

NEOTROPICAL ATHERICIDAE. II. REVISION OF GENUS *DASYOMMA*
MACQUART 1840 (DIPTERA: ATHERICIDAE)

ATHERICIDOS NEOTROPICALES. II. REVISION DEL GENERO *DASYOMMA*
MACQUART 1840 (DIPTERA: ATHERICIDAE)

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ABSTRACT

The revision of *Dasyomma* Macquart, 1840 from the Neotropical Region is performed. *Dasyomma* (*Dasyomma*) *coeruleum* Macquart, *D. (D.) croceicornis* (Bigot), *D. (D.) trivittatum* Malloch, *D. (D.) poecilogaster* (Philippi), *D. (D.) vittatum* Malloch, *D. (Dasyommina) atratum* Malloch, *D. (Dasyommina) humerale* Malloch, *D. (Trichopalomya) basale* Malloch, *D. (T.) atribasis* Malloch, *D. (T.) immaculatum* Malloch, *D. (T.) cinerascens* (Philippi), *D. (T.) univittatum* Malloch are redescribed. The following new species *D. (D.) wirthi*, *D. (D.) gonzalezi*, *D. (T.) trianguliferous*, *D. (T.) malleco* and *D. (T.) chapelco* are described, and *Dasyomma coeruleum* var *impressifrons* Malloch [= *D. coeruleum* (Macquart) new syn.] and *Dasyomma (D.) atritarsis* Malloch [= *D. (T.) basale* (Malloch) new syn.] are synonymized. A genus diagnosis, a key for the species and the geographical distribution are included.

KEY WORDS: Athericidae, *Dasyomma*, Diptera, mature stages, taxonomy.

INTRODUCTION

Dasyomma Macquart 1840 is a peculiar Southern world genus that comprises up to date 20 species in the Neotropical Region. They correspond to the Southern South American fauna, occurring mostly throughout the *Nothofagus* humid forest biogeographic realm. This clusters a very characteristic fauna living in the Subantarctic and Central Chile biogeographic subregion (Cabrera and Willink, 1973) and related with the Australian region (e.g., *Dasyomma* shares some resemblance with the genus *Austroleptis* Hardy (Malloch,

1932). Thus, the analysis of this particular fauna results important not only for a taxonomic treatment of the species but also for the future biogeographic and phylogenetic studies.

Some of the flies that belong to *Dasyomma* are hematophagous, and attack men as horseflies do. *Dasyomma*, as a taxon, is known in South America since last century by the studies of Macquart (1840), Philippi (1865) and Bigot (1887). Moreover, the knowledge of the genus was increased with the studies of Malloch (1932) wherein the description of 10 new species, a redescription of four known species and a general key for the genus were included. Edwards (1934), described one species; Stuardo (1946) and James (1968) mention it in their catalogues.

The opportunity to revise the typical material studied by Malloch, mostly deposited in the United State National Museum of Washington D.C. (USA), and material belonging to several other Institutions, allowed us to accomplish the revision of the genus *Dasyomma*. In this contribution we performed the redescription of the 15

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known species, the description of five new ones including male and female genitalia (based on adults since larval stages remain unknown), and two species were synonymized.

MATERIAL AND METHODS

The material examined belongs to the following institutions: Instituto de Entomología de la Universidad Metropolitana de Ciencias de la Educación (IE), Santiago, Chile; Instituto Miguel Lillo (IML), Tucumán, Argentina; Instituto Patagónico de Ciencias Naturales (IPC), San Martín de los Andes, Neuquén, Argentina; Museo La Plata (MLP), La Plata, Argentina, and United States National Museum (USNM), Washington D.C., USA.

The methodology for the study was the commonly employed in Dipterology; the external morphology and ornamentation were studied using a stereoscopic microscope; eyes colour revived (relaxed) maintaining the specimen for at least one hour in a humid chamber. Study of the genitalia was performed after dissection clearing and mounting the anatomical pieces onto microslides and a composed microscope equipped with camera lucida was employed for the analysis. The frontal index was obtained from the relationship between the front height and front width at base.

SYSTEMATICS

Dasyomma Macquart

Type species *Dasyomma coerulea* Macquart
Dasyomma Macquart, 1840: 31
Trichopalpus Philippi, 1865: 724
Trichopalpomyia Hunter, 1900: 148; n.n. for
Trichopalpus Philippi

Body Color black to yellow orange, face and front bright to pollinose, front sides generally divergent basally, ocelli evident on ocellar tubercle, palpi curved.

Generally with distinctly hairy eyes in both sexes; antennae with slender subapical or apical arist not segmented, supraspiracular convexity of

postnotum with distinct erect hairs, tibiae without well developed bristles but with one apical spur on the fore tibiae and two on each of the others, metanotum with lateral portion bare except the lower convex portion. Vein R_{2+3} bends forward near its apex and its tip end in the C just as R_1 originating fork of R_4 and R_5 in acute angle.

Female genitalia. Epigynium with T (tergite) IX undivided, wider than longer, T X medially separated, composed by two sclerites; cerci subovoidal, distally rounded, approximately as long as wide. Hypoproct short, wider than higher, caudal margin rounded with scattered hairs. Genital fork with base projected laterally, spermathecae rounded distally. Hypogynium with sternite VIII as long as wide, apical and medially excavated.

Male genitalia. Hypopygium with gonocoxites united dorsally, externally very haired and with aedeagal apodemes projected cephalad; gonostyle elongated, aedeagus with strong aedeagal apodeme and two well evident tines, the last one enclosed in a distally elongated aedeagal sheath, basally with a parameral apodeme inserted in each gonocoxite base. Epandrium with T IX and X fused, sternite IX ovoidal wider distally, cerci well separated.

Malloch (1932) established three subgenera of *Dasyomma*: *Dasyomma*, *Dasyommina* and *Trichopalpomyia* based on two characters: the presence or absence of setulae on CuA bordering the basal cell, and a tuft of hairs in pteropleura (anepimeron) and sternopleura (katapisternum). Species with presence of both characters belong to *Dasyomma*, with the absence of both characters to *Dasyommina*, the absence of the first character and presence of the second one characterize the species belonging to *Trichopalpomyia*. After the analysis of more material we could observe that the afore mentioned characters have inter and intraspecific variations. On the other hand, we propose to maintain the same subgeneric classification but with other characters. Accordingly, we define the subgenera as follow:

***Dasyomma (Dasyomma)*:** Front, genae, and clypeus bright blackish; eyes hairy; CuA setulosae on basal cell margin, anepimeron (pteropleura) and katapisternum (sternopleura) hairy. Included spe-

cies: *coeruleum*, *croceicornis*, *trivittatum*, *wirthi*, *fulvum*, *gonzalezi*, *poecilogaster* and *vittatum*.

***Dasyomma (Dasyommina)*:** Front and clypeus shining, genae and clypeus male pollinose; CuA no setulosae, anepimeron and katepisternum bare. Included species: *atratum* and *humerales*.

***Dasyomma (Trichopalpomyia)*:** Front, genae and clypeus pollinose; CuA setulae absent or present (scarce or occupying all the border), anepimeron and katepisternum hairy. Included species: *triangulariferous*, *malleco*, *basale*, *inmaculatum*, *atribasis*, *chapelco*, *cinerascens*, *univittatum*, and *herbsti*, and *hirticeps* with doubts.

Key to the species of genus

Dasyomma Macquart

1. Front grayish pollinose, Anepisternum, anepimeron, katepisternum and katatergite with abundant hairs 2
 - Front bright black or yellow. Anepisternum, katepisternum and katatergite with reduce or without hairs 6
2. Abdomen yellow with median black spots forming a longitudinal stripe continuous or not 3
 - Abdomen grayish brown with posterior border of tergites II-IV yellowish brown 4
3. Scutum and scutellum grayish yellow, the former with 3 blackish brown vittae (Fig. 8B); abdomen dorsal spots not continuous (Fig. 8D). *chapelco* Coscarón S.n.sp.
 - Scutum and scutellum grayish or brownish black, the former without vittae; abdomen dorsal spots joined making a median longitudinal stripe on T (II)III-V. 5
4. Wings hyaline except a line on base of discal cell and stigma dark; basal flagellomere and palpi yellowish *hirticeps* Malloch.
 - Wings smoked browned in costal cell and darkened on cross veins, basal flagellomere and palpi dark brown. *cinerascens* (Philippi)
5. Front and clypeus dark brown with pollinosity, occiput and thorax blackish, dusted brown, ♀ TII with reduced median black spot (Figs. ♀ 7D, ♂ 7E). *atribasis* Malloch
 - Front (Fig. 9A), genae, clypeus, occiput with gray pollinosity showing grayish aspect, thorax gray dusted, ♀ TII (Fig. 9C) with black median spot as wide as T III-V, ♂ abdomen with TI, V-VIII black and a wide median black stripe joining TI and IV. *univittatum* Malloch
6. Body glossy black 7
 - Body yellow with some brown to black colour. 10
7. Body shining bluish black or greenish; ♀ front with sides divergent below; Cu setulosae on central cell border; eyes with relatively long and abundant hairs; anepimeron, anepisternum, katepisternum and katatergite with hairs; ♂ unknown. 8
 - Body brownish black; eyes with very short and sparsed hairs; ♀ front with parallel sides; Cu bare on basal cell border; only anepisternum and katatergite haired, sternopleura bare. 9
8. Scape, pedicel and palpi frontally yellowish brown; first flagellomere brownish orange; wings subhyaline with pterostigma yellowish brown; abdomen greenish black iridescent. *croceicornis* (Bigot)
 - Scape, pedicel, basal flagellomere (Fig. 1C) and palpi black (Fig. 1B); wings smoked with pterostigma dark brown (Fig. 1D); abdomen bluish black *coeruleum* Macquart
9. Wings very smoked darker on costal, medial and basal cells; pterostigma and legs dark brown. *atratum* Malloch
 - Wings weakly yellowish brown smoked; pterostigma and legs yellowish brown. *humerales* Malloch
10. Front and scutum totally yellow or with a black median longitudinal stripe; wings yellow hyaline with pterostigma yellowish . . . 11
 - Front and scutum black; wings smoked with pterostigma dark brown 13
11. Scutum, antennae and palpi totally yellow. *fulvum* (Philippi)
 - Scutum yellow with a blackish median longitudinal stripe; antennae and palpi dark brown. 12
12. Scutum black median stripe not reaching the posterior border (about 3/4 of scutum length); scutellum and pleurae totally yellow; abdomen without black spots on T II-IV. *trivittatum* Malloch

- Scutum black median stripe reaching the posterior border, scutellum and half basal portion of pleurae black, abdomen with median subconical black spots on T II-V (Fig. 2B). *wirthi* Coscarón S.n.sp.
- 13 Fourth abdominal tergite black (or only yellow laterally at base in some specimens). *herbsti* Edwards
- Fourth abdominal tergite black only in the middle and yellow laterally and apically. 14
- 14 Abdomen black, posterior area joined with T I by a continuous black stripe in ♂, not in ♀, formed by isolated transverse bands leaving 1+1 yellow areas laterally and distally; front and clypeus shining black; genae pollinose 15
- Abdomen black posterior area (T V-VIII) not joined with the T I with a black continuous stripe 16
- 15. T II-IV with medial longitudinal black wide stripe in ♂, connected with lateral black spot (Fig. 4C); ♀ with median longitudinal black spots on T II-IV wide basally on T II-III (Fig. 3A). *gonzalezi* Coscarón S.n.sp.
- T II-IV medial longitudinal black stripe in ♂ relatively narrow, composed by triangles not connected with 1+1 lateral black spots (Fig. 7A) *trianguliferous* Coscarón S.n.sp.
- 16. Abdominal T I-IV totally yellow (Fig. 7B); maxillary palpi, postpronotal lobe and postalar callus yellowish. *malleco* Coscarón S.n.sp.
- Abdominal T I not totally yellow; maxillary palpi, postpronotal lobe and postalar callus brownish black. 17
- 17. Abdominal T I-IV without median black spots or with small isolated and elongated median black spots. 18
- Abdomen with black median stripe on T V to I or intermedius at least joining T V with IV; front genae and clypeus shining black. 19
- 18 Abdominal T I-IV without median black spot; eye hairs relatively long; halteres knob dark brown *inmaculatum* Malloch
- Abdominal T I-IV with small elongated black spots (Fig. 7C); eye hairs relatively short; halteres knob yellowish *basale* Malloch
- 19. T II-IV median black spots subquadrate forming a continuous longitudinal stripe of parallel

sides; sometimes T I with small black spot; thorax hairs black *vittatum* Malloch

- T II-IV median black spots subtrapezoidal, not forming a longitudinal stripe of parallel sides; sometimes that of T II and rarely T III reduced (Fig. 5C); T I never with black spot; thorax hairs yellowish. *poecilogaster* (Philippi)

***Dasyomma (Dasyomma) coeruleum* Macquart**
Figs. 1A-H

Dasyomma coerulea Macquart., 1840: 31

D. (Dasyomma) coeruleum Malloch: 1932: 220, Stuardo, 1946: 77; James, 1968: 5.

Dasyomma coeruleum var. *impressifrons* Malloch, 1932: 222. n. syn, James, 1968: 5.

