

# **Tipula (*Vestiplex*) vaillanti andalucia ssp. n. from southern Spain (Diptera, Tipulidae)**

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*Tipula (Vestiplex) vaillanti andalucia* ssp. n. from southern Spain  
(Diptera, Tipulidae).

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A description is presented of the male and female of *Tipula (Vestiplex) vaillanti andalucia* ssp. n. from southern Spain. *T. (V.) vaillanti* is placed in the *virgatula* group, the species of which are considered tertiary relicts. The ovipositor of the female, described here for the first time, does indeed show a number of primitive characters.

#### INTRODUCTION

During a brief collecting trip to Andalucia (25.9.–2.10.1989) by JEAN-PAUL HAENNI and the first author, several interesting species of Tipulidae were collected (DUFOUR, in press). On the first evening, a small and lightly built Tipulid flew into the restaurant, attracted by light. It was at first thought to belong to *Mediotipula*, or to a small species of *Lunatipula*. During the following days more specimens were collected in various localities, but only the discovery of a female led to the identification of a *Vestiplex*. A similar confusion had led MANNHEIMS to place North African specimens of *vaillanti* in his collection among *Mediotipula*. This material was described as *T. (V.) vaillanti* by THEOWALD (1977) and our material turned out to represent a new subspecies of *vaillanti*. Other material of this subspecies was already collected in Spain in 1984 by Dr. E. TRAUGOTT-OLSEN and preserved in the Zoological Museum of Amsterdam.

#### DESCRIPTION

*Tipula (Vestiplex) vaillanti andalucia* ssp. n.

*Type material.* Holotype ♂: Espagne-Granada, Sierra Nevada, C. DUFOUR & J.-P. HAENNI leg./8 km NE Lanjaron, Rio Chico, 1750 m, torrent, forêt de pins, 2.X.1989, St 25 (Musée d'histoire naturelle de Neuchâtel, dry). Paratypes: 1 ♀, idem holotype; 2 ♂, idem holotype/6 km NNE Lanjaron, Rio de Lanjaron, 1700 m, maquis dégradé, anciennes terrasses, 2.X.1989, St 27b (MHNN, dry); 7 ♂, idem/2 km SE Güejar-Sierra, Rio Genil (pont), 1050 m, rivière torrentueuse, maquis sec, 28.IX.1989, St 16 (MHNN, 6 ♂♂ dry, 1 ♂ alcohol); 13 ♂, Espagne-Granada, Sierra de Lujar, 1.IX.1989, C. DUFOUR & J.-P. HAENNI leg./2 km S Orgiva, Pago, 500 m, vallée, torrent sec, maquis, St 23 (MHNN, dry); 4 ♂, Espagne-Jaén, Sierra de Cazorla, 29.IX.1989, C. DUFOUR & J.-P. HAENNI leg./8 km SW Blanquillo (Mt), Emb. Aguaderondo, 1000 m, forêt claire brousseuse, bord de ruisseau, St 17 (MHNN, dry); 1 ♂, Espagne-Malaga, Sierra de

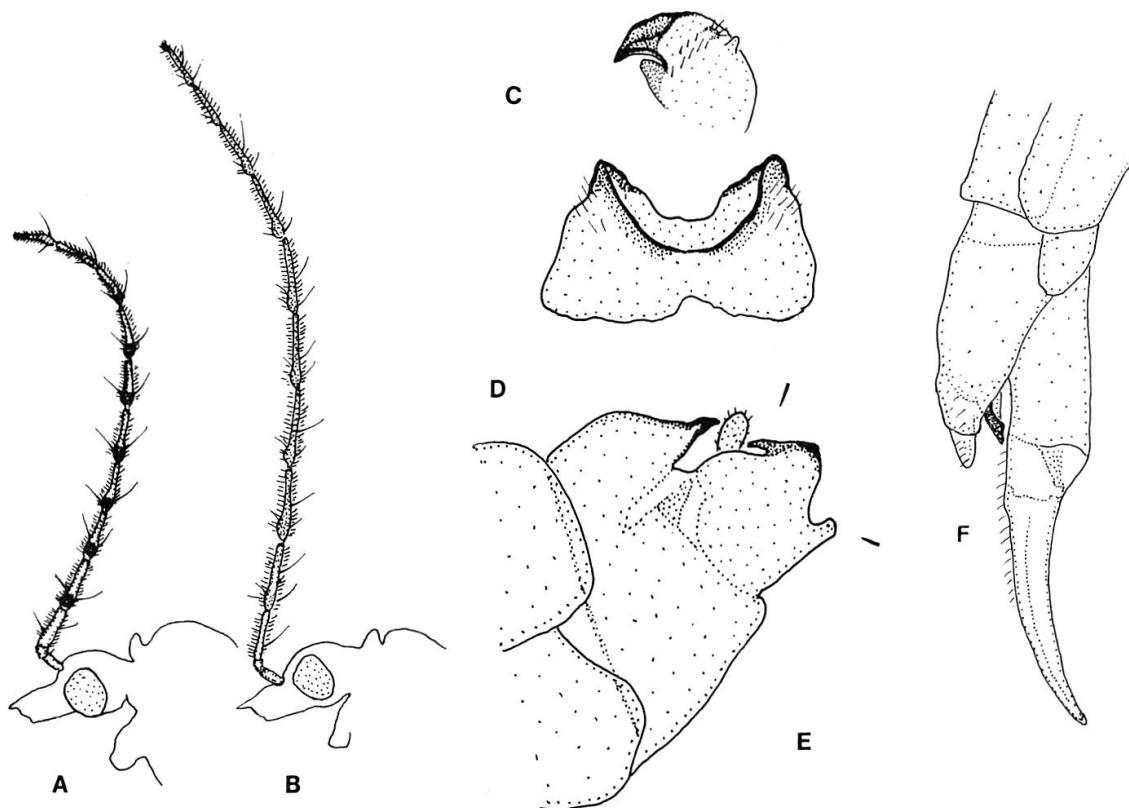


Fig. 1 a) *Tipula (Vestiplex) v. vaillanti* THEOWALD: antenna; b–f: *Tipula (Vestiplex) v. andalucia* ssp. n.: b) antenna; c) left id outside; d) tergite 9; e) lateral view of hypopygium showing both appendage of basistylus; f) ovipositor.

