

## *Dasybasis (Agelanius) cortesi*, a New Species of Horse Fly from Chile (Diptera: Tabanidae: Diachlorini)

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*The female and male of Dasybasis (Agelanius) cortesi, new species, is described and illustrated from specimens collected in the National Reserve of Río Clarillo, Cordillera Province, Central Chile. Its relationships to other Dasybasis species are discussed.*

Key words: *Dasybasis (A.) cortesi* n. sp. - Tabanidae - Neotropical region - Chile

The genus *Dasybasis* was erected by Macquart (1847) as a monotypic genus, including only the Australian species *D. appendiculata*.

This genus is characteristic of the southern temperate neotropical fauna with 82 taxa considered valid (Fairchild & Burger 1994). *Dasybasis* also occurs in Australia and New Zealand, with 73 species described in two subgenera (Daniels 1989). It is very well represented in Chile (34 species) and Argentina (47 species). *Dasybasis* is the fourth largest genus of Tabanidae in the Neotropical region. Only *Tabanus* Linnaeus (165 species), *Fidena* Walker (120 species) and *Stenotabanus* Lutz (85 species) are larger. This genus present important variation in some characters as bare or rarely sparsely setose basicostas, extended dorsal angle on the basal flagellomere, shape of callus and many of the species are densely hairy, and most have medium (subgen. *Agelanius* Rond.) to very broad frons (*Dasybasis s.str.* and subgen. *Haematopotina* Cosc. & Philip).

The Neotropical species of *Dasybasis* were monographed by Coscarón and Philip (1967a) who recognized five subgenera and 80 species. Coscarón (1969 a, 1972, 1989) has described additional species from Chile and Argentina. Only seven species are known from the immature stages (Coscarón 1969b, 1991, Coscarón & Philip 1967b, Schwan 1989).

### MATERIALS AND METHODS

The terminology follows that of Mc Alpine (1981). The frontal index is derived from the length

of the frons divided by the basal width. The material examined were obtained from larvae collected from the National Reserve of Río Clarillo and maintained until adults emerged. In order to examine male and female genitalia, the abdomens were removed and macerated in hot KOH and posteriorly mounted on slides in Canadian balsam. Drawings were made with camera lucida.

*Dasybasis (Agelanius) cortesi* González n.sp.  
(Figs 1-11)

