CALLIOPUM TRIPODIUM SP. N. A NEW LAUXANIID SPECIES FROM ANDORRA (DIPTERA: LAUXANIIDAE)

Miguel Carles-Tolrá

Avda. Príncipe de Asturias 30, ático 1. 08012 Barcelona

ABSTRACT

A new lauxaniid species of genus Calliopum Strand from Andorra is described.

Keywords: Diptera, Lauxaniidae, Calliopum tripodium sp.n., Andorra.

RESUMEN

Calliopum tripodium sp. n.: una especie nueva de lauxánido de Andorra (Diptera, Lauxaniidae)

Se describe una especie nueva de lauxánido del género Calliopum Strand de Andorra.

Palabras clave: Diptera, Lauxaniidae, Calliopum tripodium sp. n., Andorra.

INTRODUCTION

Calliopum Strand, 1928 is a genus with Holarctic distribution. The Palaearctic region is currently represented by 14-15 species (PAPP & SHATALKIN, 1998; SHATALKIN, 2000), 7 of which have been recorded up to now from the Iberian Peninsula. The fauna of Andorra is poorly represented, as only one species had been recorded so far.

During the study of a lot of dipterological material collected in this country, four species of *Calliopum* have been identified, one of them is new to science and is described below. It was collected with Malaise trap in an open place near a forest and river at 1050 m by Dr. Pujade (for more details see DURAN-ALARCÓN *et al.*, 1998).

Chaetotaxy abbreviations:

ac = acrostichal, dc = dorsocentral, hu = humeral, mp = mesopleural, np = notopleural, oc = ocellar, ors = orbital, pa = postalar, prsc ac = prescutellar acrostichal, prst = presutural, pvt = postverticals, sa = supraalar, sc =scutellar, st = sternopleural, vi = vibrissa, vte = outer vertical, vti = inner vertical.

Calliopum tripodium sp. n. (Figs. 1-10)

DESCRIPTION:

Male and female. Head dark brown to blackish, metallic blueish shining. A more or less clearer stripe extends from gena along parafaciala until the antennal base. Postgena with a distinct orangish elongate spot attached to eye margin. Antennae orangish, joint 3 brownish apical and dorsally. Joint 3 more than twice as long as joints 1 and 2 together. Arista with short pubescence, yellowish basally. Proboscis and palpi black. Chaetotaxy: 2 ors, oc, short pvt, vte, vti, vi.

Thorax dark brown to blackish, shining metallic. Mesopleura and sternopleura pilose. Chaetotaxy: 1 hu, 1 prst, 2 np, 0+3 dc, ac in 6 rows, ac prsc as long as first pair of dc, 1 sa, 2 pa, 1 mp, 2 st (anterior smaller), 2 sc.

Legs. Fore leg dark brown, only knee orangish. Mid leg: coxa and femur dark brown, apex orangish; tibia orangish, more or less brownish proximally, knee orangish, tarsus yellow, joint 5 brownish; mid tibia with one ventrapical spur; mid metatarsus without a ventral brush of small black bristles. Hind leg: coxa and femur dark brown; tibia orangish, brown proximally, basal extreme orangish; tarsus yellow, joint 5 brownish. Hind tibia: ventroapically without a brush of short black bristles; with only one minute, but distinct, anteroventral apical spur.

Wing orangish. Haltere whitish.

Abdomen dark brown to blackish, shining metallic. Sternite 5 concave posteriorly.

Male genitalia (Figs. 1-7) dark brown. Epandrium big (Figs. 1-2) with long hairs. Surstyli (Fig. 3) narrow, long, curved inwards and anteriorly, with long hairs; apex variable, mostly pointed (Fig. 4). Postgonite (Fig. 5) well developed, odd, bare, long, curved to the right; apex variable (Fig. 6). Cerci short, with long hairs.

