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A review of the genus *Dysmerus* Casey  
(Coleoptera: Laemophloeidae)

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## A review of the genus *Dysmerus* Casey (Coleoptera: Laemophloeidae)

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**Abstract.** The New World genus *Dysmerus* Casey, currently with one valid species, is revised. **Lectotypes** are designated for two species, *Dysmerus caseyi* (Grouvelle), **new status**, and *Dysmerus sulcicollis* Grouvelle, **new status**. Both are revived from synonymy with *D. basalis* Casey. Twelve new species are described: *Dysmerus boliviensis* Thomas, **new species**, *Dysmerus curvicornis* Thomas, **new species**, *Dysmerus genaspinosus* Thomas, **new species**, *Dysmerus hamaticornis* Thomas, **new species**, *Dysmerus impolitus* Thomas, **new species**, *Dysmerus skellei* Thomas, **new species**, *Dysmerus mexicanus* Thomas, **new species**, *Dysmerus monstrosus* Thomas, **new species**, *Dysmerus politus* Thomas, **new species**, *Dysmerus rondoniensis* Thomas, **new species**, *Dysmerus symphilus* Thomas, **new species**, and *Dysmerus trinidadensis* Thomas, **new species**. A key to adults of the species and illustrations are provided.

### Introduction

*Dysmerus* Casey is a small genus of New World laemophloeids with extreme sexual dimorphism in the form of the male scape. Until now, there has been one valid species, *Dysmerus basalis* Casey, with two synonyms. However, over the past 20 years numerous specimens of undescribed species have been accumulated from the large light trap sample collection in the Florida State Collection of Arthropods (FSCA) and through personal collecting efforts and those of colleagues.

**History of *Dysmerus*.** Casey (1884) described *Dysmerus basalis* based on a single specimen from Florida, justifying the creation of the new genus by the lateral attachment of the pedicel to the scape. However, at the Sept. 1, 1887 meeting of the Entomological Society of Washington, E.A. Schwarz (1888a) stated he "...exhibited specimens of both sexes of *Dysmerus basalis* from southern Florida. The female is in every respect a *Laemophloeus*, and even in the male the antennal structure does not seem to warrant a generic separation of *Laemophloeus*." Later, Schwarz (1889) treated *Dysmerus* as a subgenus of *Laemophloeus* Dejean.

Grouvelle (1898) described *Laemophloeus caseyi* from Grenada based on a female specimen, and later (Grouvelle 1908) described *Dasymerus* [sic] *sulcicollis* from Guadeloupe. Kessel (1921) described the genus *Brontophloeus* to include a number of species with modified scape in the male, including *D. basalis*. Hetschko (1930) treated *Dysmerus* as a genus and *Brontophloeus* as a subgenus of *Laemophloeus* Dejean.

Lefkovitch (1958) designated *D. basalis* as the type species of *Brontophloeus* Kessel, thus synonymizing it under *Dysmerus*. Lefkovitch (1958), noting that the pedicel is attached laterally to the scape in females also (Fig. 6), maintained *Dysmerus* as a separate genus, but added: "Upon a female specimen alone, it is likely that Casey ... would have included *Dysmerus* in his genus *Leptophloeus*." Lefkovitch (1958) also synonymized *L. caseyi* Grouvelle and *D. sulcicollis* Grouvelle under *D. basalis*, finding "... no difference between them and *Dysmerus basalis* Casey than the normal variation of secondary sexual characters within a species."

**Life history.** Like many laemophloeids, little is known of the life history and habits of the species of *Dysmerus*. Most available information pertains only to the U.S. species, *D. basalis*.

Schwarz (1888) reported *D. basalis* from Key West under the bark of poisonwood (*Metopium toxiferum* (L.) Krug & Urb.), and later (Schwarz 1889) from the galleries of *Pityophthorus centralis* Eichhoff (Curculionidae: Scolytinae) in southern Florida, and also reared it from American sweetgum (*Liquidambar styraciflua* L.) twigs infested by *Pityophthorus annectens* LeConte in northern Florida as well as poison ivy (*Toxicodendron radicans* (L.) Kuntze) from the Washington, D.C. area infested with

*Pityophthorus consimilis* LeConte. Schwarz (1889) also noted that this species and a few others "...have a rather cylindrical form of body, and I am inclined to believe that their larvae will only be found within the galleries of bark-boring Scolytids..." Adults of the species of *Dysmerus* are attracted to light and the great majority of the specimens examined were collected in that manner. Schwarz (1889) reported finding a *Dysmerus* larva in the galleries of *P. consimilis* in poison ivy, and that larva was included in a key to laemophloeid larvae (Thomas 1988a).

## Materials and Methods

Habitus photographs were taken with a Syncroscopy AutoMontage® system attached to a Leica Z16 APO microscope; genitalic photographs were taken using a Zeiss Photo-Microscope III adapted to use a Nikon Coolpix 8400 digital camera. Scanning electron photomicrographs were produced with a JEOL JSM-5510LV. Genitalia were dissected as described in Thomas (1984) and were imbedded in a drop of dimethyl hydantoin formaldehyde on the card point with the respective specimen. Because of the scarcity of specimens and small body size, suitable genitalic mounts could not be produced for all species. The natural position of the head is slightly hypognathous. For overall body length, the head was measured as it appears in dorsal view. For measuring the clypeus and determining head ratios, the head was measured with the specimen rotated up to facilitate a completely dorsal view. Label data for types of new species are reported verbatim; data are condensed for described species. Codens for collections in which specimens are deposited are:

BMNH	The Natural History Museum, London, England
CDFA	California Department of Food and Agriculture, Sacramento, CA, USA
CNCI	Canadian National Collection of Insects, Ottawa, Canada
DEFS	Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil
EAPZ	Escuela Agrícola Panamericana, Zamorano, Honduras
FMNH	Field Museum of Natural History, Chicago, IL, USA
FSCA	Florida State Collection of Arthropods, Gainesville, FL, USA
MAIC	Michael A. Ivie, Bozeman, MT, USA
MCZC	Museum of Comparative Zoology, Harvard University, Cambridge, MA, USA
MIZA	Museo del Instituto de Zoología Agrícola, Maracay, Venezuela
MLPA	Universidad Nacional de La Plata, La Plata, Argentina
MNHN	Museum National d'Histoire Natural, Paris, France
MNKM	Museo de Historia Natural "Noel Kempff Mercado", Santa Cruz de la Sierra, Bolivia
MSUC	Mississippi State University, Mississippi State, MS, USA
NMPC	National Museum (Natural History), Prague, Czech Republic
RHTC	Robert H. Turnbow, Enterprise, AL, USA
SEMC	Snow Entomological Museum, University of Kansas, Lawrence, KS, USA
USNM	National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA

## GENUS *Dysmerus* Casey

*Dysmerus* Casey 1884: 97

*Laemophloeus* (*Dysmerus*), Schwarz 1889: 164

*Dasymerus* Grouvelle 1908: 56, misspelling

*Brontophloeus* Kessel 1921: 28

Type species. *Dysmerus basalis* Casey 1884: 97, by monotypy. *Brontophloeus* Kessel, *Dysmerus basalis* Casey, by subsequent designation by Lefkovitch (1958: 97); synonymy by Lefkovitch (1958: 97).

**Diagnosis.** The combination of the following character states is diagnostic for the members of this genus: body elongate, parallel-sided and somewhat subcylindrical; pedicel attached laterally to scape, which is highly modified in males (Fig. 2-4, 6); procoxal cavities closed (Fig. 5); intercoxal process of prothorax apically truncate (Fig. 5); intercoxal process of first visible abdominal segment narrow (Fig. 5);

tarsal formula 5-5-4 in males, 5-5-5 in females. Species of *Dysmerus* are uniformly testaceous in color, have sublateral pronotal lines composed of a groove bordered laterally by a ridge, and all three elytral cells are complete. Sublateral lines of the pronotum and head are distinguishing features of all laemophloeids (Thomas 2002); elytral cells were defined and first used by Lefkovitch (1962).

**Distribution.** Members of the genus *Dysmerus* are restricted to the New World, where they range from the southeastern United States south to Bolivia and Argentina. The genus seems have a limited distribution in the West Indies: *D. basalis* in the Bahamas, *D. sulcicollis* on Montserrat and Guadeloupe, and *D. caseyi* on Grenada. I have seen no *Dysmerus* specimens from the Greater Antilles or any other of the Lesser Antilles.