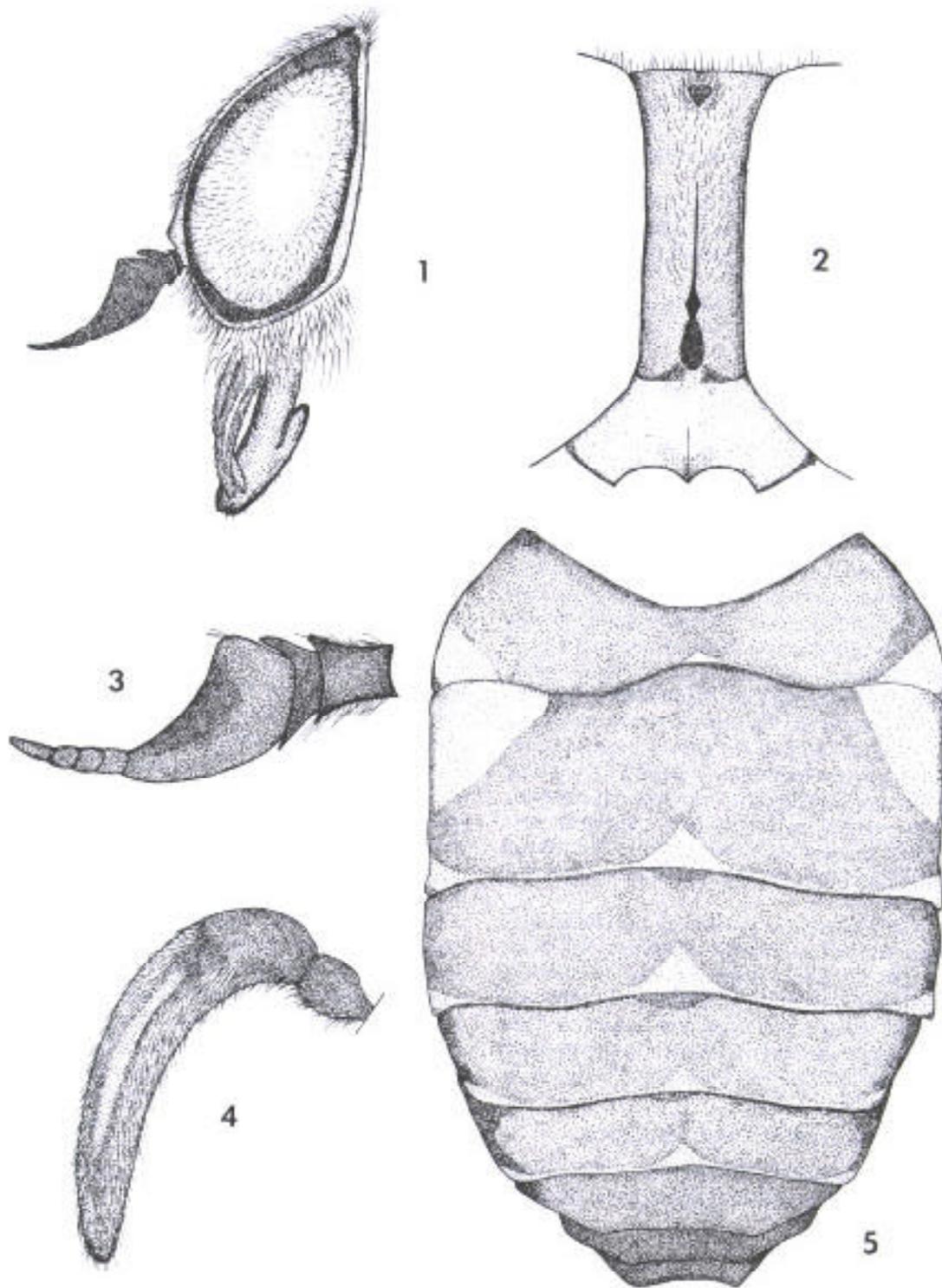
*Description of female* - Length 12.5 mm; wing 11 mm. *Head*: eyes dark brownish, without bands; with abundant gray hairs (Fig. 1). Front pale gray-brown with grayish tomentum on the ocellar triangle, bearing black hairs. Front narrow, parallel-sided, frontal index 4.0. Frontal callus black, with keel-shaped median projection more than half of the front; not touching eyes and subcallus (Fig. 2). Ocellar triangle with three ocelli. Posterior border of head gray; vertex with erect black hairs. Subcallus pale brown, tomentose, without hairs, darker near antenna. Clypeus and genae with gray pollinosity. Genae with short black hairs. Clypeus tomentose, with some black hairs only adjacent to antenna and lateral border. Beard with long gray hair. Scape of antenna with gray pollinosity and abundant short black hairs. Pedicel black, with grayish pollinosity; basal flagellomere black with light dorsal median angle and sparse gray pollinosity. Apical flagellomeres black (Fig. 3). Maxillary palpi with gray blackish pollinosity and short black hairs, slender and elongate (Fig. 4). Proboscis black; labellae black, large and fleshy. *Thorax* - Mesoscutum dark gray with black and golden hairs, with longitudinal grayish pale narrow stripes reaching notopleural lobe. Notopleural lobe pale gray with long black and gray hairs. Scutellum dark gray, without pruinosity, with black-gray hairs that are longer than those on the