Female genitalia (Figs. 8-10): tergite 8 and sternite 8 not fused. Sternite 8 well developed, characteristic, with distinct anterolateral expansions and long hairs. Epiproct small, semicircular, with 2 very long sinuate posterodorsal hairs. Hipoproct well developed and sclerotized, large, U-shaped in ventral view, with long hairs. Cercus well developed, long, densely pilose, with 1 long dorsopreapical and 3 very long sinuate hairs (2 dorsoapical and 1 ventral).

Total body length: males: 4.0-5.1 mm; females: 4.3-5.2 mm.

















6

9





Figures 1-10. Calliopum tripodium sp.n.

1. Male genitalia in lateral view, 2. Male genitalia in posterior view, 3. Surstyli in ventral view, 4. Apex of surstyli showing variability, 5. Postgonite in ventral view, 6. Apex of postgonite showing variability, 7. Surstyli and postgonite in ventral view, 8. Female genitalia in dorsal view, 9. Female genitalia in lateral view, 10. Female genitalia in ventral view. Scales = 0.2 mm

8 - 10

TYPE MATERIAL

Holotype σ : ANDORRA: Santa Coloma, 1-15.VIII.1993, Malaise trap, 1050 m, J. Pujade *leg*. Paratypes: $4\sigma\sigma$ as holotype, other paratypes as holotype, but VIII.1992 $12\sigma\sigma$ $3\varphi\varphi$, IX.1992 $9\sigma\sigma$, 1-15.VI.1993 1σ , 16-30.VI.1993 $2\sigma\sigma$, 1-15.VII.1993 $3\varphi\varphi$, 16-31.VII.1993 $2\sigma\sigma$, 16-31.VIII.1993 1σ , 1-15.IX.1993 $2\sigma\sigma$, 16-30.IX.1993 1?. Type material preserved in alcohol. Holotype and $14\sigma\sigma$ $2\varphi\varphi$ paratypes deposited in the Faculty of Biology (Barcelona, Spain), other paratypes in the author's collection. Total examined: $35\sigma\sigma$ $6\varphi\varphi$.

DISCUSSION

According to external general colour *Calliopum tripodium* sp.n. is very similar to *C. aeneum* (Fallén, 1820), *C. simillimum* (Collin, 1933) and *C. splendidum* Papp, 1978. Nevertheless, *Calliopum tripodium* sp.n. has a very peculiar genital character: postgonite odd, well developed, long, which makes of it a very easy distinguishable species. Although the surstyli and postgonite present some variability in their tips, all three together form, in ventral view, a very characteristic tripoid-structure (Fig. 7), which makes of *C. tripodium* a very distinctive species. Furthermore, the male lacks the brush of bristles of hind tibia (ventroapically) and mid metatarsus (ventrally). Likewise, the characteristic shape of female sternite 8 clearly separates *C. tripodium* from their similar species.

BIOLOGY

Unknown. The material was collected with Malaise trap near a forest and river at 1050 m. It was placed from August 1992 until December 1993 and *C. tripodium* was collected from Juny until September.

DISTRIBUTION

Hitherto only known from Andorra.

ETYMOLOGY

The specific name comes from Latin "tri" (= three) and Greek "podos" (= foot, leg) and refers to the characteristic tripoid-structure (Fig. 7) formed by them in ventral view. Likewise, the 3 very long hairs of the female cercus are also disposed like a tripod.

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REFERENCES

DURAN-ALARCÓN, S., CARLES-TOLRÁ, M., BLASCO-ZUMETA, M. & J. PUJADE-VILAR, J. 1998. Familias de dípteros capturadas con trampa Malaise en Andorra (Insecta: Diptera). ZAPATERI Revta. aragon. Ent., 8: 179-195.

PAPP, L. & SHATALKIN, A. I. 1998. 3.37. Family Lauxaniidae: 383-

400. In PAPP, L. & DARVAS, B. (ed.): *Manual of Palaearctic Diptera*. Volume 3. Science Herald, Budapest. 880 pp.

SHATALKIN, A. I. 2000. Keys to the Palaearctic Flies of the Family Lauxaniidae (Diptera). Zoologicheskie Issledovania, 5: 101 pp. (in Russian).