

## NOTES ON *TAENIOTES SCALARIS* (FABRICIUS, 1781) AND *T. CAYENNENSIS* (THOMSON, 1859) (COLEOPTERA: CERAMBYCIDAE) IN THE AZOREAN ARCHIPELAGO

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**Abstract:** *Taeniotes cayennensis* Thomson, 1859 is recorded for the first time from the Azorean Archipelago. *T. scalatus* (Gmelin, 1790), formerly *Taeniotes scalaris* (Fabricius, 1781), previously recorded because of misidentification, seems to be absent from the Azorean fauna. The characters separating the two taxa are briefly discussed; the following new synonymy is proposed: *T. cayennensis* = *T. scalaris* ssp. *azoricus* Kolbe, 1888 **syn. n.** Colour images of the three taxa involved are presented.

**Key words:** Coleoptera, Cerambycidae, *Taeniotes*, new synonymy, Azores.

**Notas sobre *Taeniotes scalaris* (Fabricius, 1781) y *T. cayennensis* (Thomson, 1859) (Coleoptera: Cerambycidae) en el archipiélago de las Azores**

**Resumen:** *Taeniotes cayennensis* Thomson, 1859 se registra por primera vez del archipiélago de las Azores. *T. scalatus* (Gmelin, 1790), antes *Taeniotes scalaris* (Fabricius, 1781), citado previamente a causa de un error de identificación, debe ser excluido de la fauna de las Azores. Se discuten brevemente los caracteres diagnósticos separadores de ambas especies. Se propone la siguiente nueva sinonimia: *T. cayennensis* = *T. scalaris* ssp. *azoricus* Kolbe, 1888 **syn. n.** Se presentan imágenes en color de los tres taxones mencionados.

**Key words:** Coleoptera, Cerambycidae, *Taeniotes*, nueva sinonimia, Azores.

### Introduction

The genus *Taeniotes* Serville includes about 25 species widespread from Central America to the northern part of South America (Monné & Hovore, 2005); a single species, originally identified as *T. scalaris* (Fabricius, 1781), has been introduced to the Azorean Archipelago (Drouet, 1859), where it has been established for about 150 years. This is the only species of the genus currently recorded from these Islands (Borges *et al.*, 2005). Nevertheless, all specimens of *Taeniotes* from the Azores, which I have examined, do not agree to the original description of *Cerambyx scalaris* Fabricius and clearly differ from its current definition. According to the key provided by Dillon & Dillon (1941) they would be referred to *T. pulverulentus* (Olivier, 1790) while, according to the revision of Breuning (1943), they could be identified as *T. cayennensis* Thomson, 1859. The nomenclatural and taxonomic status of many species of the genus (including *T. scalaris*) remained, since the beginning (and, partly, still is) unclear; see also Tavakilian (1997), who discussed the synonymy between *T. farinosus* (Linnaeus, 1758) and *T. pulverulentus*. This unclear situation very likely originated a misunderstanding, regarding the true identity of the Azorean *Taeniotes*, which will be discussed in the present paper.

### Discussion

*Taeniotes scalaris* was described by Fabricius (1781), under the name *Cerambyx scalaris* on the basis of material from “America meridionali” belonging to the collection Banks.

"*C. thorace fuscus, linea longitudinali alba, antennis longissimis. Medius, Antennae corpore triplo longiores. Caput fuscum orbita oculorum lineaque dorsali alba. Tho-*

*rax acute spinosus, fuscus linea dorsali alba. Scutellum album. Elytra fusca puncto medio suturaque dentata albis. Pedes fusci.*"

The type specimen could be located neither in the collection Banks (NHM, London) (M. Barclay, pers. comm.) nor in the collection Fabricius (ZMUC) (O. Martin, pers. comm.); where, according to Zimsen (1964), it would be preserved.

The name of Fabricius, being a junior primary homonym of *Cerambyx scalaris* Linnaeus, 1758 (now in *Saperda* Fabricius, 1775), was replaced with *Cerambyx scalatus* Gmelin, 1790 (Sama, 1991). This nomenclatural change, though ignored by the following authors (except for Borges *et al.*, 2005), was finally accepted by Monné in his last Catalogue (2005: 521), the most achieved work concerning American Cerambycids taxonomy.

According to the last available catalogues (Monné & Giesbert, 1993, Monné & Hovore, 2005; Monné, 2005), *T. scalatus* is widespread in the Western Hemisphere, from Mexico to the northern part of South America. Since 1859 this species has been recorded from the islands of São Miguel, Faial and Terceira in the Azorean Archipelago, where it was evidently introduced many years ago since it was already well established in 1858 (Drouet, 1859). During the following years it has been recorded (as *T. scalaris*) by many collectors (Crotch, 1867; Méquignon, 1935, 1942, 1946; Schatzmayr, 1945; Carvalho, 1984; Borges, 1990 & others). Kolbe (1888) studying one specimen from the Azores, found it different from the Brazilian population and described it as *Taeniotes scalaris* var. *azoricus* (Fig. 3).