**Discussion.** *Dysmerus* belongs to an informal group of genera including *Cryptolestes* Ganglbauer and *Leptophloeus* Casey. All three genera share a similar body plan and structure of the male genitalia. *Dysmerus* and *Leptophloeus* are subcylindrical in body form and have a narrow abdominal intercoxal process. However, no known *Leptophloeus* possesses a modified male antennal scape. Females of some *Leptophloeus* species have a sclerotized bursa copulatrix (Karner 1997), as do many *Cryptolestes*, which is absent in *Dysmerus* females. Species of *Cryptolestes* are more dorsoventrally compressed and have a broader abdominal intercoxal process. Many species of *Cryptolestes* possess a modified male antennal scape (Lefkovitch 1958, Thomas 1988). All *Dysmerus* species have antennal insertions situated in an excavation on the frons, and the side of the head is deeply excavated anterior to the eyes, which apparently provides freedom of movement for the enlarged scape.

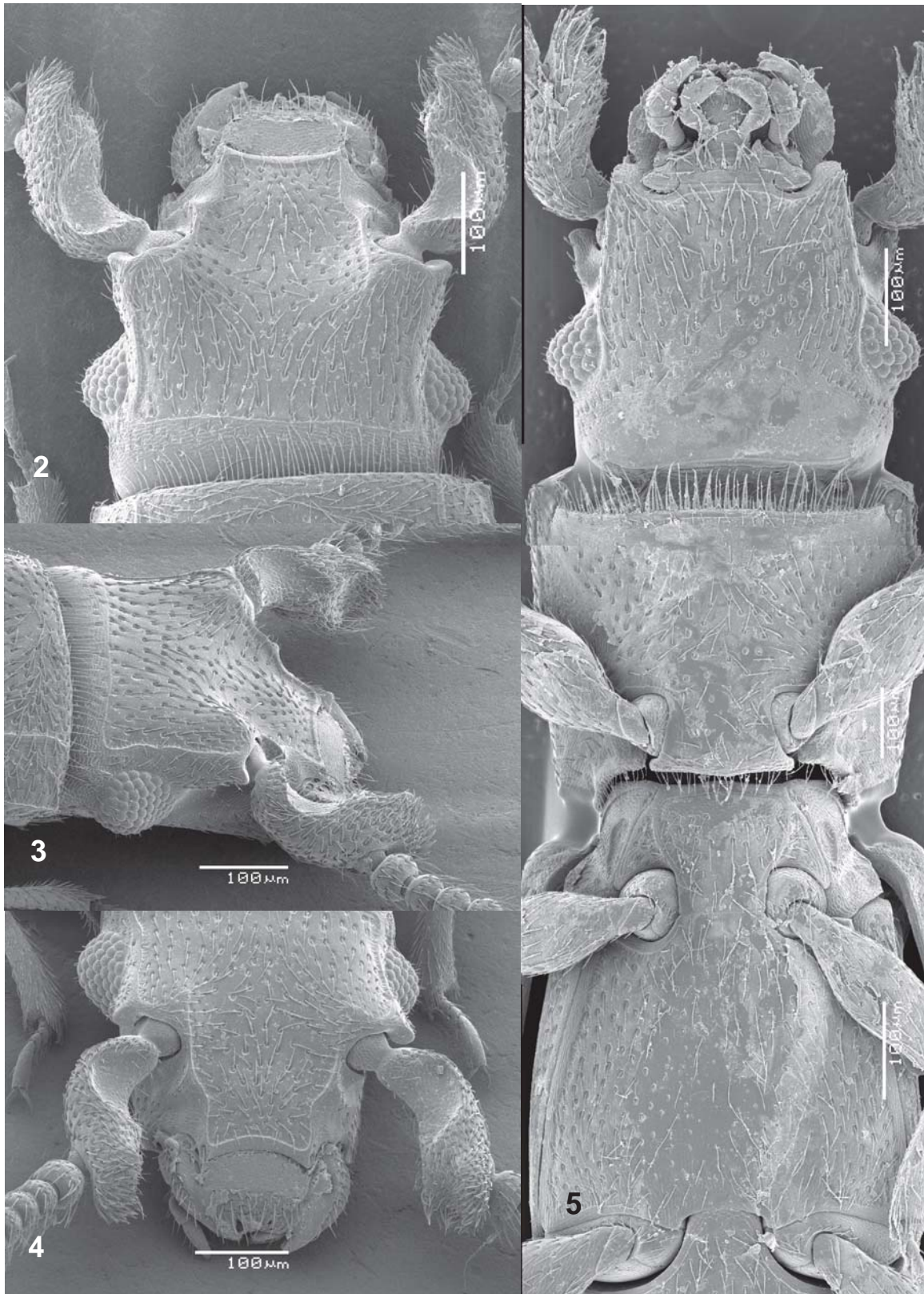
Based on morphological characters, there are several apparent groups of species within *Dysmerus*. Four species (*D. caseyi*, *D. politus*, *D. impolitus*, and *D. symphilus*) share a particular habitus, possessing a slightly fusiform body shape, and rather simple scape structure and have inconspicuous pubescence. All other species have conspicuous dorsal pubescence and more complex scape. *Dysmerus basalis* and *D. mexicanus* are very similar in head and scape structure and seem to be closely related.

Major males are easily identified by their scape structure. In most cases minor males, with less developed scapes, are still identifiable through a combination of other characters. Females of the species near *D. caseyi* should readily key out; females of other species are more problematic but can generally be identified through associated males and based on distribution. In the following new species treatments, all designated paratypes are males, except for *D. impolitus*, *D. politus*, and *D. symphilus*. In some cases, the median longitudinal line on the head vin species where that line is not carinate may appear carinate due to light reflection off the shiny surface. Viewing the specimen at an oblique angle under diffused light will reveal the actual nature of the longitudinal line.



Figure 1. *Dysmerus basalis* Casey, male, dorsal habitus.

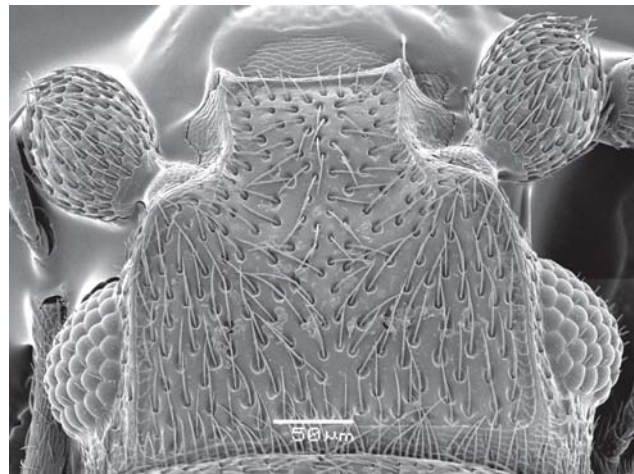




**Figure 2-5 .** *Dysmerus basalis* Casey, male: **2)** Head, dorsal view; **3)** Head, lateral oblique view; **4)** Head, frontal oblique view; **5)** Ventral view, head, pro-, meso-, and metathorax.

