

# A redescription of *Cryptops canariensis* LATZEL, 1895 and designation of Lectotypus (Chilopoda, Scolopendromorpha)<sup>1)</sup>

MARZIO ZAPPAROLI

(With 14 figures)

## A b s t r a c t

*Cryptops canariensis* Latzel, 1895 is fully redescribed on the type specimens. Lectotypus and Paralectotypus are herein formally designated. Based on specimens recently collected, complementary morphological notes are also given. The taxonomic relations with *Cryptops trisulcatus* Brölemann, 1902 are discussed.

*Cryptops canariensis* was described by Latzel (1895) on two specimens from Tenerife, Canary Isles. The original description of this species and the following redescrptions published by Kraepelin (1903) and Attems (1930) are very incomplete, without drawings and partially contradictory.

On the basis of the original material, a full redescription of this species is given in this work and, after the examination of other samples recently collected, some morphological and systematic observations are also provided.

ABBREVIATIONS. Concerning the material examined the following abbreviations have been used: ZMH = Zoologisches Museum Hamburg coll.; MZ = M. Zapparoli coll..

### *Cryptops canariensis* Latzel, 1895

*Cryptops canariensis* Latzel, 1895: 115, 119.

*Cryptops canariensis*: Brölemann, 1900: 436; Attems, 1903: 109; 1930: 207, 230; Kraepelin, 1903: 39, 56; 1904: 243; Verhoeff, 1925: 663.

? *Cryptops trisulcatus*: Kraepelin, 1904: 243 (pars).

MATERIAL EXAMINED. 1 specimen (here formally designated as Lectotypus) (ZMH), 1 specimen (here formally designated as Paralectotypus) (ZMH), with the following four labels "*Cryptops canariensis* Latz., typus, Krpln. I., IV. 94, Orotava, Tenerife" handwritten by K. Kraepelin, in china ink, "*Cryptops canariensis* Latz. Originalexempl. Krpln. I. IV. 94 Latzel ded. 94 Orotava, Teneriffa" handwritten by K. Kraepelin, in china ink, "Orotava, Apr. 94 Kraepelin leg." printed, "Zoologisches Museum Hamburg, *Cryptops canariensis* Latzel 2 Expl. Syntypen" printed and handwritten in china ink; after this study a rectangular red label has been added.

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The type specimens are very damaged. The Lectotypus is represented only by the trunk divided in two mutilated parts and the legs are almost completely lost with the exception of the I-III and XX pairs; last legs are present but detached from the trunk. Also the Paralectotypus is represented only by the trunk divided in two parts, no legs are present.

Other material: 8 specimens, Tenerife, Teno, Monte de Agua-Cumbre de Bolicos, 15.III.1984, A. Vigna leg. (MZ); 2 specimens, ibidem, 15.III.1984, E. Colonnelli leg. (MZ); 6 specimens, ibidem, 21.III.1985, A. Vigna leg. (MZ); 14 specimens, Gran Canaria, Moya, El Palmital, 24.III.1984, A. Vigna leg. (MZ).

**DESCRIPTION OF LECTOTYPUS.** Length 33 mm, breadth 1.6 mm at T. 7, 1.9 mm at T. 14, 1.2 mm at T. 20.

Cephalic shield (Fig. 1) longer than broad, posterior margin overlapped by the anterior margin of T. 1, longitudinal sutures only on the anterior third, extending a short way backwards from bases of antennae; antennae with 17 articles, 3-3.5 times longer than the head, reaching the T. 3, the first three antennal articles with rather long and slender setae, the distal articles clothed by numerous minute setae. Clypeus without trace of postantennal setae or intermediate setae which are both probably lost, posterior border with a row of 11 prelabial setae; labrum side pieces not notched at their medial angle (unidentate labrum); cephalic pleurae rather narrow. Forcipulae (Fig. 2) with the anterior border of the coxosternite slightly protuberant (the distance between the condyle-line and the anterior margin of the coxosternite is about 26 % of the condyle-line length) and posteriorly prolonged by a two-tipped endosternite; anterior border of the coxosternite without setae (probably lost) and divided by an evident medial notch in two rounded sides; forcipular femoroid rather short (breadth/external length ratio about 2:3), internal margin with slender and long setae.