Female. Length 5,5-7,5 mm; wing unicolour blue-black. Head (Fig. 1A, 1B), antennae (Fig. 1C), palpi and proboscis black with dark hairs. Front and clypeus shine black. Genae, front upper lateral margins gray pollinose. Head appendages as in Figs. 1A, 1B. Eyes with dense brown hairs.

Thorax black, metanotum with fine, erect, dark hairs, moderately dense. Wing (Fig. 1D) infuscated darker on basal half, stigma dark brown. R₁, R₄₊₅, R₅ and CuA with minute decumbent setae. Halteres brown with dark knob. Legs blackish brown with dark hairs, those of coxal and femur longer than tibiae. Abdomen black blue, bright, with dark hairs. Front with sides divergent below, frontal index: 1.2 -1.6. Ocellar tubercle elevated with ocelli very evident. Antennae with subapical arista not segmented (Fig. 1C), palpi long, curved but shorter than proboscis. Anepisternum, anepimeron, katepisternum and katatergite hairy.

Genitalia. T IX and X, cerci and hypoproct as Fig. 1E; genital fork projected distally, combs with small and slender teeth (Fig. 1F); spermathecae subovoidal, blunt distally (Fig. 1G). Sternite VIII subovoidal with scarce hairs (Fig. 1H).

Male. Not seen, Malloch (1932) described the ♂ of similar coloration pattern and structure as the ♀.

Material examined. ARGENTINA: NEUQUÉN. Pucará, 27-XII-73, col. Gentili: 1 ♀ (IPC); 1-XI-79,

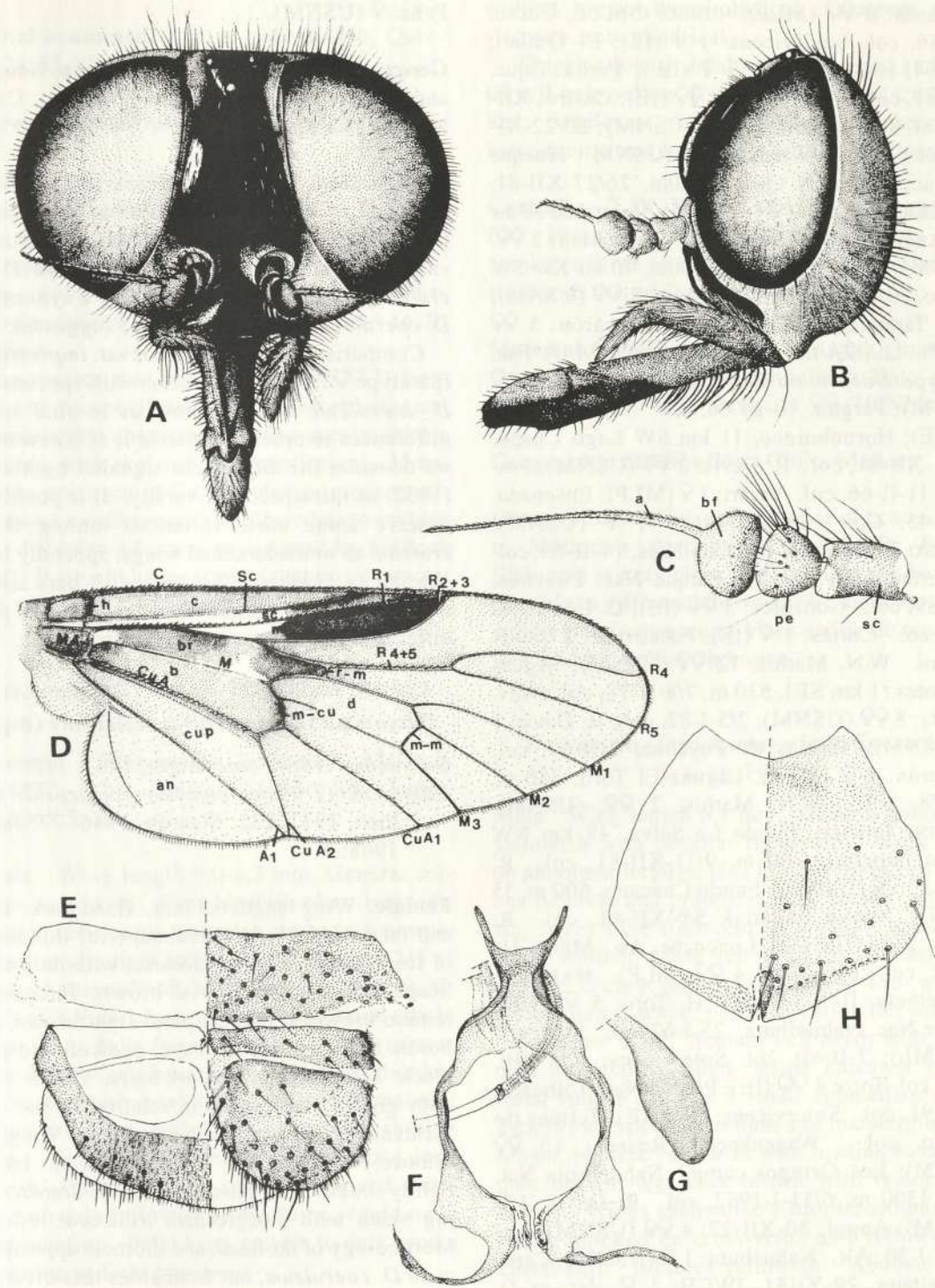


Figure 1. *D. coeruleum* ♀ A: head, frontal view; B: head, lateral view. C: antenna (sc: scape, pe: pedicel, bf: basal flagellomere, a: arista); D: wing; E: epigynum; F: genital fork; G: spermatheca; H: hypopygium.

col. Gentili: 2 ♀♀ (IPC); Hua-Hum, 16-I-81, col. Coscarón: 8 ♀♀ (MLP). CHILE: CHILOÉ, Cúcao, 5-II-86, col. Solervicens: 1 ♀ (IE); El Quilari, 14-II-64, col. Hichins: 1 ♀ (IE.); Punta Tique, 31-I-87, col. Solervicens: 4 ♀♀ (IE); Castro, XII-26, Col. R.E. Shannon: 9 ♀♀ (USNM); 20/22-XI-26, col. F.M. Edwards: 4 ♀♀ (USNM); Hueque Trumao, 22 km N Quellón 50m, 26/27-XII-81, col. D.R. Davis: 19 ♀♀ (USNM); Puntraca, 30 air Km Ancud, 21/22-XII-81, col. R. Davis, 12 ♀♀ (USNM); Lago Tepuhueco, 100m, 40 air Km SW Castro, 23/25-XII, col. R. Davis: 3 ♀♀ (USNM); Lago Tarahuen, 1-XII-92, col. Coscarón: 5 ♀♀ (MLP). LLANQUIHUE, Puerto Varas, I-24, A. Faz, paratype *Dasyomma impressifrons* Malloch, 1 ♀ (USNM); Pargua, 10-XI-66, col. Solervicens: 2 ♀♀ (IE); Hornohuico, 11 km SW Lago Chapo, 29/31-XII-81, col. R. Davis: 2 ♀♀ (USNM), Frutillar, 11-II-66, col. Vivart: 1 ♀ (MLP); Ensenada, 25-II-45, Col. E.A. Chapin: 1 ♀ (USNM). OSORNO, Entrelagos, Los Copihues, 14-II-89, col. Coscarón: 2 ♀♀ (MLP); Parque Nac. Puyehue, 14-I-89, col. González: 3 ♀♀ (IE); C. Los Copihues, col. Cortés: 1 ♀ (IE), Pucatrihue, 27/30-I-78, col. W.N. Mathis, 12 ♀♀ (USNM); Aguas Calientes (1 km SE), 530 m, 7/8-II-78, col. W.N. Mathis: 8 ♀♀ (USNM); 2/5-I-82, col. R. Davis: 1 ♀ (USNM); Termas de Puyehue, 2-II-67, col. Coscarón: 1 ♀ (MLP), Laguna El Toro, 780 m, 8-II-78, col. W.N. Mathis, 2 ♀♀ (USNM). CAUTÍN, Temuco, Fundo La Selva, 48 km NW Nueva Imperial, 700 m, 9/11-XII-81, col. R. Davis: 7 ♀♀ (USNM); Fundo Chacano, 600 m, 35 km NW Nueva Imperial, 5/6-XII-81, col. R. Davis: 2 ♀♀ (USNM); Loncoche, Ao. Mafil, 21-XI-92, col. Coscarón: 4 ♀♀ (MLP). MALLECO, Nahuelbuta, II-1988, col. H. Toro: 5 ♀♀ (IE), Parque Nac. Nahuelbuta, 25-I-67, col. Stange: 2 ♀♀ (IML); 7-II-80, col. Solervicens: 1 ♀ (IE), II-88, col. Toro: 4 ♀♀ (IE); Parque Nac. Tolhuaca, 12-II-91, col. Solervicens: 1 ♀ (IE), Termas río Blanco, col. Wagenknecht Rosech: 10 ♀♀ (USNM); Los Gringos camp. Nahuelbuta Nat. Park, 1300 m, 6/11-I-1982, col. R. Davis: 1 ♀ (USNM); Angol, 30-XII-27: 4 ♀♀ (USNM); Angol, 7-I-30, Alt. Nahuelbuta: 1 ♀ (USNM); Cerro Nahuelbuta, 29-XI-51, IWCH: 1 ♀, det. as *D. coeruleum impressifrons* Malloch. CAUQUENES, Paso García, 300 m 23 km NW Cauquenes, 29/30-XI-81, col. R. Davis: 5 ♀♀ (USNM); La Arboleda,

200-250 m, W Cauquenes, 27/28-I-81, col. L.E. Peña: ♀ (USNM).

Geographic distribution. Argentina: Neuquén, and Chile: Chiloé, Llanquihue, Osorno, Cautín, Malleco, Cauquenes.

Observations. Philippi *T. obscurus* type is lost. It is not in the National Museum of Santiago, Chile. Through the short description it is impossible to establish the differences with *D. coeruleum*. Probably, *T. obscurus* is a synonym of *D. coeruleum* as Malloch (1932) suggested.

