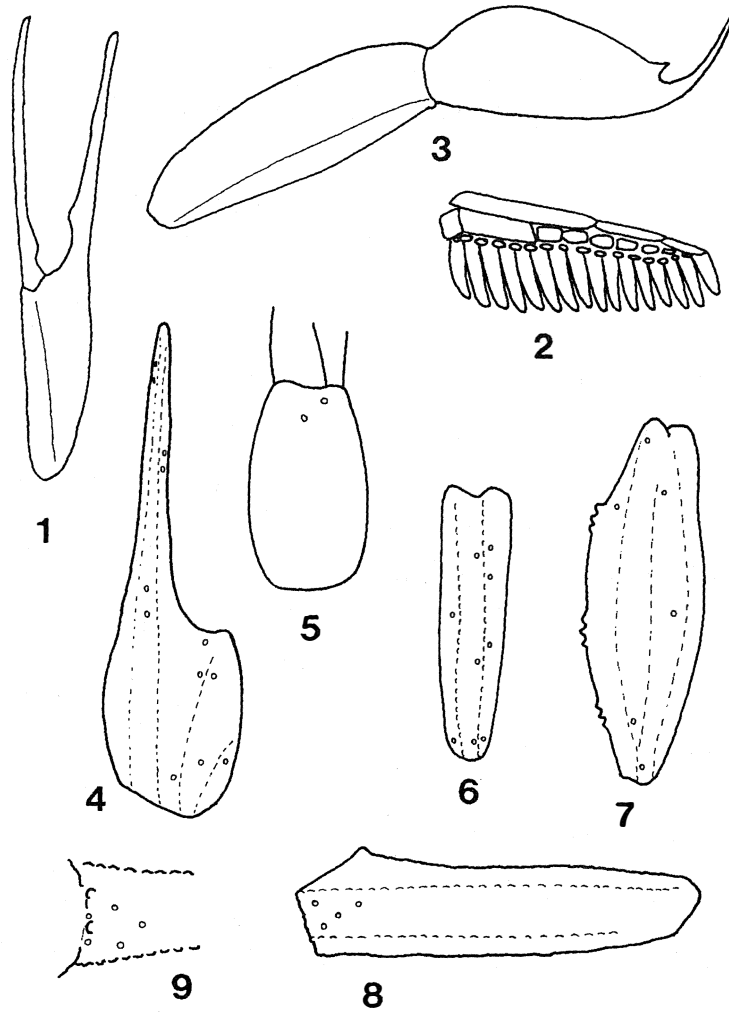
Etymology: Patronym in honor of Wilson R. Lourenço, of the Museum National D'Histoire Naturelle, Paris, France.

Diagnosis: The new species is associated to *Tityus melanostictus* Pocock and *Tityus engelkei* Pocock, but can be distinguished from the first by morphometric values, and from the second by a smaller number of pectinal teeth (cf. Lourenço & Eickstedt, 1987).

Description: based on holotype male. Measurements on table I. Coloration: basic color

is yellowish brown. Prosoma: carapace yellowish brown with darker spots; eyes surrounded with black pigments. Mesosoma: reddish brown with black transversal strips over the posterior part of tergites. Metasoma: reddish brown; segments IV and V darker. Vesicle: reddish brown, lighter than segment V. Venter: yellowish with dark spots in the posterior part of sternites.

Morphology: carapace median to feebly granular; anterior margin with a median concavity. Anterior median superciliary and posterior median keels moderated. All furrows moderately deep. Median ocular tubercle distinctly anterior of middle. Three pairs of lateral eyes. Sternum subtriangular. Mesosoma: tergites median to strongly granular. Median keel strong in all tergites. Tergite VII pentacarinat, all keels strong crenulate. Venter: genital operculum split longitudinally. Pectines: pectinal teeth count 16-15. Sternites I to VI almost smooth with elongate stigmata; VII with moderate keels. Metasoma: segments I-IV dorsolateral and lateral supramedian keels strong crenulate; posterior granule in dorsolateral keels spinoid. Lateral inframedian keels on I complete, strong crenulate; on II represented by only three distal granules; on III-IV absent. Ventrolateral keels median to strong crenulate. Ventral submedian keels moderately crenulate. Intercarinal spaces median to feebly granular.



Figs. 1-3. *Tityus lourençoi* n. sp., male-holotype. 1. Chelae, external aspect. 2. Pectine. 3. Fifth metasomal segment and telson. Figs. 4-9. *Tityus lourençoi* n. sp., trichobothrial pattern of female allotype. 4. External view of chelae. 5. Ventral view of chelae. 6. External view of tibia. 7. Dorsal view of tibia. 8. Dorsal view of femur. 9. Proximal end of internal face of femur.

TABLE I

Measurements (in mm) of Tityus lourençoi n.sp.

	Holotype male	Allotype female
Total length	44.1	54.3
Prosoma length	5.6	6.8
anterior width	3.5	4.4
Mesosoma length	13.5	19.0
Metasoma length	25.0	28.5
Segment I length	4.0	4.0
Segment I width	3.2	4.0
Segment II length	4.4	5.0
Segment III length	5.0	6.0
Segment IV length	5.4	6.5
Segment V length	6.2	7.0
Segment V width	3.2	4.1
Segment V height	2.9	3.4
Pedipalp length	24.7	24.4
Femur length	6.0	5.8
Femur width	1.6	1.8
Tibia length	7.1	6.6
Tibia width	2.1	2.3
Chelae length	11.6	12.0
Chelae width	2.2	3.1
Chelae height	2.3	2.8
Movable finger length	7.4	9.0

Segment V, dorsolateral and latero-median keels obsolete; ventrolateral and ventromedian keels feebly crenulate. Lateral intercarinal spaces feebly granular. Telson without granulations; moderate curved aculeus. Dorsal and ventral surfaces smooth; subaculeus tooth strong, spinoid. Chelicerae with the dentition as in other *Tityus*. Ventral aspect of both fingers and manus with dense, long setae. Pedipalps: femur tetracarinate; tibia hexacarinate; interior keel with very strong spinoid granules. Chelae, all keels very feebly; all different faces feebly granular. Movable fingers with 17 oblique rows of granules. Trichobothrial pattern A-Alpha orthobothriotaxic. Legs: tarsus ventrally with numerous short fine setae.

Female-allotype (Museo de Entomología, Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Santafé de Bogotá), same locality as for the holotype. Differs from male-holotype in morphometric values (see table I), by having a darker color, reddish brown to brown and presents stronger keels and granulations. Pectinal teeth count 16-17; base intermedian lamellae with strong dilatation.

Four **paratypes**, 1 male and 3 females (Museo La Salle and Museo de Entomología, Instituto de Ciencias Naturales, Universidad

Nacional de Colombia, Santafé de Bogotá), same locality as for the holotype; pectinal teeth count: male 17-17, one female 17-17, and two females 16-16.

Remarks: Besides the affinities of the new species with *T. melanostictus* and *T. engelkei*, *Tityus lourençoi* shows several characteristics similar to the description made by Mello-Leitão (1940) of *Tityus charalensis* cited for the Cordillera Oriental in the central region of Colombia. Mello-Leitão's description is however very incomplete, and without illustrations making any comparison very difficult. Moreover, the type material of *Tityus charalensis* was destroyed during a fire that consumed a great part of the Museo La Salle, Bogotá in 1948, and until present no other specimens corresponding to this species have been collected. For this reason I suggest that the name *Tityus charalensis* may be considered as a *nomen nudum* until new specimens corresponding to this species can be found.

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