Key to Males of *Dysmerus* Casey

1. Head with median longitudinal carina (Fig. 13-18, 21) ..... 2  
 — Head without median longitudinal carina ..... 5
- 2(1). Median longitudinal carina on head continues almost to anterior margin of epistome (Fig. 18) (Peru) ..... ***D. skelleyi* Thomas, new species**  
 — Median longitudinal carina on head does not continue to anterior margin of epistome (Fig. 13-17) ..... 3
- 3(2). Head above antennal insertions produced, lobe-like (Fig. 17, 21); pronotum shallowly, longitudinally sulcate; body conspicuously pubescent ..... 14  
 — Head above antennal insertions not produced and lobe-like; body not conspicuously pubescent 4
4. Dorsal integument glossy, not microreticulate (Bolivia, Brazil) ..... ***D. politus* Thomas, new species**  
 — Dorsal integument dull, strongly microreticulate (Brazil) ..... ***D. impolitus* Thomas, new species**
- 5(1). Eyes small, pyramidal in shape (Fig. 7, 14) ..... 6  
 — Eyes larger, not pyramidal in shape (e. g., Fig. 9) ..... 9
- 6(5). Pronotum shallowly but distinctly longitudinally sulcate; scape with long, curved dorsal extension (Fig. 25) (Mexico) ..... ***D. mexicanus* Thomas, new species**  
 — Pronotum not sulcate; scape without long, curved dorsal extension ..... 7
- 7(6). Scape with ventral extension ..... 8  
 — Scape without ventral extension (Fig. 2-4, 8) (USA, Bahamas) ..... ***D. basalis* Casey**
- 8(7). Gena with laterally directed spine present next to anteroventral corner of eye (Fig. 43); ventral process of scape bifurcate (Fig. 23); dorsal tubercle of scape located at anterior third (Fig. 11) (Venezuela) ..... ***D. genaspinosus* Thomas, new species**  
 — Gena without spine next to eye; ventral process of scape simple (Fig. 26); dorsal tubercle of scape located at midpoint (Fig. 15) (Argentina, Brazil) ..... ***D. monstrosus* Thomas, new species**
- 9(5). Pronotum deeply longitudinally sulcate (Fig. 19) (Lesser Antilles) ..... ***D. sulcicollis* Grouvelle**  
 — Pronotum not or weakly longitudinally sulcate ..... 10
- 10(9). Pronotum with secondary sublateral lines (Fig. 21); antennae very thick (Fig. 20) (Central and South America) ..... ***D. symphilus* Thomas, new species**  
 — Pronotum without secondary sublateral lines; antennae normal ..... 11
- 11(10). Body not conspicuously pubescent (Central and South America, Lesser Antilles). ..... ***D. caseyi* (Grouvelle)**  
 — Body conspicuously pubescent ..... 12
- 12(11). Antennal scape curved, more or less sickle-shaped ..... 13



**Figure 6.** *Dysmerus basalis* Casey, female, dorsal view of head.





**Figure 7-9.** Head and pronotum of males of *Dysmerus*: **7)** *D. basalis* Casey; **8)** *D. boliviensis* Thomas, n. sp.; **9)** *D. caseyi* (Grouvelle).

- Antennal scape complex, emarginate anteriorly, with blunt ventral projections (Fig. 22) (Bolivia) ..... ***D. boliviensis* Thomas, new species**
- 13(12). Clypeus acute anterolaterally, but not reflexed; scape apically blunt (Fig. 10) (Argentina, Brazil) ..... ***D. curvicornis* Thomas, new species**
- Clypeus acute anterolaterally, produced and reflexed (Fig. 24); scape apically acute (Fig. 12) (USA, Mexico, Costa Rica) ..... ***D. hamaticornis* Thomas, new species**
- 14(3). Dorsal surface of scape without a tubercle; head above antennal insertions more produced (Fig. 21) (Trinidad, Brazil) ..... ***D. trinidadensis* Thomas, new species**
- Dorsal surface of scape with a strong tubercle at midpoint (Fig. 17); head above antennal insertions less produced (Fig. 17) (Brazil) ..... ***D. rondoniensis* Thomas, new species**

### ***Dysmerus basalis* Casey**

Fig. 1-7, 31, Map 1

*Dysmerus basalis* Casey 1884: 97

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: head without median longitudinal carina (Fig. 7); distinct dorsal pubescence; eyes pyramidal in shape (Fig. 2). In addition, the male scape is relatively simple, without dorsal or ventral projections (Fig. 2-4), and, in large males, strongly produced, bifurcate anterolateral extensions of the frons present (Fig. 7). Male genitalia as in Fig. 31.

**Distribution.** U.S.A. (Florida north to New York and west to Oklahoma), Bahamas (Andros Island) (Map 1).





**Figure 10-12.** Head and pronotum of males of *Dysmerus*: 10) *D. curvicornis* Thomas, n. sp.; 11) *D. genaspinosus* Thomas, n. sp.; 12) *D. hamaticornis* Thomas, n. sp.

**Specimens examined:** 118 from: **BAHAMAS:** Andros Island: Forfar Field Station; **U.S.A.:** **Alabama:** Rocky Ridge, **Monroe Co.:** Haines Island Park; **Shelby Co.:** Vestavia; **Arkansas:** **Lafayette Co.:** Garland, FS Camp Clearfork; **Pulaski Co.:** Little Rock; **District of Columbia:** Washington; **Florida:** **Alachua Co.:** Haw Creek, Gainesville; **Dade Co.:** Biscayne, Camp Mahachie; **Highlands Co.:** Highlands Hammock State Park; **Jackson Co.:** Mariana; **Monroe Co.:** Key Largo, Key West; **Kentucky:** **Knox Co.:** Barbourville; **Louisiana:** **East Baton Rouge Co.:** Baton Rouge; **Maryland:** **Harford Co.:** Gunpowder; **Jackson Co.:** Medora, Starve Hollow Lk., **Montgomery Co.:** Plimmers Is.; **Mississippi:** **Okibbeha Co.:** 3mi. W Adaton; **Winston Co.:** Tombigbee National Forest; **New York:** **Tomkins Co.:** Ithaca; **North Carolina:** **Polk Co.:** Tryon; **Oklahoma:** **Grady Co.:** Tuttle; **Pennsylvania:** **Dauphin Co.:** Hummelstown; **Virginia:** **Arlington Co.:** Rosslyn; **West Virginia:** **Wood Co.:** Kanahwa Station. (CDFA, FSCA, MSUC, USNM)

**Habits and habitats:** See discussion under Life History above.

#### *Dysmerus caseyi* (Grouvelle), new status

Fig. 9, 33, Map 2,4

*Laemophloeus caseyi* Grouvelle 1898: 42

*Dysmerus basalis* Casey, in part (Lefkovitch 1958: 97)

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: head without median longitudinal carina; dorsal pubescence inconspicuous; eyes not pyramidal in shape. Scape in major males is rather simply curved and laterally flattened (Fig. 9). Male genitalia as in Fig. 33.

**Type material:** There is one female in BMNH, with the following label data: "Type/Grand Etang Rd. (Leeward side) Grenada, W.I. H.H. Smith 209/W. Indies 99-37/Laemophloeus Caseyi ty. Grouv". Grouvelle (1898: 42) did not state the number of specimens in the type series. To fix the identity of this species, the specimen above is here designated as the **lectotype** of *Laemophloeus caseyi*.



**Figure 13-15.** Head and pronotum of males of *Dysmerus*: **13)** *D. impolitus* Thomas, n. sp.; **14)** *D. mexicanus* Thomas, n. sp.; **15)** *D. monstrosus* Thomas, n. sp.

**Distribution:** Belize, Brazil, Costa Rica, Grenada, Honduras, Mexico, Panama, Peru, and Trinidad (Map 2, 4).

**Specimens examined:** 67 from: **BELIZE:** Orange Walk Dist.: Rio Bravo Conser. Area; **BRAZIL:** Rondonia: 62km. SW Ariquemes, nr Fzda. Rancho Grande; **COSTA RICA:** Cartago: 1.2mi. SE Tula; **Puntarenas:** Las Cruces Biol. Sta. 1330m 08°47.14'N, 82°57.58'W; **GRENADA:** St. Andrews: Mirabeau; **HONDURAS:** Atlantida: Parq Nac Pico Bonito El Manchon 350 m N15°29'18" W87°07'39"; El Pino (AMARAS) N15°42' W86°54'; **MEXICO:** Chamela: Estacion de Zoologia Chamela, Edo. Jalisco; **Vera Cruz:** Lake Catemaco, "Coyame"; **PANAMA:** Chiriqui: Puerto Armuelles; **Colon:** Parque NAC. Soberania, Pipeline Rd. 09°07'N, 79°45'W; **Canal Zone:** Barro Colorado I., Fairchild Trail; Paraiso; **PERU:** Loreto: 40km NE Iquitos, Explorama Inn; 160km NE Iquitos, Exploranapo Camp, 2km from Rio Napo on Rio Sucusari; **TRINIDAD AND TOBAGO:** Trinidad: Simla, Arima-Blachissuese Rd.(CDFA, EAPZ, FMNH, FSCA, SMEC, USNM).