Comparison of *D. coeruleum* var. *impressifrons* (paratype ♀ from Puerto Varas) with specimens of *D. coeruleum* did not allow us to find special differences in order to separate it as a new taxon; we consider the differences signaled by Malloch (1932) as intraspecific diversity. It is possible to observe some other variations among *D. coeruleum* as more darkened wings, specially in big specimens, presence of a yellowish bare area on the apical dorsal portion of distal article of palpi, different body size and width of front base.

Dasyomma (Dasyomma) croceicornis (Bigot)

Dasyomma croceicornis Bigot, 1887: 112.

Dasyomma (Trichopalpomyia) croceicornis: Malloch, 1932: 232; Stuardo, 1946: 77; James, 1968: 5.

Female. Wing length 6,5 mm. Head dark. Front and face shine black, lateral superior thin border of front and face gray pollinose, with dark hairs. Scape and pedicel yellowish brown. First flagellomere brownish orange, palpi light brown, proboscis broom, hairs of scape, pedicel, and palpi black. Eyes brown with dark hairs. Thorax black with gray to dark hairs in relation to the light incidence. Legs black with dark hairs. Wings not fumose, with stigma light yellowish brown, lightly tinted on the base of R₃₊₄. Abdomen shining black with bluegreenish iridescent reflexes. Morphology of the head, and thoracic appendages as in *D. coeruleum*, but front sides less divergent below, frontal index 1.2. CuA setulosae on basal cell border. Anepisternum, anepimeron, katapisternum and katatergite hairy.

Genitalia. Not studied.

Material examined. CHILE: VALPARAÍSO, Quintero.. 28-XI-72, col. Lanfranco: 1 ♀ (IE).

Geographic distribution. Chile: Valparaíso.

Observations. *D. croceicornis* is the nearest species to *D. coeruleum*. It differs by the yellowish brown orange antennae and palpi; wings not fumose with stigma light yellowish brown, and abdomen notoriously iridescent. Eye hairs relatively short and less dense compared to *D. coeruleum*.

This species was cited by Bigot (1887) from Chile without specifying locality. Morphological and ornamental characters of these specimens are according with the original description. Moreover, the presence of CuA setulosae in our specimen shows a difference that allowed us to include it in a different subgenus as assigned by Malloch (1932). It should be mentioned that this character is not easy to detect and it is not always constant.

Dasyomma (Dasyomma) trivittatum Malloch

Fig. 2A

Dasyomma (Dasyomma) trivittatum Malloch, 1932: 224, Stuardo, 1946: 76, James, 1968:5.

Female. Wing length 7,0-8,3 mm. General coloration yellowish. Eyes blackish blue (relaxed), tubercle ocelliferous, antennae, proboscis, narrow medial longitudinal stripe on the, anterior 2/3 of scutum, halteres knob, legs, abdomen distally after 3/4 of T V dark brown to blackish; distal article of maxillary palp, base of femora, 1 + 1 narrow submedial longitudinal stripe of scutum (bordering the blackish one) light brown. Remaining portion of head and body yellowish shining dusted. Eyes with abundant to moderate long pilosity. Front, occiput, scutum, legs and abdomen with pale yellowish brown hairs, regarding to light direction. Palpi hairs grayish to dark brown in relation to light position.

Front of parallel sides, wider than eye transverse diameter, protuberant, convex at center (Fig. 2A). Front anterior margin without transverse depression and not depressed around ocelli; oc-

ciput bulky. Frontal index 0.9-1.0. Antennae without special morphological characters, palpi elongate, subcylindrical.

Wings yellowish, hyaline; pterostigma and costal cell pale yellow, R₁, basal section of CuA and R₄₊₅ setulosae. Anepimeron, anepisternum, katepimeron and katatergite with tuft of hairs.

Genitalia. T IX, X, cerci and hypoproct, genital fork, spermathic ducts and spermathecae very similar to those of *D. poecilogaster*; sternite VIII similar to that of *D. vittatum*.

Material examined. CHILE: MALLECO, near Los Gringos camp, 1300 m Nahuelbuta Nat. Park, 6/11-I-82, Col. D.R. Davis: 11 ♀♀ (USNM).

Geographic distribution. Chile: Malleco.

Observations. The revised material is according to Malloch's description (1932). *D. fulvum* (Philippi) is very close to *D. trivittatum* but it is possible to differentiate from it by the presence of yellow palpi, absence of black stripe on mesonotum, and leg yellowish brown.

Dasyomma (Dasyomma) wirthi Coscarón

S. n. sp. Fig. 2B

Male. Wing length 6,8 mm. General coloration yellowish with peculiar rhomboidal black spots on abdomen tergites, legs brown. Eyes ocelliferous tubercle and proboscis dark brown to blackish, eyes blue iridescent (relaxed). Eyes with short, whitish, dense yellow hairs. Genae, clypeus and occiput pale gray pollinose with whitish yellow hairs; scape, pedicel yellowish with whitish yellow hairs. Scutum yellowish with a median longitudinal black, stripe narrower on the distal fourth and 1 + 1 small submedian small, dark brown spots; scutellum and metatergite dark brown, pleurae yellowish with median basal area dark brown; legs dark brown with femora yellowish. Wings subhyaline with pterostigma dark brown smoked on cross-veins and yellowish on costal cell. Halteres yellowish. Abdomen yellowish with dark brown median subconical spots on T II-V, 1+1 shorts spots laterally on T III-V, one median subtriangle on anterior half and 1+1 reduced spots laterally on T VI (Fig. 2B); 1+1 spots

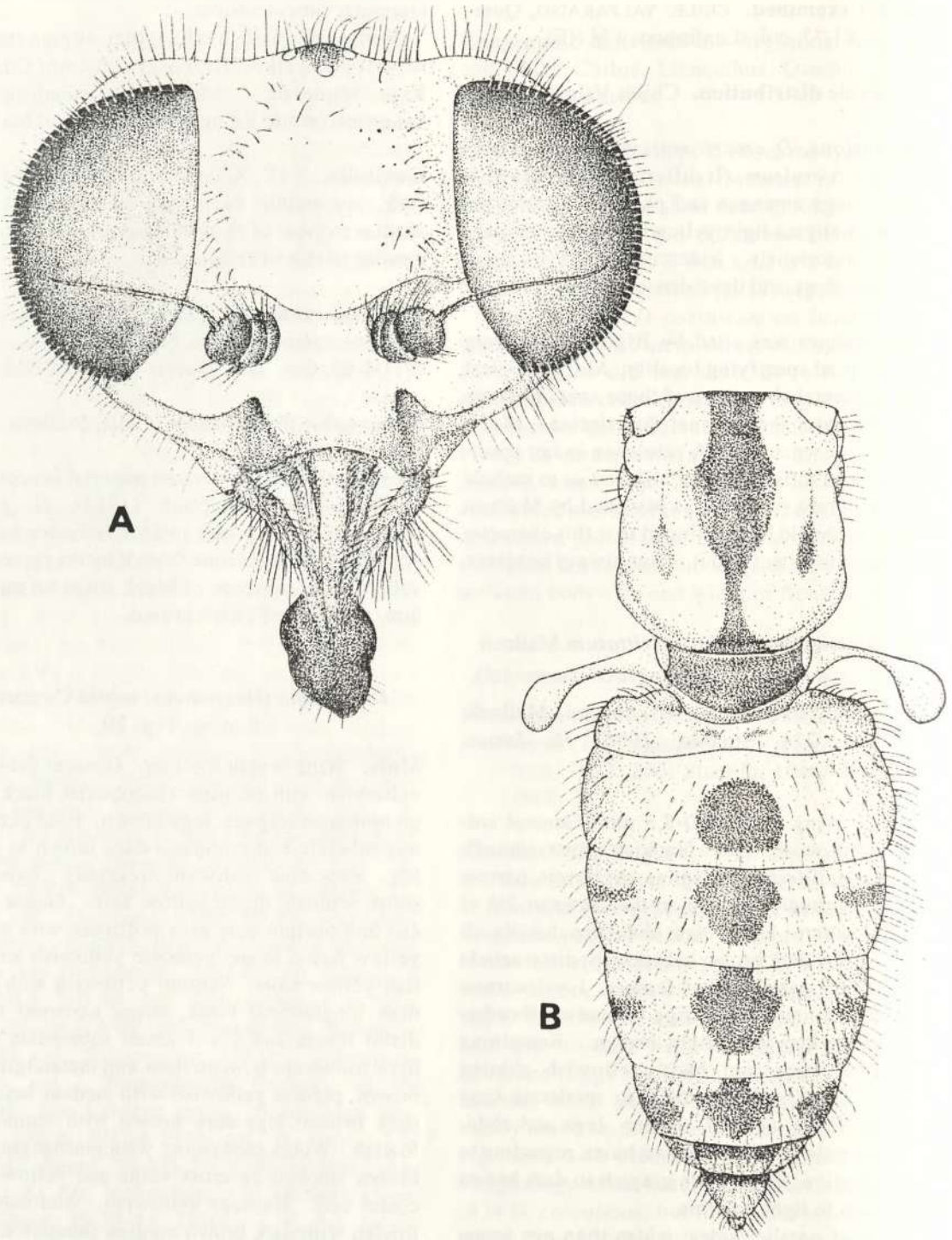


Figure 2. *D. trivittatum* ♀ A: head, frontal view. *D. wirthi* ♂. B: thorax and abdomen, dorsal view.

laterally on sternite V, and sternites VI-VIII dark brown. Thorax and abdomen, scape and pedicel without special morphological characters, basal flagellomere lost, palpi subcylinder, elongated. CuA with scarce hairs on margin of basal cell. Anepisternum, katapisternum and katatergite with hairs.

Genitalia. Unknown.

Material examined. CHILE: Holotypus ♂, COLCHAGUA. San Fernando, 80 mi S. Santiago, 15-II-67, Col. G. Olalquiaga (USNM).

Geographic distribution. Chile: Colchagua.

Observations. This species shows a great affinity with *D. trivittatum* sharing the yellowish coloration and the median black longitudinal stripe on scutum. As the *D. trivittatum* male is unknown, we could consider this specimen as the male of this species, since the males in the *Dasyomma* genera are always darker than females. However, a shorter median blackish stripe of scutum, scutellum, legs, pleura and T I-IV yellowish in their totality, and the presence of pale pterostigma without smoked cross-vein area, are enough characters for separating it as a different species. Besides, this new species is different from *D. fulvum*. The name is dedicated to W. Wirth who has put a label in the specimen as *Dasyomma* n. sp.

Dasyomma (Dasyomma) fulvum (Philippi)

Trichopalpus fulvum Philippi, 1865: 725.

Dasyomma fulvum: Malloch, 1932: 219, Stuardo, 1946: 77, James, 1968: 5.

We did not see any material of this species. Through the short original diagnosis, it is possible to differentiate it from the rest of the *Dasyomma*, species. It is characterized by head, base of antennae, palpi, thorax and abdomen yellow, with apex of abdomen, eye and proboscis black; wings yellowish; legs dark brown.

Dasyomma (Dasyomma) gonzalezi Coscarón S. n.sp. Figs. 3A-E, 4A-F

Female. Wing length 7,0 mm. Head dark; front, ocellar tubercle, face shining black with concolor hairs, cheeks and front narrow, lateral margin gray pollinose. Scape, pedicel, arista, palpi and proboscis black, flagellum brown orange; palpi hairs black front hairs and beard black to gray whitish according to light incidence. Eyes greenish violaceous black (relaxed) with gray yellow dense, short pilosity. Thorax and legs black dusted; pronotal sclerite light gray brown genae, occiput, scutum, metanotum pleurae, coxae and femora hairs gray whitish. Wings smoky ornamented as in *D. coeruleum* but darkened on cross vein. Abdomen yellow brownish, with T V-IX totally black, and I-IV with wide black transverse band more extended cephalad, not attaining the lateral and posterior border (Fig. 3A), in some specimens the black transverse band covers T I totally and reaches to the lateral borders of TII-IV but not the posterior border, which is very narrow in the last tergite; ventrally the abdomen shows yellowish sternite II-IV and yellowish anterior 2/3 of sternite V. Arista inserted subapically (Fig. 3B), palpi 3/4 of proboscis length; Front index 1.3-1.4. CuA setulosae on basal cell margin; anepisternum, anepimeron, katapisternum and katatergite hairy.