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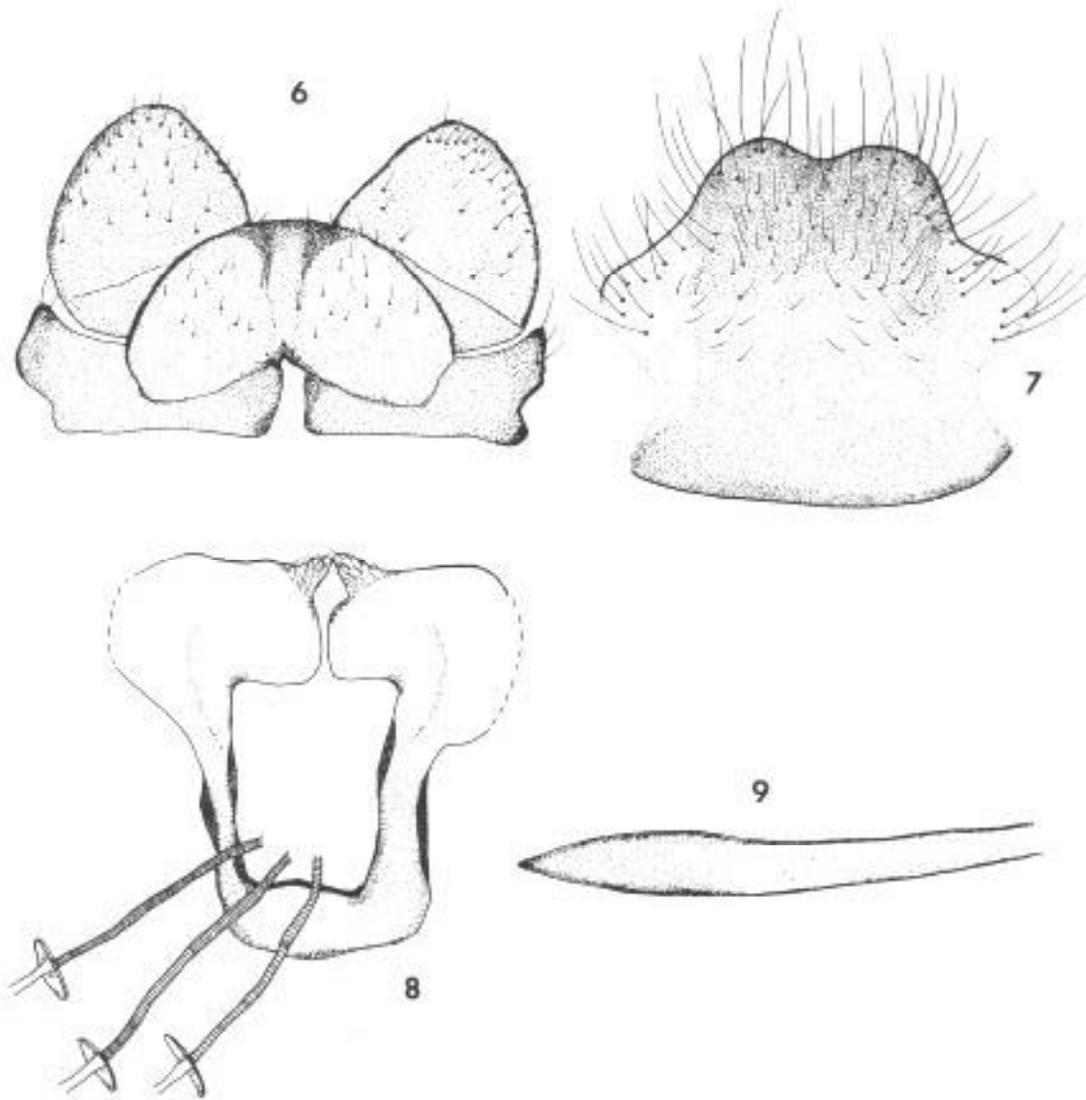
*Dasybasis (Agelanius) cortesi* n. sp. female. Fig. 1 : head in side view. Fig. 2: front. Fig. 3: antenna. Fig. 4: palp. Fig. 5: abdomen in dorsal view.

mesoscutum. Pleura dark gray, with long black-gray hairs, only anepisternum and katepisternum with hairs more short. Legs dark brown. Coxae and femora with black-gray hairs; remaining leg segments with abundant short black hairs. Wing smoky with dark brown clouds on the veins and with short setae on Sc and R1; with short appendix on R4. Basicosta bare, apex acute. Halter dark brown. Squamae concolorous with base of wing.

*Abdomen* - Dark brown dorsally, pale brown laterally on tergites I and II; posterior border of tergites with distinct narrow grayish pale hind margins and gray hairs, the gray hairs on posterior margins ex-

panding into median triangles (Fig. 5). Sternites dark gray, mostly black haired.

*Genitalia* - Cerci subcircular with the apex semisharp, though internal border straighter than *D.(A.) erebus* Coscarón & Philip; X tergite subsquare and with the tip semisharp well sclerotized (Fig. 6). Gonapophysis with border concave and lightly projected and with long hairs (Fig. 7). VIII sternite with wide base and long hairs (Fig. 7). Genital fork with wide base and long spermathecal ducts (Fig.8). Spermatheca distally acuminate, well sclerotized and with wide base (Fig. 9).



*Dasybasis (Agelanius) cortesi* n. sp. female genitalia. Fig. 6: X tergite, cerci and hypoproct. Fig. 7: gonapophysis and VIII sternite. Fig. 8: genital fork and spermathecal ducts. Fig. 9: spermatheca.

*Description of male* - Length 10 mm; wing 10mm. Coloration similar to female except as follows: eyes with hairs more abundant than female; upper median eye facets large, clearly differentiated from lower facets; larger faceted areas pale brown; ocellar triangle present with three ocelli. Genae with dense, long gray hairs, and black hairs near eyes. Maxillary palpi pale brown with long gray hairs and more shorter. Thorax with longitudinal stripes diffuse; mostly long black haired but some short hairs at least anteriorly. Wing without appendix on R4 and clouds on the veins. Coxae with long gray hairs; femora with dense long black-gray hairs. Pleura gray, darker than female. Abdomen pale brown laterally on tergites I-III. Sternites II pale brown. Genitalia as in Figs 10 and 11.