T. 1 (Fig. 1) with an anteriorly concave transversal suture in the anterior third; two slightly anteriorly convergent short longitudinal sutures running backwards from the central area of the transversal suture but not reaching the posterior border of the tergite. The transversal suture of T. 1 is well visible, the longitudinal sutures just visible. Paramedian longitudinal sutures are present from T. 2 but were not visible in the last tergites; arcuate sutures from T. 4. Last sternite without sutures but with a longitudinal medial depression on its posterior half, posterior margin relatively sharp. Sternites 1-3 almost short, sternites 4-20 relatively longer, endosternites 1-5 well developed and with posterior margin rounded, metacoxa and supra-sternite 1-2 fused together, a central cruciform impression from sternite 2, last sternite with lateral margins slightly posteriorly convergent and posterior margin rounded.

Last legs with cribriform area not reaching the posterior border of the coxae along which are visible the traces of insertion of at least five setae, only two setae are present among the pores; prefemur and femur with numerous short, spinous setae and more slender setae on ventral and external side; tibia, tarsus and pretarsus with long and slender sparse setae; internal side of all articles without setae; prefemur without ventral groove. External distal end of the femur with a feeble unciform tubercle,

both external and internal distal end of tibia with a short unciniform tubercle; prefemur without unciniform tubercles. Tibial comb with 13 progressively larger, sharp and spaced teeth; tarsal comb with five large and sharp teeth, the proximal three very close to one another (in contact), the other two well spaced from one another and from the proximal three.

**VARIATION.** On the basis of the Paralectotypus and the other specimens recently collected in the same area, it is possible to complete the description of some morphological features not visible in the Lectotypus owing to its not good preservation status, and to make some observations on the variation of some characters.

Body length 19 mm (Paralectotypus), 24-28 mm (Tenerife), 27-30 mm (Gran Canaria). Cephalic shield punctate and with longitudinal sutures also in the posterior third (Figs 11-14). Prosternum with 2-4 setae on either side of the anterior margin (Fig. 4). Poison gland at the distal extremity of the forcipular femoroid. Clypeus with two postantennal setae, four intermediate setae and a transversal row of 11 prelabial setae (Fig. 3). In the specimens from Gran Canaria the posterior margin of the cephalic shield is generally overlapped by the anterior margin of T. 1, in those from Tenerife no preferential arrangement was observed.

Tergites punctate. T. 1 with longitudinal sutures generally arranged as in the Lectotypus. However, these sutures are sometimes absent or, especially in specimens from Tenerife, they run backward up to the posterior margin of the tergite. Paramedian longitudinal sutures from T. 2 to T. 20.