Genitalia. T IX with abundant hairs, cerci subovoid, hypoproct with short median projection cephalad (Fig. 3C). Genital fork (Fig. 3D) very narrow basally, spermatheca rounded distally. Sternite VIII with concave base (Fig. 3E).

Male. Wing length 6,2 mm. Head color similar to that of female with center of face shine but little dusted on middle and base; clypeus and genae gray pollinose. Eyes as in female, ocellar tubercle prominent with ocelli evident. Head as in Figs 4A and 4B. Antennae, palpi, thorax, legs and wings as in female. Abdomen ornamentation as that of holotype, but black transverse bands can reach the lateral borders (Fig. 4C). Sternite I-IV anteriorly yellow.

Genitalia. T IX and X subbasally wider than apically, cerci with abundant hairs. Sternite IX ovoid, subdistally wider than basally (Fig. 4F). Basistyli elongate with abundant hairs, longer

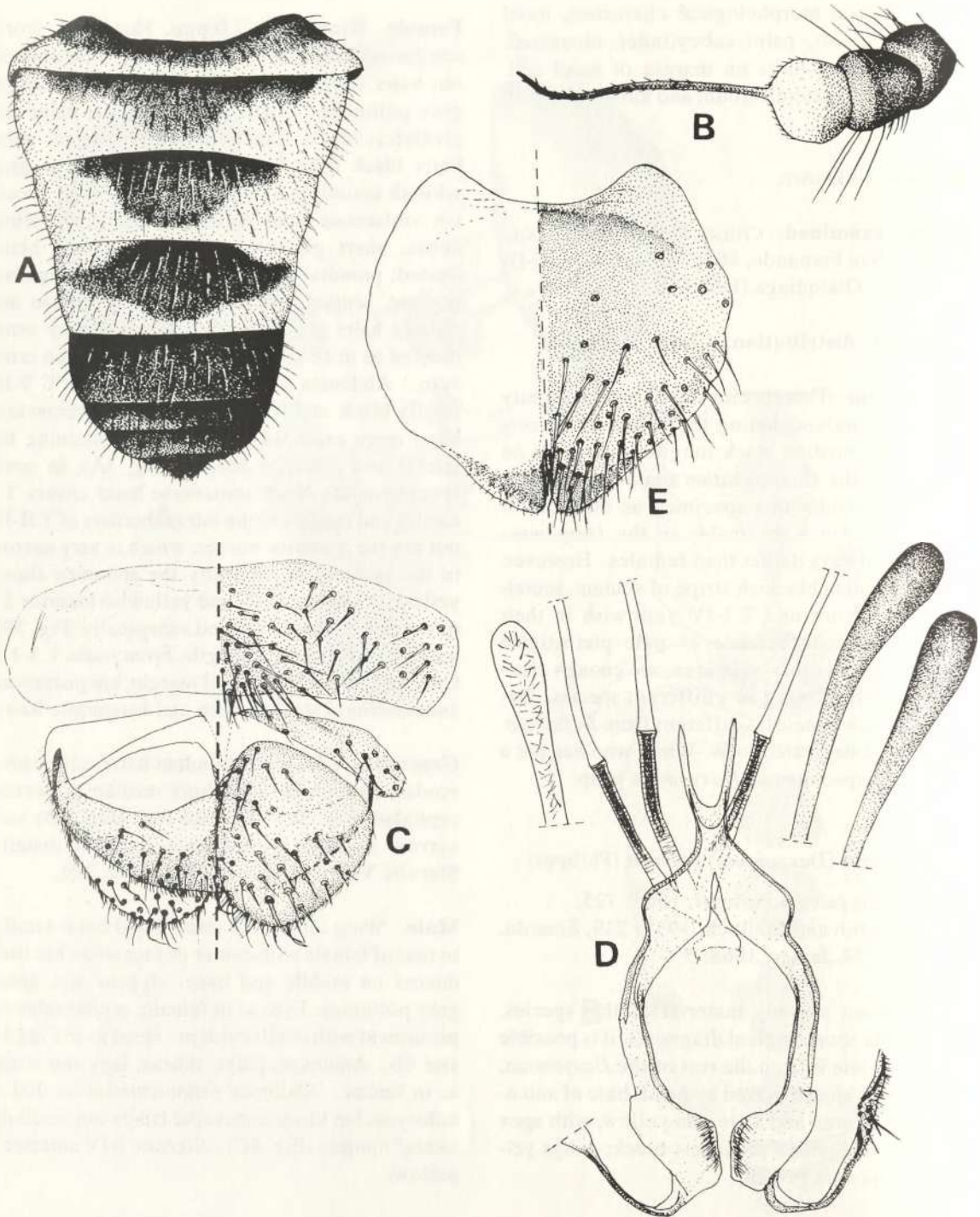


Figure 3. *D. gonzalezi* n. sp. ♀. A: abdomen, dorsal view, B: antenna, C: epigynum; D: genital fork with basal spermathecae and spermatheca, E: hypogynium.

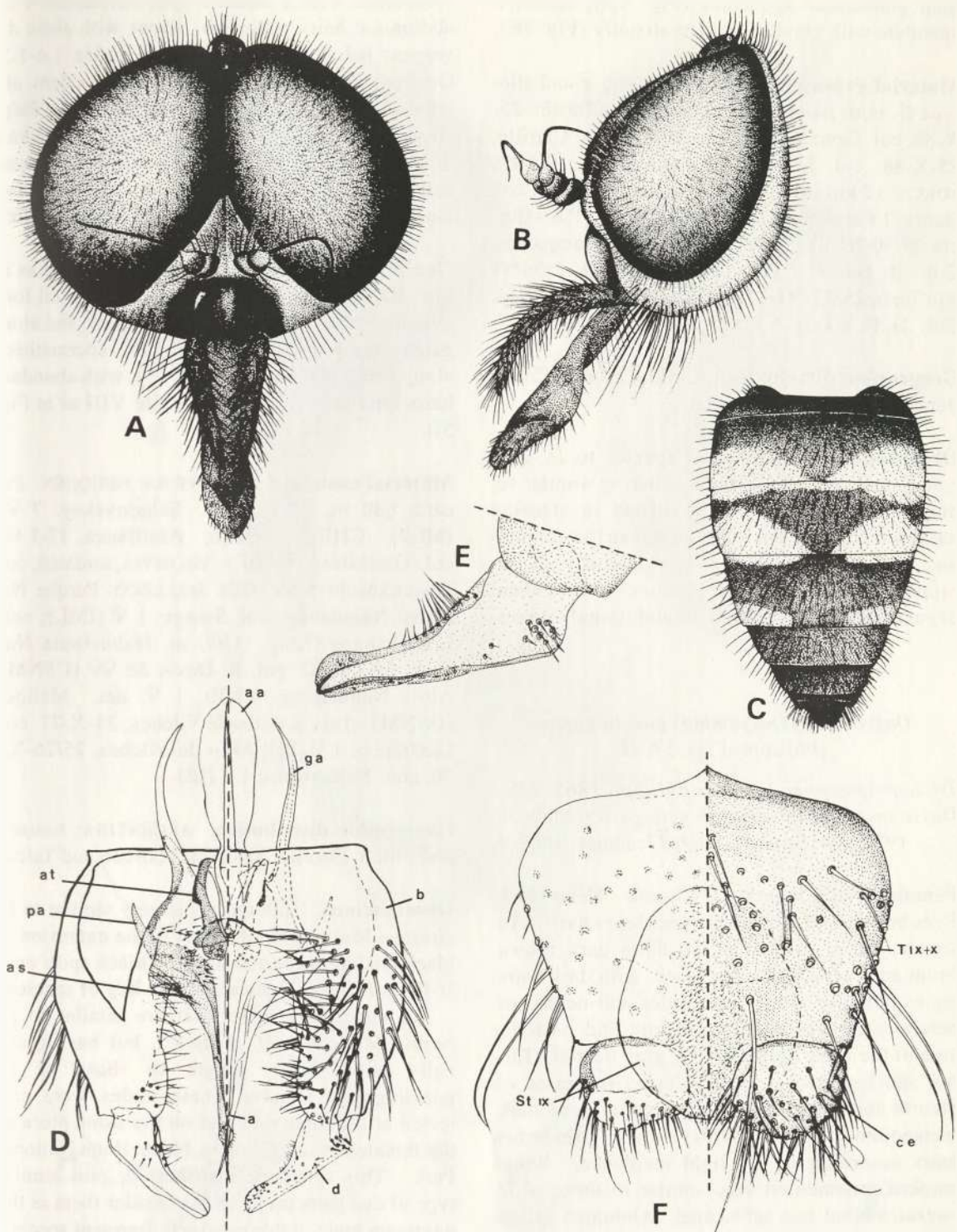


Figure 4. *D. gonzalezi* n. sp. ♂. A: head, frontal view; B: head, lateral view; C: abdomen, dorsal view, D: hypopygium, dorsal, view (a: apex of aedeagus, aa: aedeagal apodeme, as: aedeagal sheat, at: apodema tines, b: basistyle, d: dististyle, ga: gonocoxal apodeme, pa: parameral apodeme); E: dististyle; F: epandrium (T IX+X: tergites IX+X, St IX: sternite IX, ce: cercus).

than gonocoxal apodemes (Fig. 4D); dististyli spatulate with small concavity distally (Fig. 4E).

Material examined. CHILE: Holotype ♀ and allotype ♂, both from CORDILLERA, Río Clarillo, 25-X-88, col. González (IE). Paratypes: Río Clarillo, 25-X-88, col. Mellado, 1 Paratype ♂ (IE) PETORCA, 12 km interior El Sobrante, 18-X-86, col. Henry, 1 Paratype ♀ (IE); CAUQUENES. Paso García 29/30-XI-81, 300 m, 23 km NW Cauquenes, Col. R. Davis, 1 Paratype ♀ (USNM); CURICÓ, Río Teno, 25/27-XI-81, 800 m, 40 km E de Curicó, Col. D. R. Davis, 5 Paratypes ♂♂ (USNM).

Geographic distribution. Chile. Petorca, Cordillera, Cauquenes and Curicó.

Observations. The nearest species to *D. gonzalesi* is *D. poecilogaster* by sharing similar female ornamentation, but it differs in showing narrow median black longitudinal stripe continuous from T II-IV, not expanded laterally. *D. vittatum* is also a close species but without expansions on median spot of abdominal tergites.

Dasyomma (Dasyomma) poecilogaster
(Philippi) Figs. 5A-H

Trichopalpus poecilogaster Philippi, 1865: 725.

Dasyomma (Dasyomma) poecilogaster Malloch, 1932:224, Stuardo, 1946:77; James, 1968: 4.