***Dysmerus sulcicollis* Grouvelle, new status**

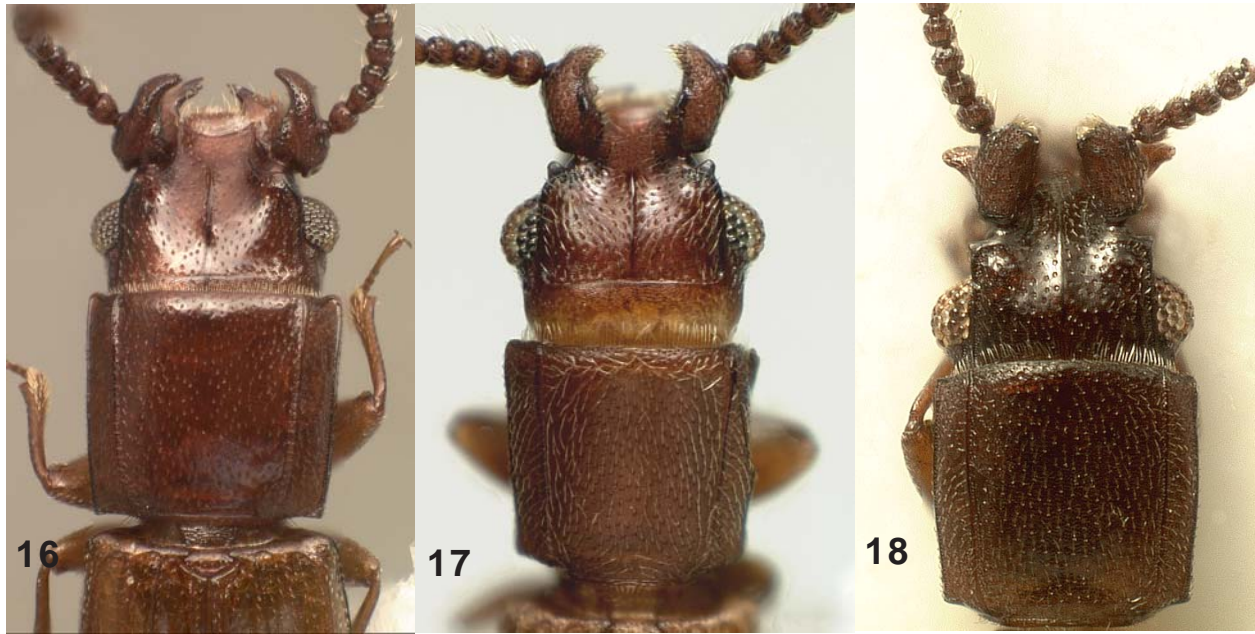
Fig. 19, 41, Map 2

*Dasymerus* [sic] *sulcicollis* Grouvelle 1908: 56

*Dysmerus basalis* Casey, in part (Lefkovitch 1958: 97)

**Diagnosis.** Individuals of this species can be distinguished from other members of the genus by a combination of the following character states: head without median longitudinal carina; distinct dorsal pubescence; eyes not pyramidal in shape; pronotum deeply, longitudinally sulcate; frons strongly arched over eyes and with two carinae on each side (Fig. 19). Scape not as strongly produced as in other *Dysmerus* species; however, it is likely that a major male was not represented in the material studied. Male genitalia as in Fig. 41.





**Figure 16-18.** Head and pronotum of males of *Dysmerus*: **16)** *D. politus* Thomas, n. sp.; **17)** *D. rondoniensis* Thomas, n. sp.; **18)** *D. skellei* Thomas, n. sp.

**Distribution.** Guadeloupe and Montserrat (Map 2).

**Type Material.** A male and possibly a female mounted on the same card, were examined, in the MNHN with the following label data: “Guadeloup Dufou/Type./49/Dasymerus sulcicollis ty. Grouv/TYPE/Muséum Paris”. Grouvelle (1908: 56) did not state the number of specimens in the type series. To fix the identity of this species, the male, which is mounted upside down on the right hand side of the card, is here designated as the **lectotype** of *Dysmerus sulcicollis*.

**Specimens examined.** In addition to the types above, I have examined the following 4 specimens: 2, Guadeloupe (USNM); 2, MONTSEERRAT: Cassava Ghaut, Beattle House 16°45.91'N, 62°12.95' W 23-03APRMAR2002, 632ft A. Krokower, u.v. light/Compared with type (MAIC).

***Dysmerus boliviensis* Thomas, new species**

Fig. 8, 22, 32, Map 3

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: head without median carina (Fig. 8); distinct dorsal pubescence; male scape moderately complex with a dorsal tubercle (Fig. 8, 22).

**Description. Holotype** male, deposited in MNKM, with the following label data: “BOLIVIA: Santa Cruz, 3.7km SSE Buena Vista, Hotel Flora & Fauna 405m. 5-15-XI-2001 17°29.949'S, 63°33.152'W M.C. Thomas & B.K. Dozier tropical transition forest”

**Body** elongate, parallel-sided, convex; length, 2.12mm.

**Head** 1.40X wider than long; sparsely punctate, punctures longitudinally elliptical, smaller than an eye facet, separated by 2 or more puncture diameters, each subtending a long, pale seta; surface between punctures smooth and shining; clypeus prolonged, comprising 0.50 total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides not strongly reflexed; angle above antennal insertion obtuse, strongly elevated; antennal scape large, length equal to 0.58 length of head; from dorsal view roughly triangular, with a dark tubercle beyond midpoint; irregular in lateral





**Figure 19-21.** Head and pronotum of males of *Dysmerus*: **19)** *D. sulcicollis* Grouvelle; **20)** *D. symphilus* Thomas, n. sp.; **21)** *D. trinidadensis* Thomas, n. sp.

view (Fig. 22); pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer than preceding flagellar antennomeres; XI longer than X; eye moderately, evenly convex, about 0.38 length of head.

**Pronotum** as long as wide; surface sculpture and pubescence as head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.09X width across posterior angles; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles right, not produced.

**Elytra** 2.00X longer than combined width; parallel-sided for basal half, then gradually converging; all three cells visible, lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

Male genitalia as in Fig. 32.

**Type material. Paratypes**, 3, as follows: 1, same data as holotype (FSCA); 1, "BOLIVIA: SANTA CRUZ Reserva Privada Potrerillos de Guenda; 17°40.26'S 63°27.44'W; 400m; 10/29-XI-2006; B.K. Dozier coll." (MNKM); 1, "BOLIVIA: SANTA CRUZ: 3.7 km SSE Buena Vista, Hotel Flora & Fauna; 17°29.949'S, 63°33.152'W; 430m; 10/29-XI-2003; UV; B.K. Dozier" (FSCA). Four female specimens deposited in the FSCA and MNKM, all from the vicinity of Buena Vista, are identified as this species but are excluded from the type series.