Alhama, 25.IX.1989, C. DUFOUR & J.-P. HAENNI leg./8 km N Vinuela, Fuente de la Pena, 700 m, café St 2 (MHNN, dry); 1 ♂, 1 ♀, Spanje (Malaga), Marbella, Casa y Campos, 2.XI.1984 (Zoological Museum Amsterdam, ZMA, dry); Spanje (Malaga), S. Pedro de Alcantaro, Urb. Madronal, 400 m, 27.X.1984, (ZMA, dry).

#### Description

♂: *Tipula (V.) vaillanti* THEOWALD is a small *Mediotipula*-like species, characterized by long antennae, shiny dark praescutal stripes, shiny yellowish abdomen with distinct dorsal and lateral stripes. Male genitalia are most unusual bearing an anteriorly directed process on basistylus which appears to hold the od as in a hook.

Most similar to the nominal subspecies from Algeria and Tunisia, *T. (V.) v. andalucia* has only few discriminating characters: very long antennae, lighter coloured femora, and shorter posterior appendage of basistylus on male genitalia.

*Holotype ♂*: head greyish with yellowish brown rostrum, nasus distinct, antennae 8 mm long (fig. 1B), 13 segmented (the last segment very small), longer than in *v. vaillanti* (fig. 1A); scape, pedicel and first flagellar segment yellowish, flagellar segments 2–12 dark and nodose at base, progressively darker towards end of antennae. On most flagellar segments a mediodorsal bristle (additional to the 4 proximal).



Fig. 2 Typical habitat for *Tipula (Vestiplex) v. andalucia* ssp. n. A hot and dry stream bed in Sierra de Lujar (2 km S Orgiva, St 23).

Thorax grey with 4 shiny dark grey praescutal stripes, wing membrane greyish with yellowish costal cell, and with a distinct hyaline spot in median cell only. Coxae grey, trochanter yellowish, legs very long, femora yellowish darker only on distal 6th (progressively darkened in *v. vaillanti*).

Abdomen with continuous mediodorsal and broken lateral stripes on segments 1–7, 3 dark ventral marks on sternite 2, proximal and distal ventral marks on sternites 3–7.

Hypopygium as in fig. 1 C–E, sternite 8 undifferentiated, tergite 9 only slightly sclerotized, od small, id rounded and basistylus with 2 very characteristic processes, the posterior being shorter than in *v. vaillanti*.

♂ body length 8–11 mm, wing length 10–13 mm.

♀: as male in general appearance, antennae much shorter, scape yellowish grey, pedicel and first flagellar segment yellow, flagellum progressively darker; legs shorter and stronger than in male, wings not reaching tip of abdomen when folded; cerci not dented, hypovalvae reduced as typical for *Vestiplex*, but tip still distinct from basal part (fig. 1 F).

♀ body length 14–15 mm, wing length 10–12 mm.

*Biotope:* *T. (V.) vaillanti andalucia* ssp. n. was collected at altitudes ranging from 400 to 1750 m. Habitats are quite varied: dry maquis, abandoned terrasses, river banks and *Pinus* forests. A hot and dry stream bed in Sierra de Lujar, St. 23 (fig. 2) appeared to be most favourable to this species.

*Ethology:* During day-time females are extremely rare. The only one collected with a sweep net was caught in flight in the highest locality and in the morning. The other female was probably taken by light as indicated by the scales of Lepidoptera deposited on its body. Due to the short wings, flight is not very efficient: wing beats are rapid and the abdomen hangs down. As opposed to the mainly nocturnal activities of females, males are quite active especially in late afternoon. They often rest on vertical walls, cliffs or bushes where they can easily be collected. The still unknown female of *v. vaillanti* might not be short winged as suspected by THEOWALD to explain its absence, but simply nocturnal as *v. andalucia*.

#### SYSTEMATICAL REMARKS

As already stated by THEOWALD this species is probably best classified in the East-Palaearctic *virgatula* group, the representatives of which in the Western Palaearctic are *T. fernandezi* THEOWALD from Tenerife, *T. fragilicornis* RIEDEL from southern Italy, *T. kosswigi* MANNHEIMS from Minor Asia and *T. relicta* DIA & THEOWALD from Lebanon. On the base of distribution, THEOWALD (1977) considers *vaillanti* as a tertiary relict. This assumption is worked out in more detail by DIA & THEOWALD (1982).

The genitalia of female *T. (V.) v. andalucia* indeed show some primitive characters: smooth cerci (usually dented in *Vestiplex*) and hypovalvae with reduced but distinctly rounded apical parts. This apical part is usually reduced to threads in other species of *Vestiplex* but a distinctly rounded apical part is also found in *fragilicornis* and *kosswigi* (MANNHEIMS, 1953).

#### RÉSUMÉ

Une description est donnée du mâle et de la femelle de *Tipula (Vestiplex) vaillanti andalucia* ssp. n. du Sud de l'Espagne. *T. (V.) vaillanti* appartient au groupe *virgatula* dont les espèces sont considérées comme étant des reliques tertiaires. L'ovipositeur de la femelle, décrit pour la première fois, montre en effet nombre de caractères primitifs.

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