Female. Wing length 6,6-8,0 mm. Head black. Eyes brown with abundant concolours hairs. Antennae, palpi, proboscis and hairs dark brown. Front and clypeus shining black, with dark hairs; genae laterally, front upper sides and ocellar tubercle edges dusted gray; occiput and posterior area of the head lightly glossy gray dusted. Thorax and legs glossy black, dusted increased on pleurae and postpronotal lobe, scutum, scutellum, metanotum and pleurae with yellow to light brown hairs according to the light incidence. Wings smoked ornamented very similar to those of *D. coeruleum* but less infuscated. Abdomen yellow with medium black stripe of variable length, extending from T II to T V, or from only the posterior half of T IV to T V; T V-IX black (Fig. 5C). Ventrally only black from sternite (IV)-V to apex

sometimes with a medium spot on sternite I-II; abdominal hairs yellowish. Front with sides divergent below (Fig. 5A); frontal index 1.4-1.5. Ocellar tubercle elevated, ocelli well evident, antennae with arista inserted subapically. Palpi slightly curved (Fig. 5B), approximately one half of the proboscis length. CuA setulosae on basal cell margin. Anepisternum, anepimeron, katapisternum and katatergite with a tuft of hairs.

Genitalia. T IX and X, cerci and hypoproct as in Fig. 5D. T IX with abundant hairs. Genital fork with a comb of abundant teeth (Fig. 5E) and elongated basal spermathecal ducts; spermatheca elongated, blunt apically (Fig. 5F), with abundant hairs internally (Fig. 5G); sternite VIII as in Fig. 5H.

Material examined. ARGENTINA: NEUQUÉN. Pucará, 630 m, 6-I-73, col. Schajovskoy: 7 ♀♀ (MLP). CHILE: OSORNO, Antillanca, 12-I-89, col. González: 3 ♀♀ (IE). VALDIVIA, undated, col. Wagenknecht 5 ♀♀, (IE). MALLECO, Parque Nacional Nahuelbuta, col. Stange: 1 ♀ (IML); near Los Gringos Camp., 1300 m, Nahuelbuta Nat. Park, 6/11-I-82, col. R. Davis 38 ♀♀ (USNM), Altos Nahuelbuta, 6-I-30, 1 ♀, det. Malloch (USNM). TALCA, Altos de Vilches, 31-X-71, col. Lanfranco: 1 ♀ (IE); Altos de Vilches, 25/26-XI-70, col. Solervicens: 1 ♀ (IE).

Geographic distribution. ARGENTINA: Neuquén, and CHILE: Osorno, Valdivia, Malleco and Talca.

Observations. This species is very similar to *D. vittatum* Malloch but it differs in the extension of black median stripe and shape of black spots on T II-IV as formely explained in the key of species.

We have three males that are similar to *D. basale* Malloch = *D. atritarsis*, but having eye hairs with similar length to those of *D. poecilogaster* females. These males were collected at the same time and on the same place as the females in Los Gringos, Nahuelbuta National Park. This sympatric distribution, plus similar type of eye hairs invite us to consider them as the unknown male of this relatively frequent species. Abdomen more yellow with small isolated median black spots on ♂ tergites II-IV, lighter colour of wings (opposite to the common darker coloration,

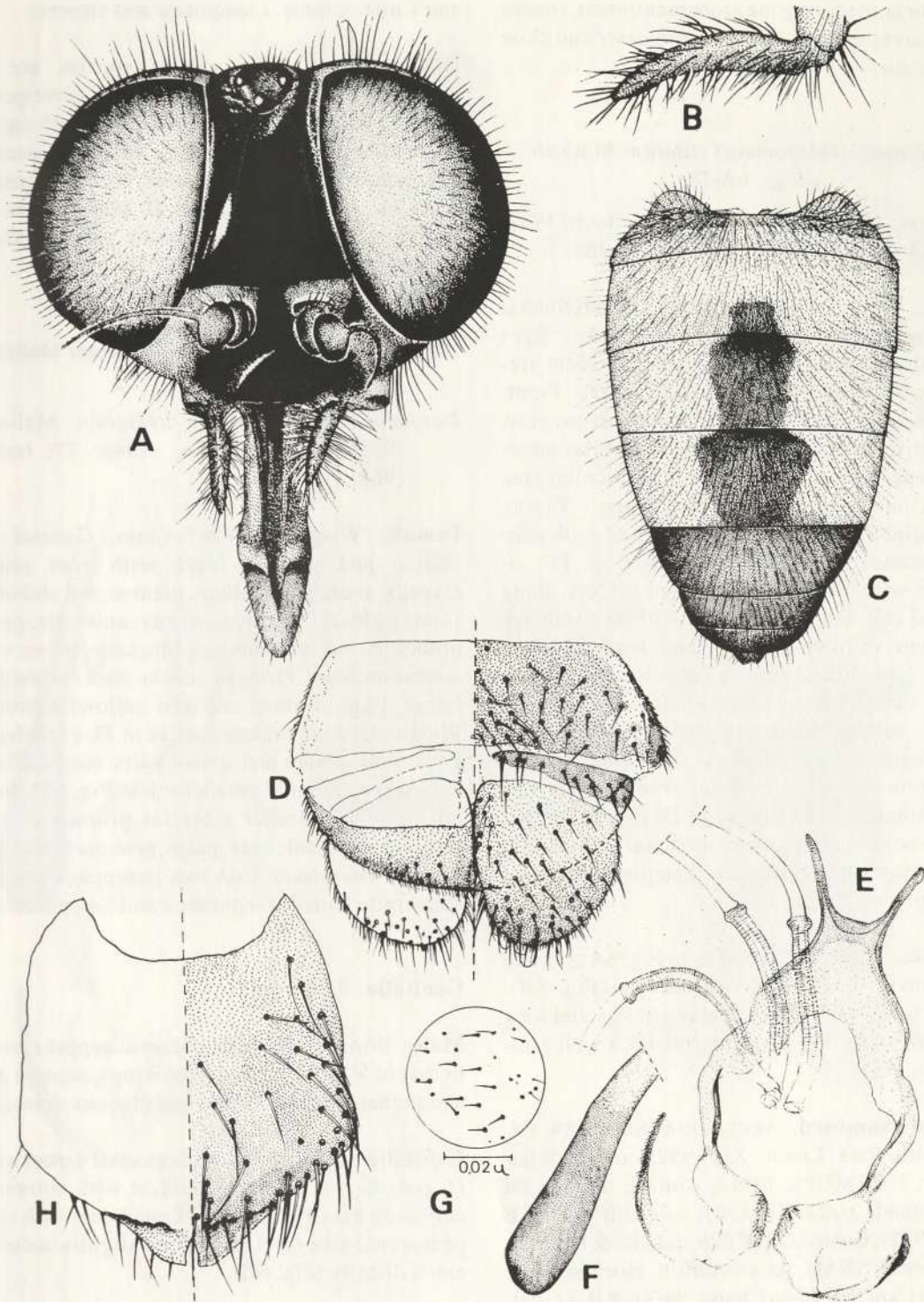


Figure 5. *D. poecilogaster* ♀. A: head, frontal view, B: palpus; C: abdomen, dorsal view, D: epigynum; E: genital fork and basal spermathecal ducts; F: apex of spermatheca, G: internal hairs of spermatheca, H: hypopygium.

characteristic of males), plus T I black are elements for considering the afore mentioned 3 males as a different species to *D. poecilogaster* and close to *D. basale*.

Dasyomma (Dasyomma) vittatum Malloch
Figs. 6A-D

Dasyomma (Dasyomma) vittatum Malloch, 1932: 223; Stuardo, 1946: 77; James, 1968: 5.

Female. Wing length 7,5-8,0 mm. Head, thorax, appendages, and abdomen apex black. Eyes brownish violaceous, bluish dark iridescent (relaxed) with dense brownish dark hairs. Front, genae and clypeus glossy black with narrow, gray, dusted stripe on edges of lateral and ocellar tubercle. Scape, pedicel, palpi, front, postocellar area and occiput dusted, with black hairs. Thorax glossy slightly dusted. Wings smoked with general ornamentation similar to that of *D. coeruleum*, with black setulae present in CuA, along the basal cell, R₁, R₄₊₅ and base of R₅. Halteres with stem yellowish brown and knob blackish brown. Legs blackish with concoloured hairs as scutum, scutellum and pleurae hairs. Abdomen on T II-IV yellow, with elongated medium black spots; segments V-VIII black. Front sides divergent below as is *D. coeruleum*; frontal index 1.4-1.5. Antennae and palpi as in *D. coeruleum* but palpi slender. CuA setulosae on basal cell margin. Anepisternum, anepimeron, katapisternum and katatergite with a tuft of hairs.

Genitalia. T IX-X and cerci as in Fig. 6A; sternite VIII with a deep concavity basally (Fig. 6B). Genital furca with narrow basal process and long apical branches (Fig. 6C); spermatheca well capitated (Fig. 6D).

Material examined. ARGENTINA: NEUQUÉN, Pucará, Nat. Park Lanin, XII-1952, col. S. Schajovskoy: 1 ♀ (MLP). CHILE: CHILOÉ. Puntra, 30 Km S Ancud, 21/22-XII-1981, col. D.R. Davis: 6 ♀♀ (USNM); Castro, XII-1926, col. R. & E. Shannon: 2 ♀♀ (USNM). LLANQUIHUE, Hornohuenco, 300 m, 11 km SW Lago Chapo, 29/31-XII-81, col. D.R. Davis: 2 ♀♀ (USNM). OSORNO, Nat. Park Puyehue, 600 m, 1km W to Aguas Calientes, 2/5-I-82, col. D.R. Davis: 7 ♀♀ (USNM).

Geographic distribution. Argentina: Neuquén, and Chile: Chiloé, Llanquihue and Osorno.

Observations. The closest species are *D. poecilogaster* (see discussion in the corresponding redescription) and *D. atribasis*, which can be differentiated from *D. vittatum* by the presence of abdominal T I black in females, and face dusted. It should be mentioned that *D. vittatum* and *D. poecilogaster* are two common species which males are still unknown.

Dasyomma (Dasyomma) atratulum Malloch
Figs. 6E-G

Dasyomma (Dasyomma) atratulum Malloch, 1932: 228; Stuardo, 1946: 77; James, 1968: 1.

Female. Wing length 4,8-5,4 mm. General coloration dark brown to black, with front, genae, clypeus, scutum, scutellum, pleurae and abdomen shining glossy. Eyes brown gray; antennae, palpi, proboscis, occiput and legs blackish brown with concolour hairs, face and cheeks dark brown pollinose, base of tibiae and tarsi yellowish brown. Wing coloration ornamented as in *D. coeruleum*. Eyes with minute and sparse hairs very difficult to observe. Front of parallel sides (Fig. 6E), frontal index 1.7, ocellar tubercles prominent with ocelli evident, antennae, palpi, proboscis and legs as in *D. coeruleum*, CuA bare, anepisternum and katatergite haired; anepimeron and katapisternum bare.

Genitalia. Unknown.

Male. Wing 4,6-5,1 mm. General aspect similar to that of ♀, but having darker wings, scutum and abdominal tergites. Genae and clypeus dusted.

Genitalia. Hypopygium with general aspect as in *D. gonzalezi* n. sp., but dististyle with notorious curvature basally (Fig. 6F). Epandrium with sub-pentagonal-like cerci shape, and slightly acuminate distally (Fig. 6G).