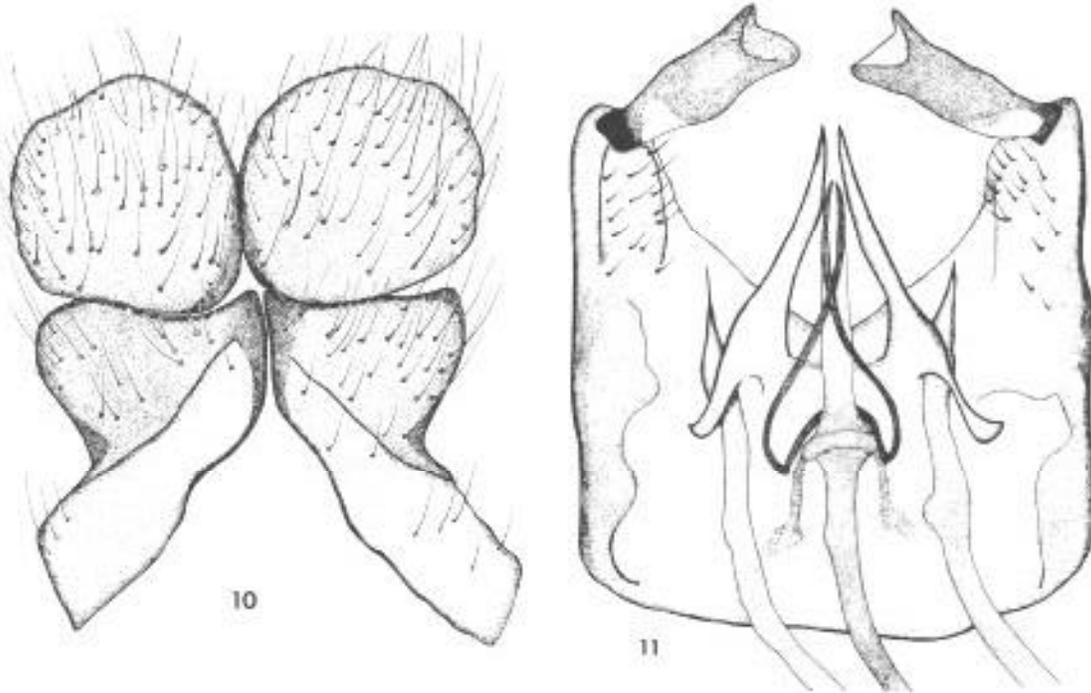
*Types* - *Holotype female*, Chile, Cordillera Province, National Reserve of Río Clarillo, failure Los Almendros, 1.X.1992, CR González (Instituto Entomología, Univ. Metropolitana). *Paratypes*: 4E and 3 G, Cordillera Province, National Reserve of Río Clarillo, failure Los Almendros, 27.X.1992, CR González (1E and 1G Museo de La Plata, Argentina; 1E and 1G Department of Zoology, Univ. of New Hampshire, USA); 4E and 1G with same dates of Holotype in Instituto de Entomología, Univ. Metropolitana.

*Etymology* - This species is named in honor of Dr

Raúl Cortés, a great dipterist and friend in recognition of his assistance and help in study of this family of Diptera.

#### REMARKS

This species exhibits generalized characters characteristics of the subgenus *Agelanius* Rondani: narrow front, ocellar triangle with three ocelli, basal flagellomere of the antenna with a dorsal median angle; maxillary palpi elongate. *Dasybasis* (*A.*) *cortesi* is very closely related to *D.(A.) erebus* Coscarón & Philip in general appearance but *D.(A.) cortesi* differs on the following external characters: shape, width and extension of the frontal callosity; wings clearer and with appendix on R4 (female), and clouds on the veins. Scutellum with golden hairs and general color of the body darker. In addition to gonapophysis are more excavated and genital fork with base longer than *D.(A.) erebus* Cosc. & Philip. VIII sternite with wide base is similar to *D.(A.) meridiana* (Rond.) equally that gonapophysis but there are differences in general color of the body and basal flagellomere shape. X tergite semisharp, well sclerotized is similar to *D.(A.) philippii* (Rond.). *D.(A.) aquila* Cosc. & Philip. show resemblance in callus and maxillary palpi shape in addition to a X tergite and cerci shape but shows differences in general color of the body, basal flagellomere and gonapophysis shape.



*Dasybasis (Agelanius) cortesi* n. sp. male genitalia. Fig. 10: X tergite and cerci. Fig. 11: gonocoxite, gonostyli and aedeagus.

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