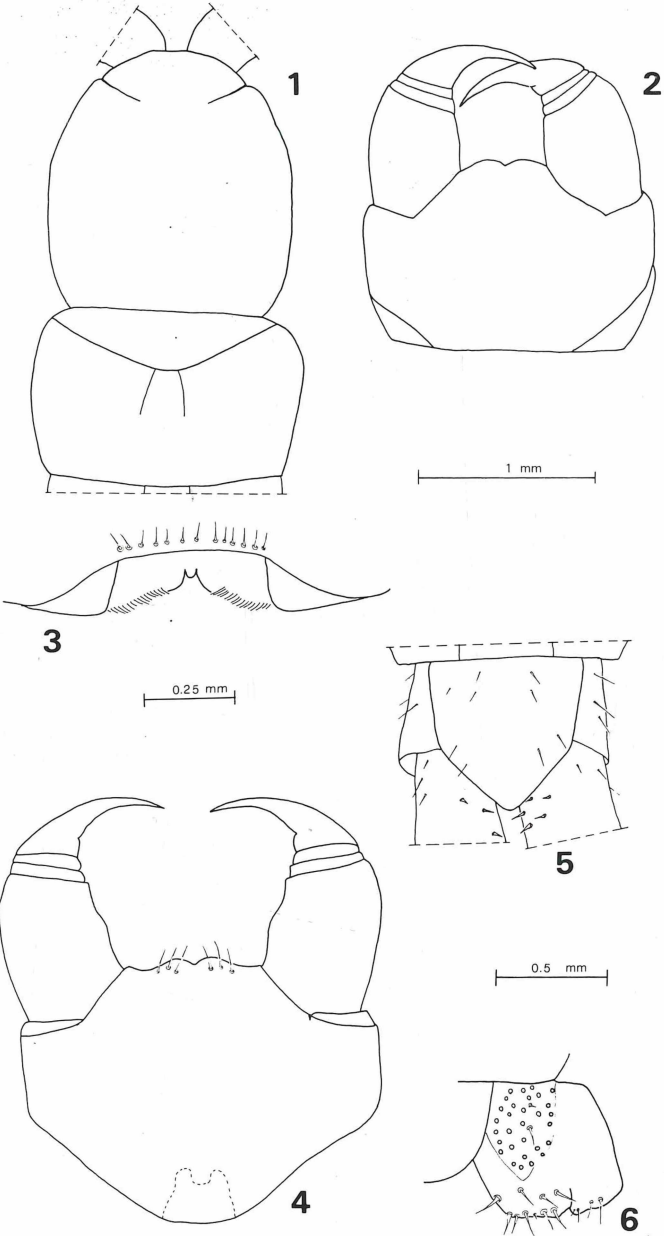
Tarsus and metatarsus 1-19 fused together. Coxae of last legs with 24-25 pores (Fig. 6), pore-field with 1-2 relatively long setae and some very little spiniform setae; tibial comb with 9-13 teeth (Fig. 8), tarsal comb with 4-5 spaced teeth (Fig. 7); dorsal tubercles generally little and constantly arranged as in the Lectotypus (Figs 9-10).

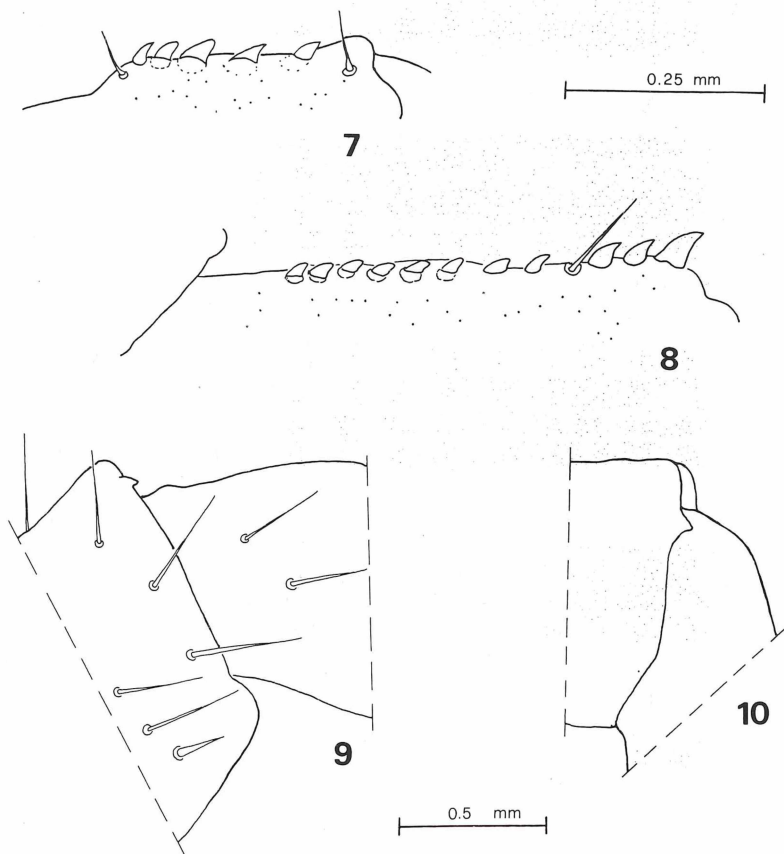
**OBSERVATIONS.** *Cryptops canariensis* is an endemic species of the Canary Isles, recorded in Tenerife (Loc. typ.: Orotava), Gran Canaria and Fuerteventura (Brölemann 1900; Kraepelin 1904; Attems 1930).