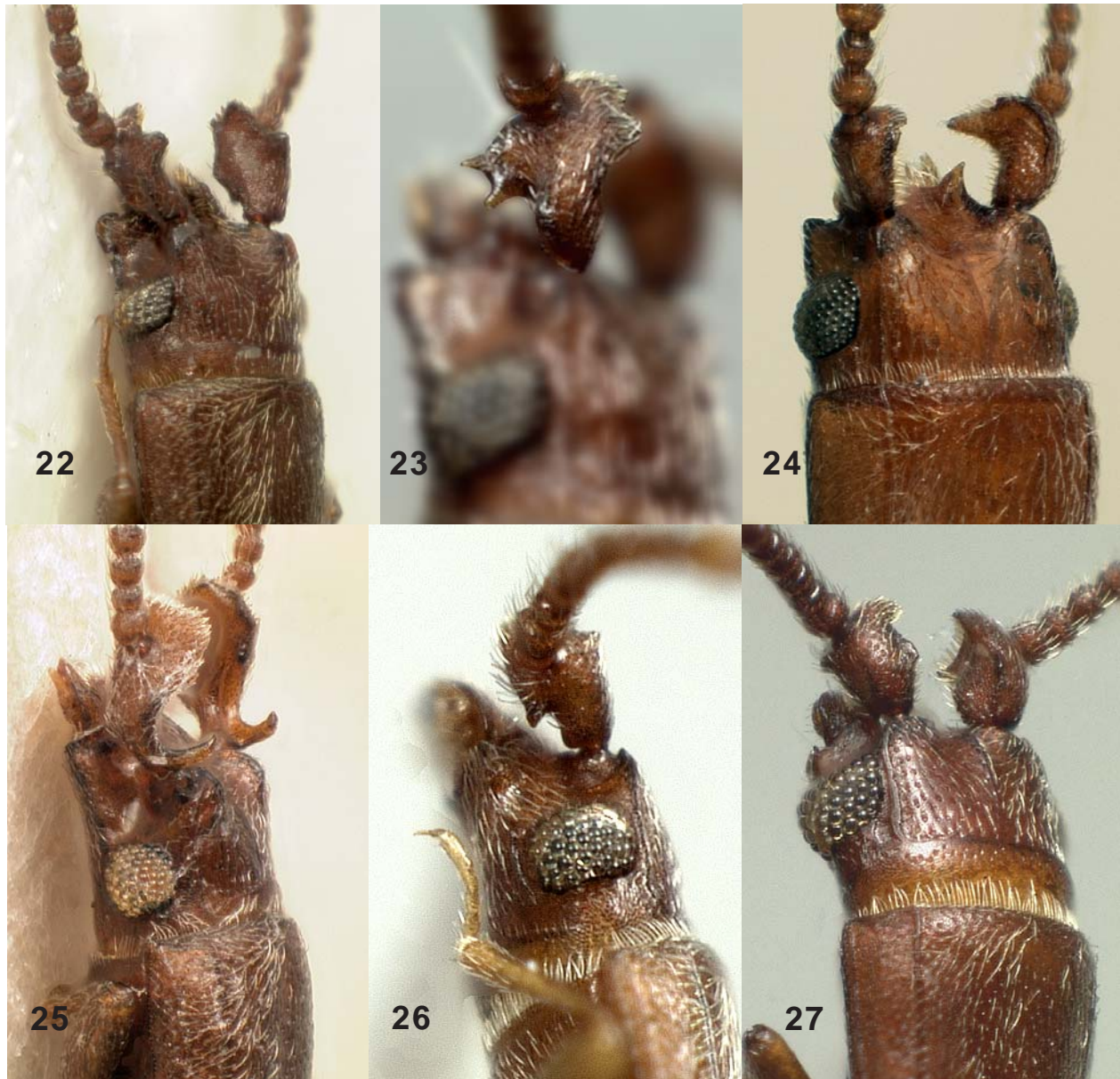
**Variation.** Length of male paratypes, 1.57mm - 2.12mm. The degree of development of the scape varies slightly, as does the acuteness of the angle above the antennal insertions. Females resemble the males but without the secondary sexual characters.

**Etymology.** The species epithet is derived from the type locality.

**Distribution.** Bolivia (Map 3).

### *Dysmerus curvicornis* Thomas, new species

Fig. 10, 34, Map 3



**Figure 22-27.** Oblique view of head and antennal scape of males of *Dysmerus*: **22)** *D. boliviensis* Thomas, n. sp.; **23)** *D. genaspinosus* Thomas, n. sp.; **24)** *D. hamaticornis* Thomas, n. sp.; **25)** *D. mexicanus* Thomas, n. sp.; **26)** *D. monstrosus* Thomas, n. sp.; **27)** *D. rondoniensis* Thomas, n. sp.

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: male scape strongly curved medially (Fig. 10) and clypeus deeply emarginate but sides not reflexed.

**Description. Holotype** male, deposited in MLPA, with label data as follows: “Buenos Aires Argentina Isla Martin Garcia 7-1938 M.J. Viana/Museo La Plata”.

**Body** elongate, parallel-sided, convex; length, 2.14 mm.

**Head** 2.00X wider than long; punctures circular medially, more longitudinally elliptical laterally and basally, slightly smaller than an eye facet, separated by one or more puncture diameters, sparse medially, denser laterally and basally; each subtending a long, pale seta; surface between punctures smooth and shining; clypeus prolonged, comprising 0.36 of total length of head measured along midline from front





**Figure 28-30.** Oblique view of head and antennal scape of males of *Dysmerus*: **28)** *D. skelleyi* Thomas, n. sp.; **29)** *D. sulcicollis* Grouvelle; **30)** *D. trinidadensis* Thomas, n. sp.

of eyes to front of head capsule, deeply emarginate, sides not strongly reflexed but corners sharply pointed; angle above antennal insertion obtuse, strongly elevated; antennal scape large, length equal to 0.71 length of head; from dorsal view strongly curved medially; pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye moderately, evenly convex, about 0.43 length of head; mandibles strongly curved.

**Pronotum** 1.10X wider than long; surface sculpture and pubescence as head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.17X width across posterior angles; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles obtuse, not produced.

**Elytra** 2.43X longer than combined width; parallel-sided for basal half, then gradually converging; all three cells visible, lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

Male genitalia as in Fig. 34.

**Type material. Paratypes**, 2, as follows: 1, "BRAZIL: Santa Catharina, Nova Teutonia Nov F. Plaumann" (FMNH); 1, "BRASIL: Sta. Catharina Nova Teutonia 23:III:1936 leg. F. Plaumann/A. Bierig Colln. Acc. Z-13812 Field Mus. Nat. Hist." (FMNH); 2, "BRAZIL: Santa Catharina, Nova Teutonia Sept F. Plaumann" (MCZC).

Two females with the following label data: "Nova Teutonia, Sta. Catharina, BRAZ VI:-:1941 Fritz Plaumann leg" (FMNH) and "BRAZIL: Santa Catharina, Nova Teutonia Nov. F. Plaumann" (MCZC), are assigned to this species but are excluded from the type series.

**Variation.** The paratypes range in length from 1.60 mm to 1.98 mm. Except for development of the scape, which is minimal in the smallest specimen, they are very similar to the holotype. The females that I have assigned to this species resemble the males in having distinct dorsal pubescence and a laterally toothed clypeus that is not reflexed but possess a globose scape that is somewhat swollen on the apicomedial surface.

**Etymology.** The specific epithet refers to the curved scape.

**Distribution.** Argentina, Brazil (Map 3).



***Dysmerus genaspinosus* Thomas, new species**

Fig. 11, 23, 35, 43, Map 3

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: the distinct dorsal pubescence, scape with a bifurcate ventral process (Fig. 23), and the curious genal spine (Fig. 43) distinguish the male of this species from all other known species. The female is unknown.

**Description. Holotype** male, in MAIC (to be deposited in MIZA), with label data as follows: "VENEZUELA: Bolivar nr. Icabaru, 110km SW Sta. Elena de Uairen 04 JULY 1987, 490m at light M.A. Ivie".

**Body** elongate, parallel-sided, convex; length, 1.56 mm.

**Head** 2.00X wider than long; punctures longitudinally elliptical, smaller than an eye facet, separated by 0.50 or more diameters (mostly 1 or more), sparse medially, denser laterally and basally; each subtending a long, pale seta; surface between punctures smooth and shining; clypeus prolonged, comprising 0.27 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides not strongly reflexed; angle above antennal insertion right, strongly elevated; a laterally directed, horizontal spine is located just anterior to eye on gena (Fig. 43); antennal scape large, length equal to 0.60 length of head; from dorsal view roughly triangular in shape, with a dark tubercle about 0.25 length of scape behind apex; in lateral view with a ventrally directed acutely bifurcate process (Fig. 23); pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye moderately, evenly convex, about 0.40 length of head.

**Pronotum** as long as wide; surface sculpture and pubescence as for head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.10X width across posterior angles; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles right, not produced.

**Elytra** 1.87X longer than combined width; parallel-sided for basal half, then gradually converging; all three cells visible, lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

Male genitalia as in Fig. 35.