Material examined. CHILE: CHILOÉ. Castro, XII-1926, col. R. & E. Shannon: 3 ♀♀, 11 ♂♂ (USNM). CAUQUENES. La Arboleda, 27/28-I-

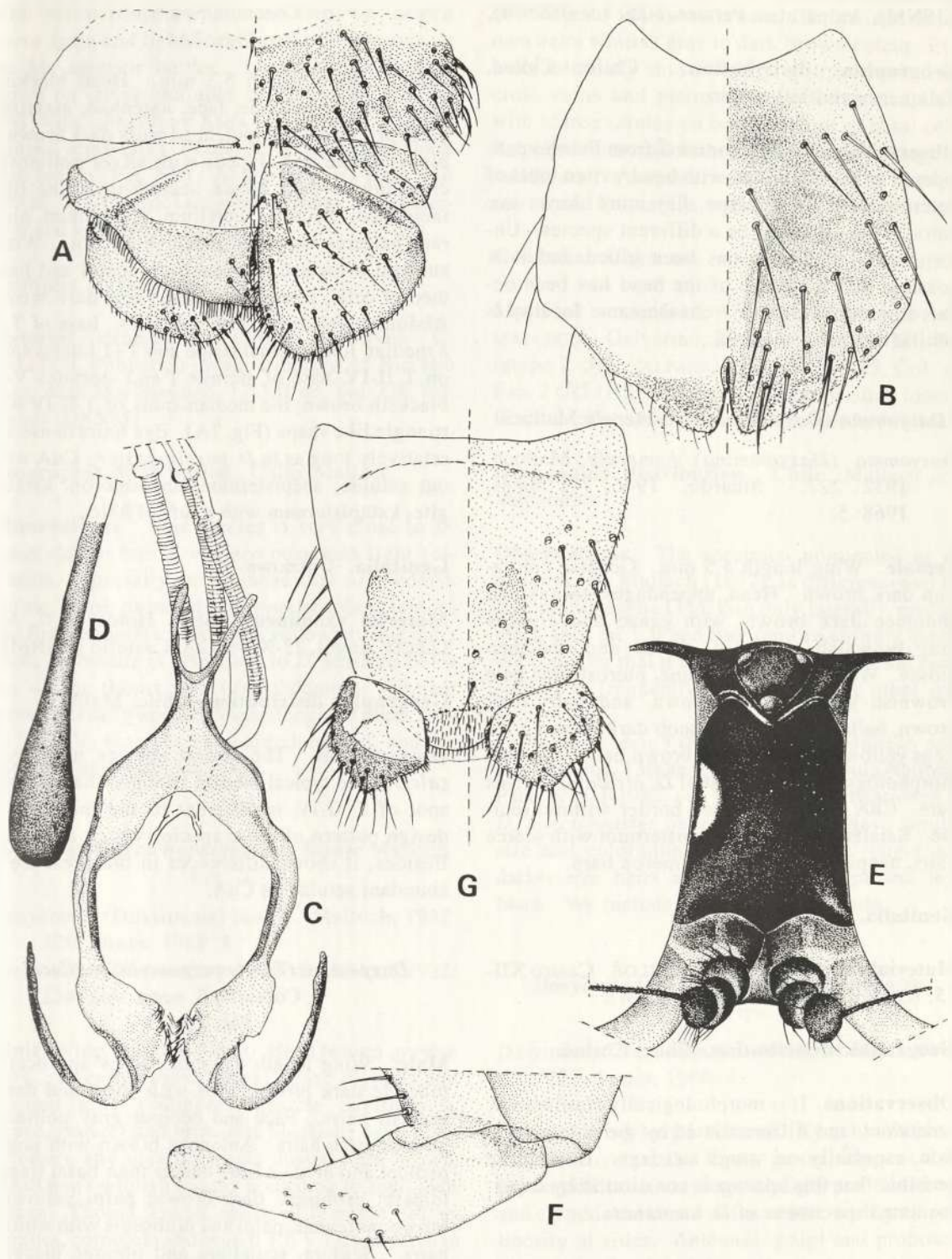


Figure 6. *D. vittatum* ♀. A: epigynium; B: hypogynium; C: genital fork and basal spermatheca, D: spermatheca. *D. atratulum* ♀. E: front, ♂ F: dististyle, G: epandrium.

1981, 200-250 m, W. Cauquenes, col L. Peña, 1 ♀ (USNM). Valparaíso, Perales, I-25, 1 ♀ (USNM).

Geographic distribution. Chile: Chiloé, Cauquenes and Valparaíso.

Observations. The specimen ♂ from Perales considered as *D. atratum*, with hand written label of determination as allotype, has more dense eye hairs. Thus, it could be a different species. Unfortunately, the head has been glued and it is possible that a change of the head has been occurred; moreover, the ♀ from the same locality is similar to Castro material.

Dasyomma (Dasyommina) humerale Malloch

Dasyomma (Dasyommina) humerale Malloch, 1932: 227; Stuardo, 1946: 77; James, 1968: 5.

Female. Wing length 4,5 mm. General coloration dark brown. Head, appendages, thorax and abdomen dark brown, with genae and clypeus gray brownish pollinose, thorax and abdomen glossy. Wings grayish-hyaline, pterostigma pale brownish yellow, veins brown, and hairs dark brown, halteres brownish, knob dark brown gray. Legs yellowish brown with brown hairs. General morphology similar to that of *D. atratum*. Eyes bare. CuA over central cell border without setulae. Katatergite haired, anepisternum with scarce hairs, anepimeron and katepimeron bare.

Genitalia. Unknown.

Material examined. CHILE: CHILOÉ. Castro XII-25, R. & E. Shannon: 2 ♀♀ (USNM).

Geographic distribution. Chile: Chiloé.

Observations. It is morphologically similar to *D. atratum*, and differentiated by the pale coloration, especially on wings and legs. It could be possible that this species is constituted by depigmented specimens of *D. atratum*.

Dasyomma (Trichopapomyia) trianguliferous

Coscarón S. n. sp.

Figs. 7A

Male. Wing length 5,3 mm. Head blackish. Eyes, ocellar tubercle, face, antennae, maxillary palp, proboscis, occiput, head hairs dark brown to black; genae and clypeus with silver pollinosity changing to dark brown according to the light incidence. Scutum, scutellum, metanotum, pleurae, halteres and legs blackish brown. Wings smoked brownish, darkened on costal and basal medial cells, pterostigma and veins dark brown. Abdomen yellowish with T I, V-IX, base of T II, a median longitudinal stripe and 1+1 lateral spots on T II-IV, base of sternite I and sternites V-IX blackish brown; the median spots of T II-IV with triangle like shape (Fig. 7A). Eye hairs dense and relatively long as in *D. poecilogaster*. CuA without setulae; anepisternum, anepimeron, katatergite, katapisternum with a tuft of hairs.

Genitalia. Unknown.

Material examined. CHILE: Holotype ♂, MALLECO. Angol, 22-X-46, Col. Castello (USNM).

Geographic distribution. Chile: Malleco.

Observations. The closest species is *D. gonzalezi*. The typical median triangle shaped black spot of T II-IV, is different to the median line design pattern of those species which are wider. Besides, it shows differences in the presence of abundant setulae on CuA.

Dasyomma (Trychopalpomyia) malleco

Coscarón S. n. sp.

Fig. 7B

Male. Wing length 6,5 mm. Eyes and ocellar tubercle dark brown; eyes with short and dense grayish hairs. Face and occiput gray pollinose with whitish hairs. Antennae brown with scape, pedicel and arista a little darker than basal flagellomere; proboscis dark brown; palpi yellowish brown; antennae, palpi and proboscis with whitish hairs. Scutum, scutellum and pleurae blackish brown slightly shining, with gray dust and whitish hairs. Postpronotal and postalar lobes and hal-

teres light grayish yellow. Wings clear suffused with yellowish brown, intensified on brown pterostigma and light brown on the cross veins on the M₂ anterior border. Legs yellowish, dark brown on coxae and apex of femora, tibiae and tarsi with concolour hairs. Abdomen slightly shining, segments I-IV and cerci yellowish, V-VII dark brown (Fig. 5B). Abdomen hairs light yellowish. CuA setulosae; anepisternum, katepisternum and katatergite haired.

Genitalia. Unknown.

Material examined. CHILE: Holotype ♂, MALLECO, Pehuenco creek, tributary of Bio Bio river, near Marimenuco, 12-XII-63, col. GF. Edmunds (USNM).

Geographic distribution. Chile: Malleco.

Observations. This species is very close to *D. immaculatum* but *D. malleco* possesses light coloration, especially in antennae that are reddish brown; palpi, pronotal and postalar lobes, femora and first segment of abdomen yellowish; eye hairs short. *D. basale* is also close to *D. malleco* but it has darker thorax, the first abdominal segment brown laterally and a median elongated black spot on T II-IV; the eyes hairs are elongated, and the antennae and palpi are black.

Dasyomma (Trichopalpomyia) basale Malloch
Fig. 7C

Dasyomma (Dasyomma) basale. Malloch, 1932: 226; James, 1968: 5.

Dasyomma (Dasyomma) atritarsis Malloch 1932: 234, nov. syn.

Male. Wing length 6,5 mm. Head brown grayish dark. Eyes brownish black, genae clypeus and occiput gray pollinose, tubercle ocelliferous, scape, pedicel and proboscis blackish; basal flagellomere and maxillary palp dusted light brown. Head hairs whitish to gray according to light incidence. Thorax, coxae, apices of femorae, tibiae, tarsites, complete abdominal T I, V-IX and median elongated spots on T II-IV segments blackish (Fig. 7C). Halteres and abdominal segments II-IV yellow; basal half of femur and tibia I, basal 3/4 of

femora II-III yellowish, tibiae II-III and basal half of basitarsus yellowish brown. Thorax and abdomen hairs whitish gray to dark brown colour. Eye hairs relatively short. Wings a little smoked on cross veins and pterostigma dark brown. CuA with scarce setulae on basal portion of basal cell. Palpi and antennae without special morphological variations. Anepisternum, anepimeron, katepimeron and katatergite with a tuft of hairs.

Genitalia. Unknown.

Material examined. CHILE: Holotype ♂, MALLECO. Galvarino, 28-XI-1929 (USNM); Paratype 2 ♂♂, VALPARAISO, Perales, I-25, Col. A. Faz, 2 ♂♂ (USNM) one with hand written identification label of *Dasyomma atritarsis* by Malloch.

Geographic distribution. Chile: Malleco and Valparaíso.

Observations. The specimen nominated as *D. atritarsis* by Malloch (1932), is differentiated by abdominal tergite I blackish only laterally, median black spot on T II and fore femora entirely black. We consider that it is only a variation of the same species as frequently observed among other species.

We have seen 3 ♂♂ from Chile, Malleco near Los Gringos, 1300m, Camp. Nahuelbuta National Park, 6/11-I-1982, col. D.R. Davis (mentioned in *D. poecilogaster* observations) that have similar size and coloration pattern but with longer and darker eye hairs and antennae, palpi and legs black. We include them here with doubt.

Dasyomma (Trichopalpomyia) atribasis
Malloch. Figs. 7D-F

Dasyomma (Dasyomma) atribasis Malloch, 1932: 222; James, 1968: 4.