Kraepelin (1903) considers *C. canariensis* near or almost a subspecies of *C. hortensis* Leach, 1815, a widespread W-palearctic species. Following Brölemann (1920), *C. canariensis* is close to *C. hispanus* Brölemann, 1920, an endemic species of the Iberian peninsula. Neither *C. hortensis* nor *C. hispanus* are recorded in the Canary Isles.

After this study it is possible to state that *Cryptops canariensis* is not close to the above mentioned taxa but to *C. trisulcatus* Brölemann, 1902, a species distributed in the W-mediterranean areas and also present, maybe introduced, in some of the Canary Isles such as Tenerife, Gran Canaria and Gomera (Kraepelin 1904; Attems 1911; Brölemann 1930; Zapparoli unpublished data).

*C. canariensis* shows some morphological affinities with *C. trisulcatus* such as the general size of the body, the arrangement of the cephalic sutures, the shape of the labrum, the shape of the endosternite of the forcipular

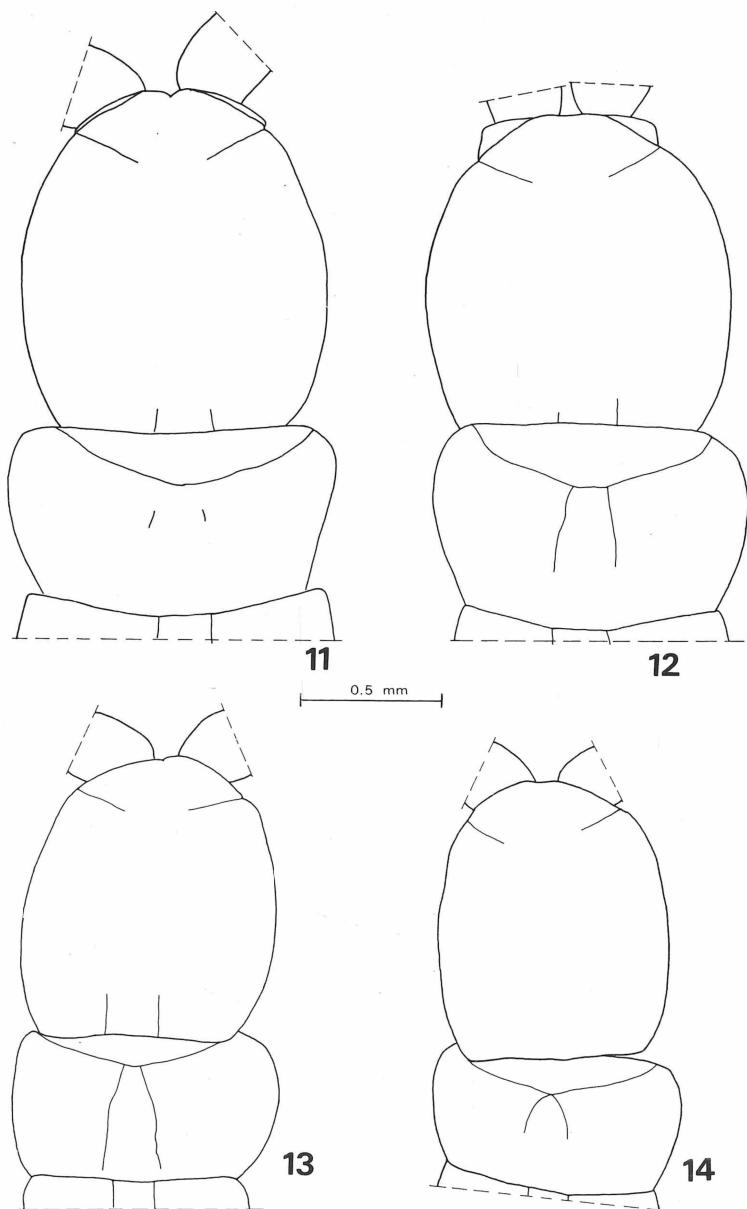




Figs 1-2: *Cryptops canariensis* Latzel, 1895 (Lectotypus). Cephalic shield and T. 1 (1); Forcipules (2).

Figs 3-6: *Cryptops canariensis* Latzel, 1895 (Gran Canaria). Labrum (3); Forcipules (4); Last tergite (5); Coxal pores (6).

Figs 7-10: *Cryptops canariensis* Latzel, 1895 (Gran Canaria). Tarsal comb (7); Tibial comb (8); Femur tubercle (9); Tibial tubercle (10).



Figs 11-14: *Cryptops canariensis* Latzel, 1895. Variation on cephalic shield and T. 1 sutures: Tenerife, Teno, Monte de Agua (11, 13, 14); Gran Canaria, Moya, El Palmital (12).

coxosternite, the relatively large pore areas of the last coxae, the number of the teeth in the tibial and in the tarsal combs of the last legs.

The characters useful to distinguish *C. canariensis* from *C. trisulcatus* are listed as follows:

- body generally more slender in *C. canariensis* than in *C. trisulcatus*.