**Etymology.** The specific epithet refers to the unique genal spine exhibited by the holotype and only known specimen.

**Distribution.** Venezuela (Map 3).

***Dysmerus hamaticornis* Thomas, new species**

Fig. 12, 24, 36, Map 1

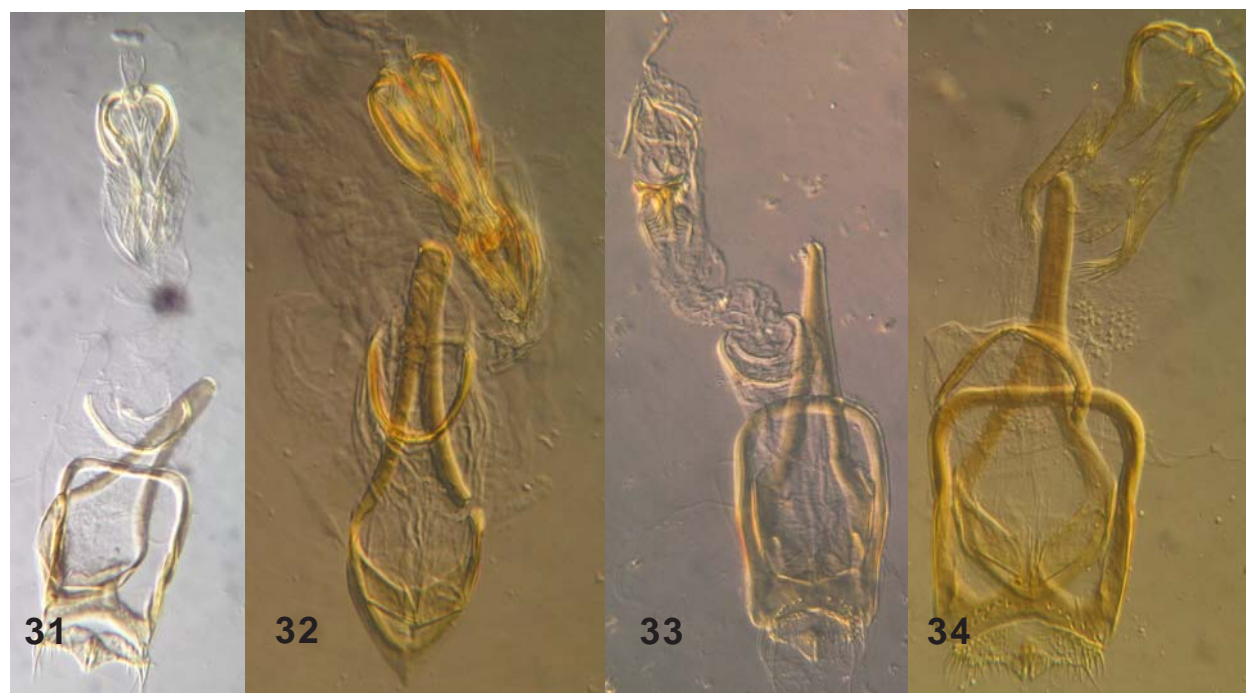
**Diagnosis.** Males can be distinguished from other members of the genus by a combination of the following character states: laterally elevated, toothed clypeus (Fig. 24), distinct dorsal pubescence, and strongly curved, acutely pointed male scape (Fig. 12).

**Description. Holotype** male, in FSAC, with label data as follows: "MEXICO: Quintana Roo 19km N Carrillo Puerto, 30-VI-1990 M.C. Thomas blacklight trap".

**Body** elongate, parallel-sided, convex; length, 1.54 mm.



**Figure 43.** *Dysmerus genaspinosus* Thomas, n. sp., oblique view of holotype showing genal spine.



**Figure 31-34.** Male genitalia of species of *Dysmerus*: **31)** *D. basalis* Casey; **32)** *D. boliviensis* Thomas, n. sp.; **33)** *D. caseyi* Thomas, n. sp., **34)** *D. curvicornis* Thomas, n. sp.

**Head** 2.00X wider than long; punctures longitudinally elliptical, smaller than an eye facet, separated by 1 or more puncture diameters, sparse medially, denser laterally and basally; each subtending a long, pale seta; surface between punctures smooth and shining; clypeus prolonged, comprising 0.25 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides strongly reflexed, laterally acutely toothed (Fig. 24); angle above antennal insertion obtuse, strongly elevated; antennal scape large, length equal to 0.55 length of head; from dorsal view strongly curved medially, apex sharply tapered to a point (Fig. 24), dorsally without a dark tubercle (Fig. 12); pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye moderately, evenly convex, about 0.43 length of head.

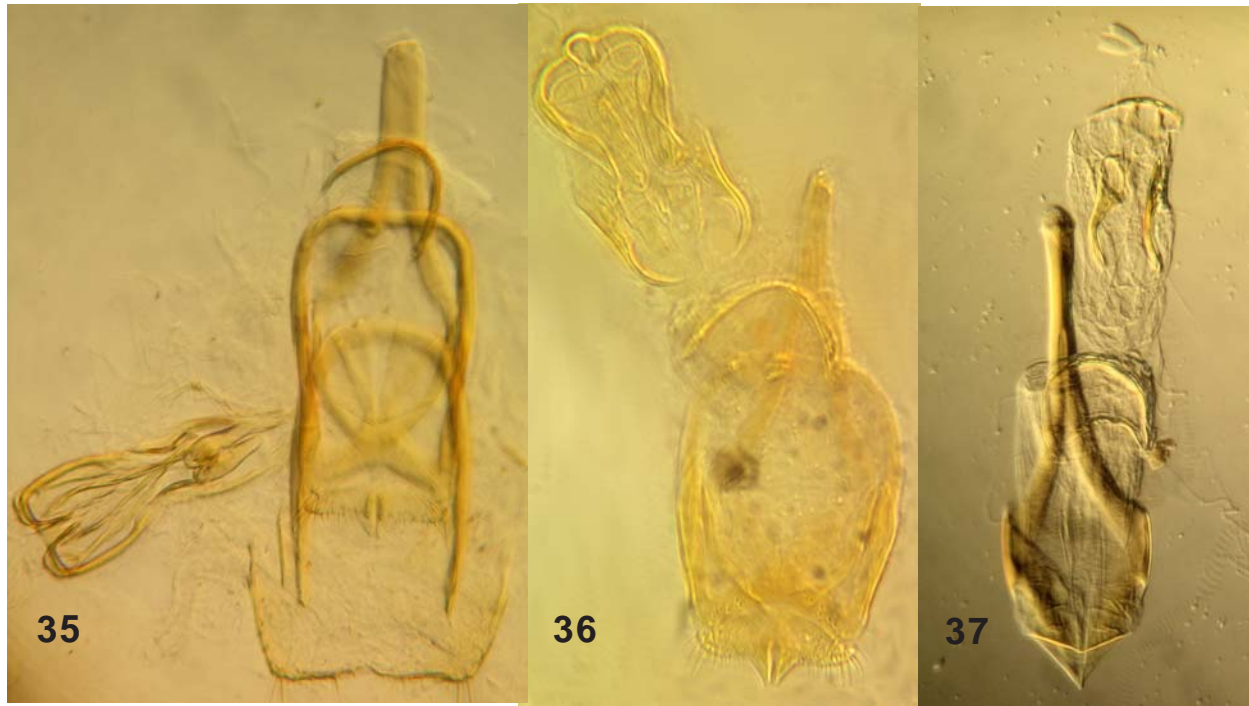
**Pronotum** as long as wide; surface sculpture and pubescence as head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.16X width across posterior angles; vaguely longitudinally sulcate medially; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles right, not produced.

**Elytra** 1.87X longer than combined width; parallel-sided for basal half, then gradually converging; all three cells visible, lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

Male genitalia as in Fig. 37.

**Type material. Paratypes**, 3, with following data: 1, "COSTA RICA: Limon Reventazon, Hamburg Farm XI:1:1927 leg. F. Nevermann/at light/FMNH(HD) 27-2/Field Mus. Nat. Hist. 1966 A. Bierig Colln. Acc. Z-13812" (FMNH); 1, "10/2/75 LT" (FSCA); 1, "Cercis Jr 23+ [illegible] Coll. Chitn Dysmerus basalis Cas. USNM 204872" (USNM).

The following female specimens are considered to be this species but are excluded from the type series: 1, "ALABAMA: Jefferson Co. Westavia 10-VIII-1980 Coll. T. King" (FSCA); 3, "COSTA RICA: Limon Reventazon, Hamburg Farm XI:1:1927 leg. F. Nevermann/at light/FMNH(HD) 27-2/Field Mus. Nat. Hist. 1966 A. Bierig Colln. Acc. Z-13812" (FMNH).



**Figure 35-37.** Male genitalia of species of *Dysmerus*: **35)** *D. genaspinosus* Thomas, n. sp.; **36)** *D. hamaticornis* Thomas, n. sp.; **37)** *D. impolitus* Thomas, n. sp.

**Variation.** The paratypes range in length from 1.78 mm to 1.86 mm. Otherwise, they are very similar to the holotype. The females that I have assigned to this species resemble the males in having a shallowly sulcate pronotum and distinct dorsal pubescence but differ in having a globose scape that is somewhat swollen on the apicomedial surface and a laterally toothed clypeus that is not or barely reflexed.