In 2005, I received for study some specimens of *Taeniotes*, collected during the previous year in São Miguel

by the Danish entomologist Ole Mehl; I expected these to be *T. scalaris*, the unique species of the genus known from the Azores, but, when compared to a series of this taxon preserved in the collection P. Schurmann, now in my possession, it was clear they belonged to a totally different species. A detailed study of the small series of *Taeniotes* in Schurmann's collection (never really carefully examined before) showed that the same species had already been found in the Azores by my late friend and identified, probably by himself, as *T. amazonum*. Submitted (as an image) to G. Tavakilian (Paris), a well known specialist in South-American Cerambycidae, the specimens of Mehl were identified, through examination of the type material, as *T. cayennensis* Thomson, 1859, a very distinctive species from French Guyana and northern Brazil.

*T. scalatus* (Fig. 1) [this taxon is here interpreted according to the original description and as currently defined (Dillon & Dillon, 1941; Breuning, 1943; Villiers, 1980)] differs from *T. cayennensis* (Fig. 2) by the conspicuously reduced pattern of yellow stripes and spots of pubescence on the dorsal surface of the body; moreover, it has only three vittae on the head (the two small ones behind upper eye lobes are lacking), pronotum only with the median longitudinal band and the ones below each lateral tubercle, elytra with a broad sutural stripe less deeply dentate and without larger spots, the disc only with a very few minute dots, metepimera totally clothed with yellow pubescence.

I have consequently tried to verify if the previous records of *T. scalaris* were due, since the outset, to incorrect determination, or if a second species of *Taeniotes* (*T. cayennensis*) has been recently introduced to the Azores Islands. In spite of the records of Drouet (1859) "*pas rare à San-Miguel et à Fayal. M. Morelet l'a rencontré de même à Terceira*" and those of Méquignon (1935) "*je l'ai trouvé aux environs de Ponta-Delgada*" and Méquignon (1942) "*São Miguel, 6 ind. (Nodier)*", not one specimen of *T. scalatus* from the Azores could be found in the collections of Muséum National d'Histoire Naturelle of Paris (G. Tavakilian, pers. comm.).

On the other hand, all specimens of *Taeniotes* from the Azorean Archipelago that I was able to study belong to the same species (*T. cayennensis*) collected by P. Schurmann and O. Mehl, and suggested by Tavakilian. I have examined the following specimens:

- 1 ♂, "Azoren / Simroth" (MNHUB); Holotype male of *Taeniotes scalaris* var. *azoricus* Kolbe, 1888 ;
- 1 ♂: "San Miguel, Acor. Furnas, A. Schatzmayr (Schatzmayr, 1945; MNSNM);
- 1 ♀: Pico Pedra SM [São Miguel], 26 / 8 / 80, leg. Borges (coll. P. Borges);
- 1 ♂: São Miguel, 15.VIII.1989, leg. P. Oromi.

On this basis, although I could not see the specimens collected by the French entomologists, I am convinced that only one species (*T. cayennensis*) currently belongs to the Palaearctic fauna. Very likely, the first specimens of *Taeniotes* from the Azores were identified as *T. scalaris* because *T. cayennensis* had not yet been described and, later on, nobody thought to check and to rectify the previous identifications.

### **Taeniotes cayennensis Thomson, 1859**

- Taeniotes cayennensis* Thomson, 1859, Arcana Nat.: 96. Type locality: Cayenne. Type material: MNHNP, examined by G. Tavakilian.
- = *Taeniotes scalaris*: Drouet, 1859: 10; Tarnier, 1860: 89, 90; Crotch, 1867: 379; Méquignon, 1935 : 203 ; Méquignon, 1942: 48; Schatzmayr, 1945 : 24; Méquignon, 1946: 117; Serrano, 1982 : 89 ; Borges: 1990: 113 (nec Fabricius, 1781).
- Taeniotes scalaris* var. *azoricus*: Gemminger & Harold, 1873, Col. Cat., 10: 3021 (nomen nudum).
- Taeniotes scalaris* var. *azoricus* Kolbe, 1888, Entomol. Nachrichten, 14(12): 180. Type locality: "Azoren". Type material: Holotype ♂, MNHUB, examined (syn. n.).
- Taeniotes pulverulentus* : Dillon & Dillon, 1941: 19 (nec Olivier, 1790).
- Taeniotes scalaris* var. *azoricus*: Dillon & Dillon, 1941: 15; Breuning, 1943 : 246; Monné & Giesbert, 1993: 181.
- Taeniotes farinosus*: Breuning, 1961 : 330 (partim) ; Monné & Giesbert, 1993: 181 (nec Linnaeus, 1758).
- Taeniotes scalatus*: Sama, 1991: 126; Borges & al., 2005: 199 ; Monné, 2005.

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**Fig. 1.** *Taeniotes scalatus* (Gmelin, 1790) ♂ - Mexico, Vera Cruz (Coll. G.Sama). **Fig. 2.** *Taeniotes cayennensis* Thomson, 1859 ♂ - Azores: São Miguel, leg. O. Mehl. **Fig. 3.** *Taeniotes scalaris* ssp. *azoricus* Kolbe, 1888 - Holotype ♂.

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