- dorsal tubercles at the distal end of the last legs articles present on the external side of the femur and on the internal and external sides of the tibia, absent on the prefemur in *C. canariensis* (Figs 9-10); present on the internal side of the prefemur and on the external and internal sides of the femur and tibia in *C. trisulcatus*. Moreover, in *C. canariensis* the tubercles are faint and less evident than in *C. trisulcatus*, especially the very little one of the femur.
- longitudinal sutures of T. 1 less incised than the transversal ones and generally not reaching the posterior margin of the tergite in *C. canariensis* (Figs 11-14); always complete, well incised and joined together at the transversal suture in *C. trisulcatus*.

As stated above, in *C. canariensis* these sutures may also be complete or almost absent.

- posterior longitudinal sutures of the cephalic shield generally absent or very short in *C. canariensis* (Figs 11-14); always present and longer in *C. trisulcatus*.

Owing to the variation of the arrangement of T. 1 longitudinal sutures, it is possible that some of the former records of *C. canariensis* are incorrect: the records collected in Fuerteventura and Gran Canaria "station n° 26", published by Brölemann (1900) under this species, were successively reported by Kraepelin (1904) as *C. trisulcatus*.

### A c k n o w l e d g e m e n t s

I wish to thank Dr. Gisela Rack, Curator in the Zoologisches Museum in Hamburg (RFT) and Prof. Augusto Vigna Taglianti, Director of the Museo di Zoologia of the Dipartimento di Biologia Animale e dell'Uomo, Rome University "La Sapienza", for enabling me to examine the studied material.

### Z u s a m m e n f a s s u n g

*Cryptops canariensis* Latzel, 1895 wird an Hand des Typenmaterials neu beschrieben. Lectotypus und Paralectotypus werden dabei formell definiert. Morphologische Eigenschaften werden außerdem an neugesammelten Exemplaren beschrieben. Taxonomische Verbindungen zu *Cryptops trisulcatus* Brölemann, 1902 werden diskutiert.

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Address of the author:

Dr. Marzio Zapparoli, Istituto di Difesa delle Piante, Università della Tuscia, Via San Camillo de Lellis, 01100 Viterbo, Italy.



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