**Etymology.** The specific epithet is derived from the Latin words for “hooked” and “antenna,” referring to the sharply hooked scape.

**Distribution.** Costa Rica, Mexico, USA (Map 1).

**Discussion.** It was surprising to find a second species of *Dysmerus* occurring in the U.S., but the evidence seems to support its presence in the southeastern states. The male FSCA specimen was received in a batch of specimens from Tim King of Birmingham, AL. The female with full data was from the same collector. I am assuming that “Chhtn” on the label of the USNM specimen refers to H. F. Chittenden. As he apparently did not collect outside of the U.S. (Blake 1951-1952) it is probable that the USNM specimen was also collected in the U.S.

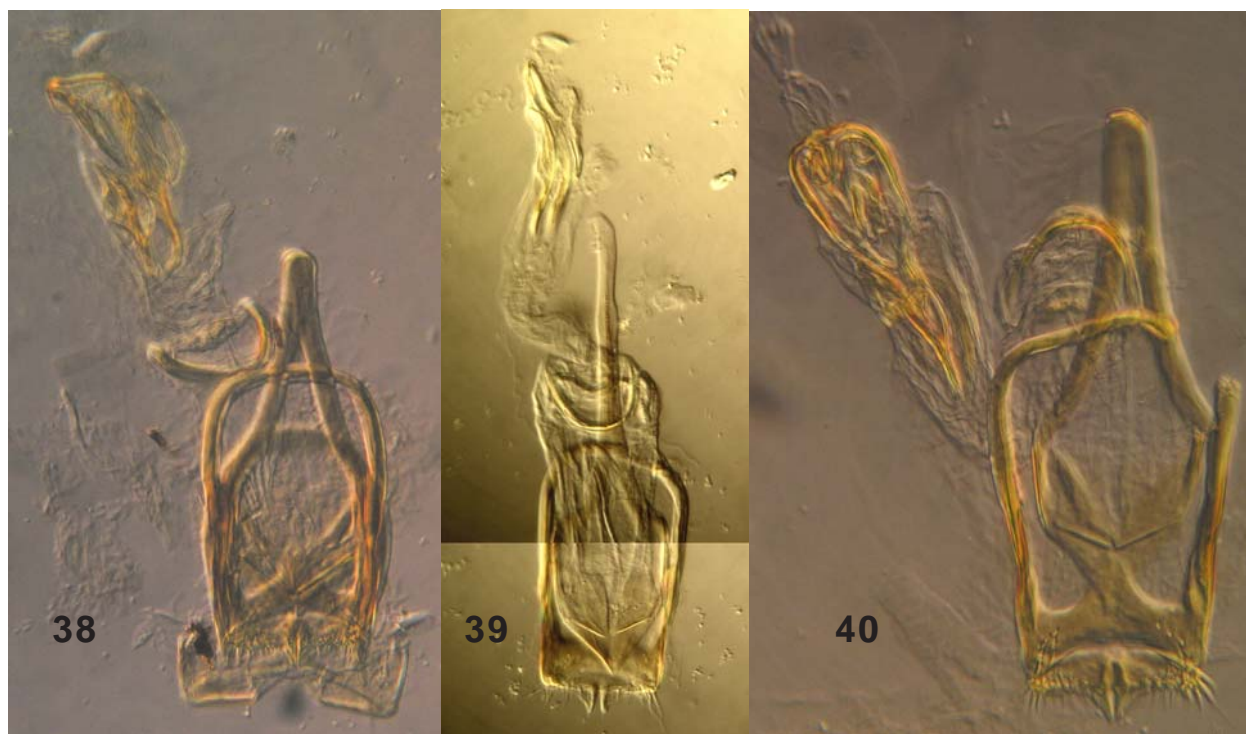
### ***Dysmerus impolitus* Thomas, new species**

Fig. 13, 37, Map 4

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: head with short median carina (Fig. 13); integument dull, strongly microreticulate; inconspicuous dorsal pubescence, and in the male, scape simple, strongly curved (Fig. 13).

**Description. Holotype**, male, in NMPC, with label data as follows: “REPRESSA RIO GRANDE, GB BRASIL, 6.66 ALVARENGA”/coll. Marek P5p-05/74”.





**Figure 38-40.** Male genitalia of species of *Dysmerus*: **38)** *D. mexicanus* Thomas, n. sp.; **39)** *D. politus* Thomas, n. sp.; **40)** *D. rondoniensis* Thomas, n. sp.

**Body** elongate, parallel-sided, convex; length, 1.76 mm.

**Head** 2.00X wider than long; punctures shallowly impressed, longitudinally elliptical, smaller than an eye facet, separated by 1-2 or more puncture diameters, sparse medially, denser laterally and basally; each subtending a short, pale seta; surface between punctures dull, microreticulate; a short median longitudinal carina begins just posterior to the antennal insertions and ends at about the midpoint of the eye; clypeus prolonged, comprising 0.26 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides not reflexed; angle above antennal insertion obtuse, strongly elevated; antennal scape large, length equal to 0.60 length of head; from dorsal view strongly curved medially, apical portion of scape flattened laterally and distally rounded (Fig. 13), dorsally without a dark tubercle; pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye moderately, evenly convex, about 0.42 length of head.

**Pronotum** slightly wider than long (1.09:1.00); surface sculpture and pubescence as head; roughly rectangular in shape, broadest just behind apex, thence narrowing slightly to base; width across anterior angles 1.05X width across posterior angles; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles right, not produced.

**Elytra** 2.04X longer than combined width; parallel-sided for basal half, then gradually converging; lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

Male genitalia as in Fig. 37.

**Female, allotype**, in NMPC, length, 1.86 mm., with label data as follows: "REPRESSA RIO GRANDE, GB BRASIL, 8.66 ALVARENGA" coll. Marek P5p-05/74". Proportions as follow: head, 2.23X wider than long; clypeus 0.28 length of head; eye, 0.67 length of head; pronotum as wide as long, 1.09X as wide apically as posteriorly; elytra 2.07X longer than wide. All else as in male except for the simple scape.

**Type material. Paratypes**, 44 as follows: 1, "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 27-1V-1992 U. Schmitz blacklight trap" (FSCA); 2, "BRAZIL: State of Minas Gerais, Cordisburgo Gruta de Maquine 20-I-1979 R.E. Woodruff blacklight trap" (FSCA); (the following each has a second label reading: "coll. Marek P5p-05/74") 1, "REPRESSA RIO GRANDE, GB BRASIL, 5.66 AVARENGA" (FSCA, NMPC); 2, "R. Janeiro GB, Brasil 3.72 Alvarenga" (NMPC); 7, "REPRESSA RIO GRANDE, GB BRASIL, 8.66 ALVARENGA" (NMPC); 7, "REPRESSA RIO GRANDE, GB BRASIL, 6.66 ALVARENGA" (FSCA, NMPC); 18, "RIO D. JANEIRO GB BRAS., 7.66 ALVARENGA" (DEFS, FSCA, NMPC); 1, "REPRESSA RIO GRANDE, GB BRASIL, 6.67 OLIVEIRA" (FSCA); 1, "FZDR. TIJUCA GUANABARA ALVARENGA 5.66" (NMPC); 2, "REPRESSA RIO GRANDE, GB BRASIL, 10.67 OLIVEIRA" (NMPC); 4, "REPRESSA RIO GRANDE, GB BRASIL, 9.72 OLIVEIRA" (DEFS, FSCA, NMPC); 1, "PARAGUAY: Itatpua Yatai, prop. Hostettler family San Rafael Prserve 26°38'17"S, 55°39'50"W 21 NOV 2000; Z. Falin PAR1F00 018 ex: UV light".



**Figure 41-42.** Male genitalia of species of *Dysmerus*: **41)** *D. sulcicollis* (Grouvelle); **42)** *D. symphilus* Thomas, n. sp.