Female. Wing length 9,0 mm. Eyes bluish black iridescent (relaxed). Front, genae, clypeus dark brown pollinose, varying with light position, front and clypeus darkened at the center with gray pollinosity at sides. Antennae, palpi and proboscis black. Ocellar tubercle, occiput, thorax and legs dark brown to blackish shining dusted colour. Wings smoked brown, darker on costal cell, and

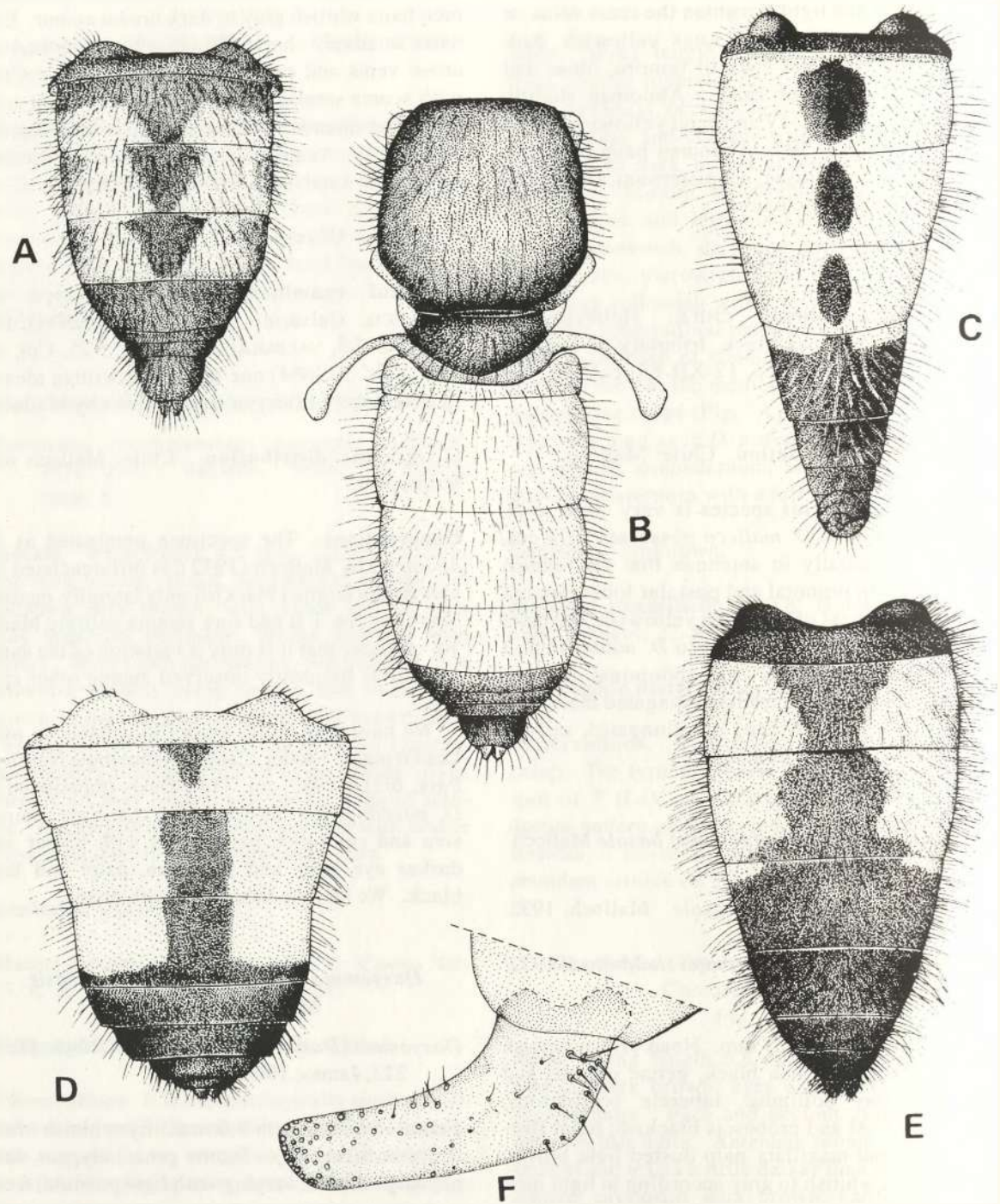


Figure 7. *D. trianguliferous* n. sp. ♂. A: abdomen, dorsal view. *D. malleco* n. sp. ♂. B: thorax and abdomen, dorsal view. *D. basale* ♂. C: abdomen, dorsal view. *D. atribasis* ♀. D: abdomen, dorsal view. *D. atribasis* ♂. E: abdomen, dorsal view; F: dististyle.

along the veins with similar ornamentation as in *D. poecilogaster*. Halteres yellowish brown with dark brown knob. Abdomen yellow, except segments V-VIII with a median quadrate spot on T III-IV and a small subtriangular spot on TII black. Cephalic and body hairs black (Fig. 7D). Eyes with dense and long dark brown hairs; antennae and palpi hairs black; occiput, thorax and legs hairs from grayish to brown blackish according to the light direction; abdomen hairs concolours with the integument colour. Front sides flat, divergent below with similar shape to those of *D. univittatum*. Frontal index 1.2. CuA on basal cell margin well setulosae. Anepisternum, anepimeron, katapisternum and katatergite hairy.

Genitalia. Unknown.

Male. Wing length 7,5 mm. General coloration as in female but darker on body and wings. Abdomen yellow with black median stripe wide and with sinuose borders on T II-III; T I and V-VIII black (Fig. 7E).

Genitalia. General morphology similar to *D. gonzalezi* n. sp.; dististly apically more truncated (Fig. 7F).

Material examined. ARGENTINA: NEUQUÉN, S.M. de los Andes, 640 m, 5-XI-78, col. M. Gentili: 1 ♂ (MLP). CHILE: Chiloé. 1 km from Tepuhuecu lake, 40 km SW of Castro 100 m, 23/25-XII-1981, col. D.R. Davis: 1 ♂ (USNM). Llanquihue, Casa Pangué, XII-1926, col. R. & E. Shannon: 1 ♀ (USNM). CAUTIN. Fundo Chacamo, 600 m, 35 km NW Nueva Imperial, 5/8-XII-1981, col. D.R. Davis: 1 ♂ (USNM).

Geographic distribution. Argentina: Neuquén, and Chile: Chiloé, Llanquihue and Cautín.

Observations. Males revised are in agreement with the holotype original description from Bariloche. A female is now assigned to this species, with some doubts, because the first abdominal segment is yellow, and darker on the middle of its tergites, as also is laterally on the T IV. We assign this specimens to *D. atribasis* because it has a similar body size, head, thorax and appendages and presence of dust on clypeus and genae as

male. The female here studied is close in the coloration to *D. vittatum* females, but the latter are smaller, with front bright black and thorax shining black.

Dasyomma (Trychopalpomyia) immaculatum
Malloch

Dasyomma (Dasyomma) immaculatum Malloch, 1932: 225, James, 1968: 5.

Male. Wing length 7,0 mm. Eyes, antennae, palpi, proboscis, thorax, coxae, abdominal segments I, V-VIII dark brown; pterostigma, halter knob, distal 2/3 of femora I-II, apical 1/4 of femur III, tibiae, tarsites and abdominal segment I brown. Genae, clypeus and occiput gray pollinose, with light gray hairs as in the scutum, scutellum, pleurae, legs and abdomen. Wings suffused pale brownish with pale brown veins. Scutum slightly shining with thin gray dust, postpronotal and postalar lobes yellowish brown. Abdomen shining, segments II-IV yellowish concolours with light gray hairs. Eyes with dense and long, light brown hairs; ocellar tubercle prominent. CuA with scarce setulae on basal cell border; anepisternum, anepimeron, katapisternum and katatergite with a tuft of hairs.

Genitalia. Unknown.

Material examined. ARGENTINA: RÍO NEGRO. Bariloche, XI-1926, col. R. & E. Shannon: 1 ♂ (USNM). This specimen has hand written determination of Malloch but not holotype label, it could be the damaged ♂ mentioned by Malloch (1932).

The abdomen separated from the body has been glued onto a paper. CHILE: MALLECO, Los Gringos Camp, 1300 m, Nahuelbuta Nat. Park, 6/12-I-1982, col. R. Davis: 1 ♂ (USNM). This specimen with brownish black legs and sternite V yellowish, can be considered as a darker variation of this species.

Geographic distribution. Argentina: Río Negro, and Chile: Malleco.

Observations. It is very close to *D. basale* and *D. atribasis* which have a medium elongated spot on

T II-IV and T III-IV, respectively. On the other hand, the first species has short and lighter eye hairs. *D. malleco* is another close species, but it differs by a lighter coloration pattern of reddish brown antennae, palpi yellowish brown, thorax sides light grayish yellow, femora and first abdominal segment yellowish.

Dasyomma (Trichopalpomyia) chapelco

Coscarón S. n. sp. Figs. 8A-E

Female. Wing length 6,6 mm. Head grayish. Front, face, occiput gray pollinose with hairs gray whitish to yellowish; front mostly gray dark mid basally (Fig. 8A); ocellar tubercle dark brown grayish. Antennae and palpi brown grayish, hairs dark brown; proboscis dark brown. Eyes dark brown to blackish blue (relaxed) with short and dense yellowish pilosity. Scutum grayish yellow pollinose, with three blackish vittae (Fig. 8B) Pleurae gray brown pollinose. Postpronotal sclerite and metanotum light yellowish gray. Postscutellum blackish brown; thorax hairs white grayish. Legs light grayish brown; darkened distal third of femora, tibiae and tarsite-apically darkened, legs hairs from whitish to dark brown. Wing scarcely yellowish brown with cross veins MCu and RM brown; stigma light brown (Fig. 8C). Halteres brown yellowish with brown knob. Abdomen yellow darkened on segments VII-IX and with a dark brown dorsal median stripe trough T II-VII (Fig. 8D).

Abdomen hairs white yellowish. Antennal arista apically disposed. Palpi a little, curved (Fig. 8E) and as long as proboscis. Front convex at center; frontal index 1.0. Wing with setulae on R₄₊₅ and scarce on base of CuA on basal cell border. Anepisternum, anepimeron, katepisternum and katatergite with tuft of hairs.

Genitalia. Unknown.

Material examined. ARGENTINA: Holotype ♀, NEUQUÉN, San Martín de los Andes, Cerro Chapelco, 21-I-78, col. Coscarón (MLP).

Geographic distribution. Argentina: Neuquén.

Observations. *D. univittatum* is the closest species but it differs in abdomen ornamentation with

continuous medium longitudinal stripe, darker wings, absence of well defined vittae on scutum, and bigger body size. *D. hirticeps* is differentiated from *D. chapelco* n. sp. by absence of scutum vittae, presence of black hairs on front, and three large fuscous marks on abdominal tergites.

Dasyomma (Trichopalpomyia) cinerascens
(Philippi)

Trichopalpus cinerascens Philippi 1865: 725.

Dasyomma (Trichopalpomyia) cinerascens: Malloch 1932: 229; Stuardo, 1946: 77; James 1968: 5.

Female. Wing length 7,5 mm. General coloration blackish with gray pollinosity. Eyes dark brown, with abundant short pilosity yellowish brown. Front, ocellar tubercle and occiput dark gray pollinose. Front laterally and genae basally light gray pollinose. Clypeus dark gray shine-dusted. Scutum, scutellum and pleurae shine-dusted, grayish black. Antennae, palpi and proboscis dark brown. Head and thorax hairs yellowish gray to brownish black according to light incidence. Legs dark yellowish brown dusted, with concolour hairs. Wings suffused with brown pale darkened on cross veins; pterostigma dark brown. Wings and halteres grayish brown. Abdomen grayish black shine dusted, with light yellowish brown transverse stripe on posterior border of T II-IV, wider on T II. Front sides divergent below, frontal index 1.2. Antennae and palpi very similar to *D. univittatum*. R₁ and R₄₊₅ with setulae; CuA without setulae on basal cell border. Anepisternum, anepimeron, katepisternum and katatergite hairy.

Genitalia. Unknown.

Male. Unknown.

Material examined. CHILE: F C Reed, 1 ♀ (USNM). The specimen has a manuscript label of *Trichopalpus cinerascens* and other of *Dasyomma cinerascens* (Phil.), det. J. R. Malloch. Fide Malloch this specimen was determined by Reed, and Edwards in a footnote added that in the Bigot's collection there is a ♀ probably determined by Philippi that is in accordance with this specimen.

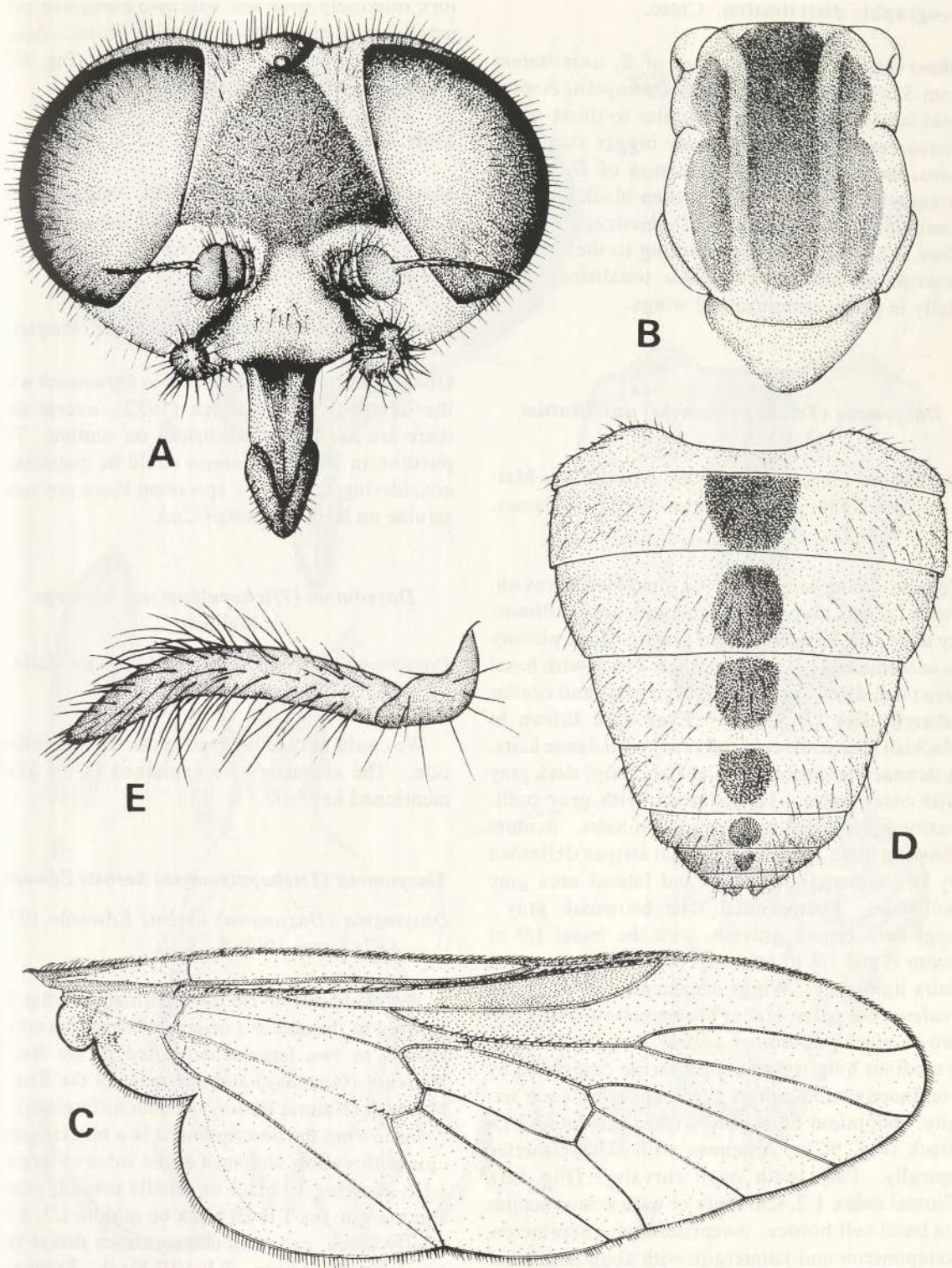


Figure 8. *D. chapelco* n. sp. ♀. A: head, frontal view; B: scutum and scutellum, C: wing; D: abdomen, dorsal view; E: palpus.

Geographic distribution. Chile.

Observations. Our specimens of *E. univittatum* from San Martín de los Andes (Neuquén, Argentina) have head and wings similar to those of *D. cinerascens*, but possess body bigger size. Besides, the abdomen ornamentation of *D. univittatum* is yellowish, with a median black stripe of continuous quadrate spots. *D. hirticeps* is very close to *D. cinerascens* according to the original description, but shows lighter tonalities, especially in palpi, antennae and wings.

Dasyomma (Trichopalpomyia) univittatum

Malloch Figs. 9A-F

Dasyomma (Trichopalpomyia) univittatum Malloch 1932: 231, Stuardo, 1946: 77, James, 1968: 5.

Female. Wing length 8,6-9,2 mm. Head grayish. Front, genae, clypeus, occiput with gray pollinosity over dark base with light gray to black pilosity in accordance to light incidence. Front with basal area on midline and laterally light gray, and ocellar tubercle dark (Fig. 9A). Eyes dark brown to blackish blue iridescent (relaxed) with dense hairs. Antennae and proboscis blackish, palpi dark gray with black hairs. Thorax black with gray pollinosity and whitish gray yellowish hairs. Scutum showing three large longitudinal stripes delimited by two submedian stripes and lateral area gray pollinose. Postpronotal lobe brownish gray. Legs dark brown grayish, with the basal 1/3 of femur II and 1/2 of femur III brown yellowish and hairs light gray. Wings ornamented as in *D. coeruleum* but paler. Halter brown yellow with knob brown black. Abdomen yellow, tergites I-V with a medium longitudinal black stripe composed by continuous subquadrate black spots on each tergite, abdominal hairs yellowish; segments VI-IX black (Fig. 9C). Antennae with arista inserted apically. Palpi with small curvature (Fig. 9B). Frontal index 1.2. CuA bare or with scarce setulae on basal cell border. Anepisternum, anepimeron, katepimeron and katatergite with abundant hairs.

Genitalia. T IX, X, cerci and hypoproct as in Fig 9D. T IX with abundant hairs. Base of genital

fork relatively wide and with two elongated subparallel processes; teeth of apical combs dense and with slender basal spermathecal ducts (Fig. 9E); spermatheca subacute distally (Fig. 9F).

Male. Unknown.

Material examined. ARGENTINA: NEUQUÉN, Pucará, 630 m, 25-I-73, col. Schajovskoy: 1 ♀ (MLP); San Martín de los Andes, 21-I-78, col. Coscarón: 2 ♀♀ (MLP).

Geographic distribution. Argentina: Neuquén.

Observations. Our material is in agreement with the description of Malloch (1932), except that there are not four black stripes on scutum. The position in *Trichopalpomyia* could be questioned considering that in one specimen there are some setulae on basal portion of CuA.

Dasyomma (Trichopalpomyia) hirticeps

Malloch

Dasyomma (Trichopalpomyia) hirticeps Malloch 1932: 230, James 1968: 5

We could not see the type in the USNM collection. The characters are explained in the aforementioned key.

Dasyomma (Trichopalpomyia) herbsti Edwards

Dasyomma (Dasyomma) herbsti Edwards 1934: 187; James 1968: 5.

We could not revise the type material that according to the author's original description corresponds to two females deposited in the Berlin Museum (Germany) and one male in the British Museum (Natural History) (London, England).

Following the description, it is a blackish species with yellow abdomen at the sides of tergites I-III, showing T I black on middle towards posterior margin, the T II-III black on middle 1/3, T IV totally black, except in one specimen that is yellow laterally at base. T V-VIII black. Front and face brightly shining black, wings smoky, with darker pterostigma and darker shades across ends

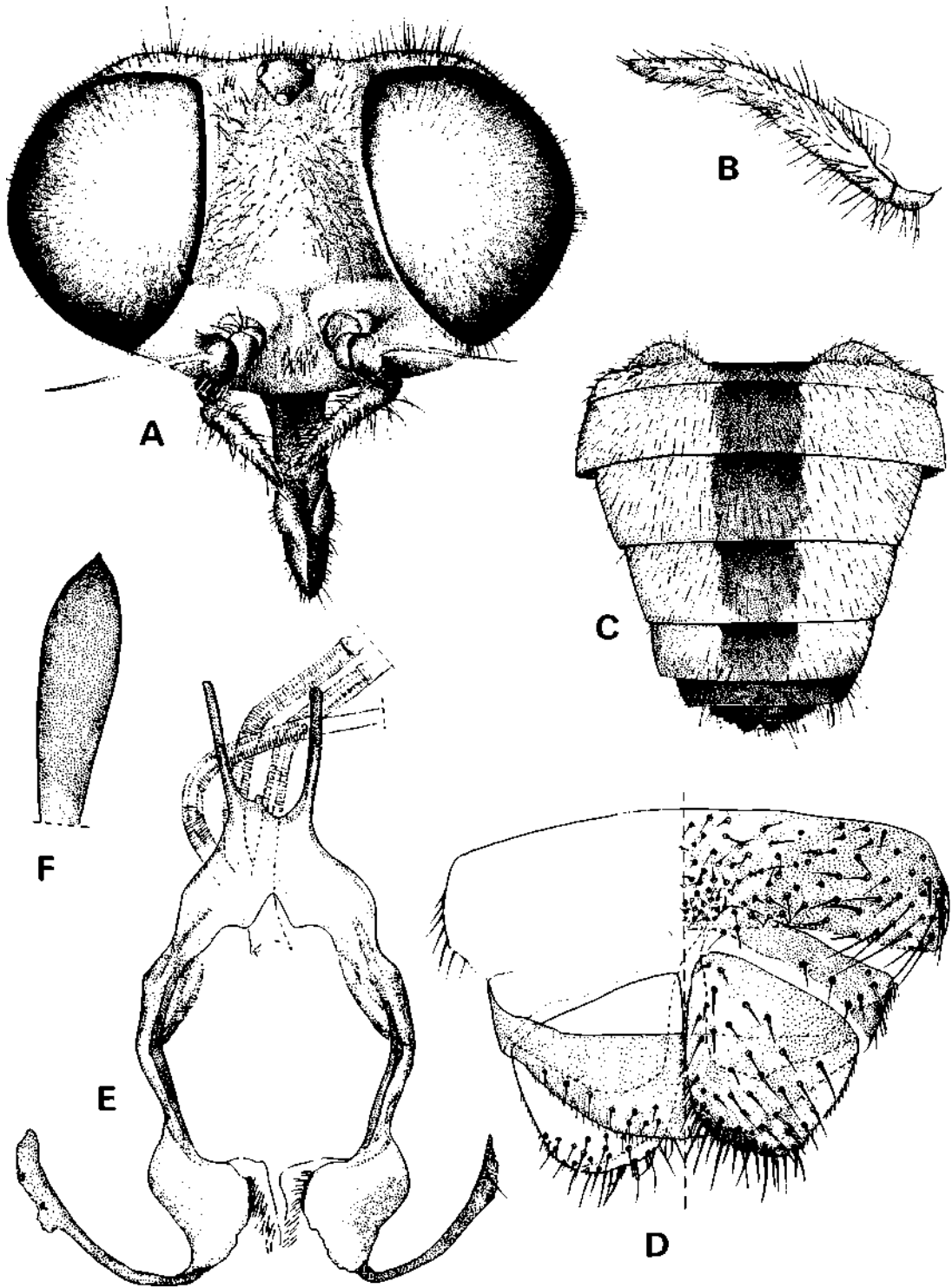


Figure 9. *D. univittatum* ♀. A: head, frontal view; B: palpus; C: abdomen, dorsal view; D: epigynum; E: genital fork with basal spermathecae; F: apex of spermatheca.

of basal and discal cells, with R₁, R₄₊₅, base of R₅ and CuA setulosae.

We have no specimens like these in our collection. The nearest species to *D. herbsti* is *D. gonzalezi* n. sp., but the later species differs in the size of the median black spot on T I-I V that is wider and with a yellow posterior border.

Edwards (1934) considers *D. atribasis* and *D. vittatum* as the closest species, *D. atribasis* has T I totally black and wings homogeneously (except pterostigma) smoky *D. vittatum* has front and face dull, and yellow at sides in abdominal tergites I-IV.

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