**Variation.** The paratypes range in length from 1.34 mm to 1.88 mm. Otherwise, they are very similar to the holotype.

**Etymology.** The specific epithet refers to the non-glossy integument of this species,

**Distribution.** Brazil, Paraguay (Map 4).

### ***Dysmerus mexicanus* Thomas, new species**

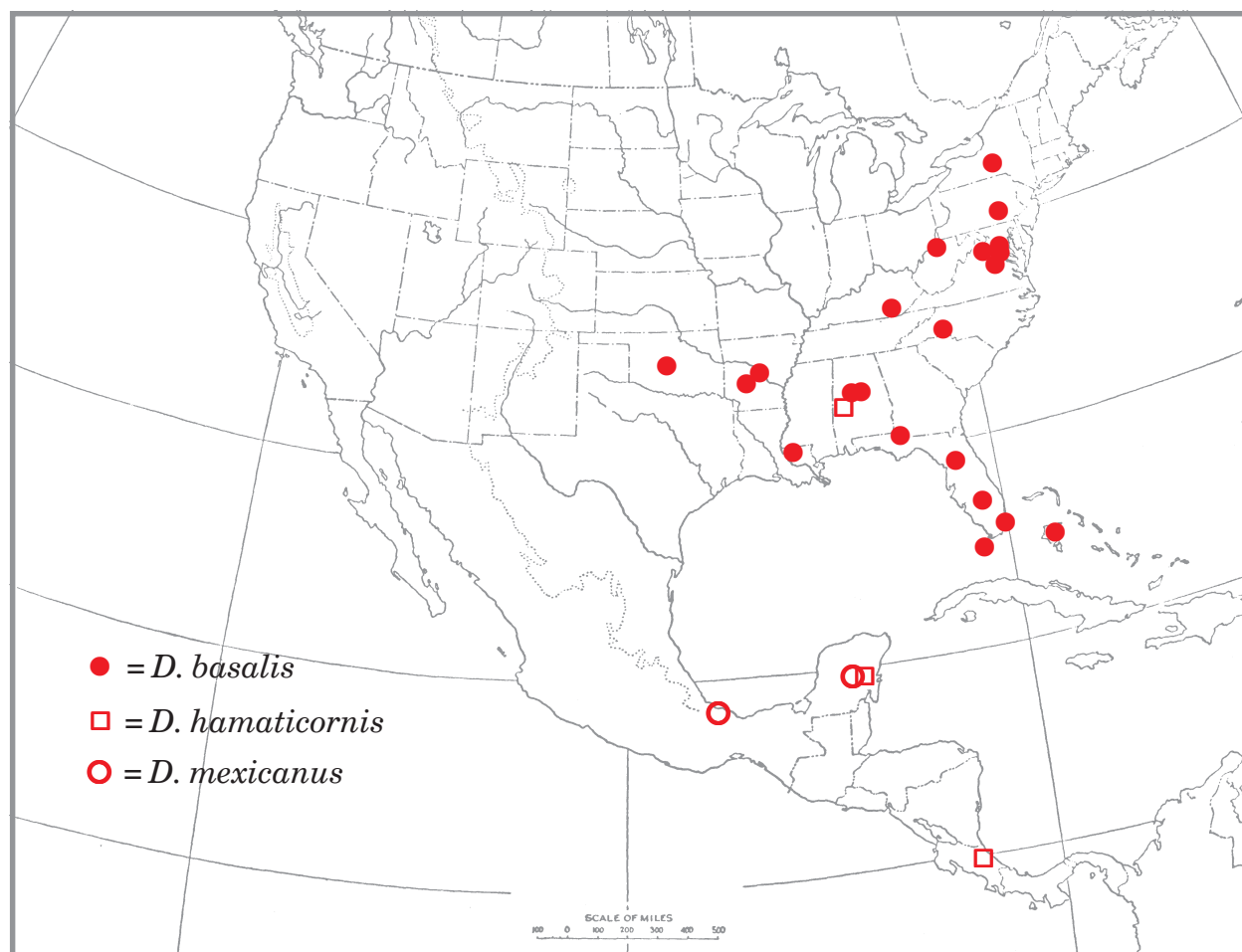
Fig. 14, 25, 38, Map 1

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: distinct dorsal pubescence, head above antennal insertions and gena both strongly produced (Fig. 14), male scape with vertical spine basally (Fig. 25).

**Description. Holotype**, male, in CNCI, with the following label data: "MEX Ejipantla, 5mi. S. San Andres Tuxtla, V.C., V.5.1969 D.E. Bright".

**Body** elongate, parallel-sided, convex; length, 1.74 mm.

**Head** 1.70X wider than long; punctures shallowly impressed, longitudinally elliptical, smaller than an eye facet, separated by 1-2 or more puncture diameters, sparse medially, denser laterally and basally; each subtending a long, pale seta; surface between punctures smooth and shiny; clypeus prolonged, comprising 0.44 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate anteriorly; sides not reflexed but sinuate and carinate, gena broadly expanded anteriorly, pointed anterolaterally; angle above antennal insertion obtuse, strongly elevated and produced (Fig. 14); antennal scape large, length equal to length of head; from dorsal view strongly curved medially, inner surface concave, apex truncate with dorsal tubercle about 0.30 behind the apex, and with a vertical spine basally (Fig. 25); pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye small, abruptly convex, about 0.38 length of head.



**Map 1.** Distribution of *Dysmerus* species.

**Pronotum** slightly wider than long (1.04:1.00); surface sculpture and pubescence as head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.15X width across posterior angles; sides steeply descending from sublateral line to margin; anterior angles right, produced; posterior angles right, not produced.

**Elytra** 1.86X longer than combined width; parallel-sided for basal half, then gradually converging; lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

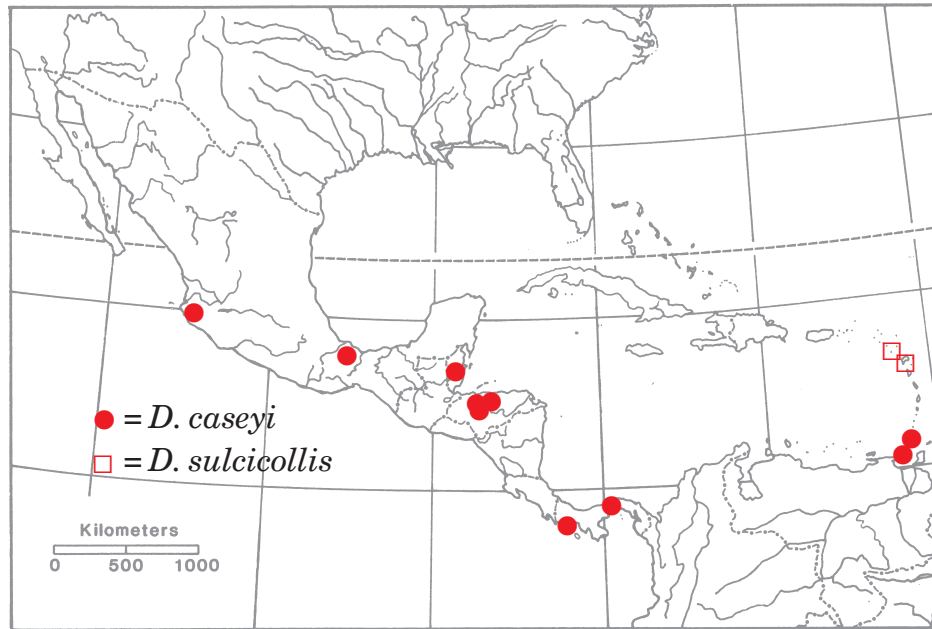
Male genitalia as in Fig. 38.

**Female.** A single female with the same data as the holotype in the CNCI is identified as this species but is excluded from the type series. It has similar dorsal pubescence and an angulate gena, although not as pronounced as in the male. It differs in its simple scape, less broadened pronotum anteriorly, and less protuberant eyes.

**Type material. Paratypes**, 2, as follows: "MEXICO: Quintana Roo 19km N Carrillo Puerto, 30-VI-1990 M.C. Thomas blacklight trap" (FSCA).

**Variation.** The two male paratypes are 1.32 mm and 1.54 mm in length. In neither is the male head armature as well developed as in the holotype but both exhibit indications of the vertical spine at the base of the scape.





**Map 2.** Distribution of *Dysmerus* species.

**Etymology.** The specific epithet is derived from the country of origin of this species.

**Distribution.** Mexico.

***Dysmerus monstrosus* Thomas, new species**

Fig. 15, 26, Map 4

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: distinct dorsal pubescence; head without a median carina; antennal scape with a dorsal tubercle (Fig. 15) and a strong ventral projection (Fig. 26).

**Description. Holotype** male, deposited in FSCA, with the following label data: “BRAZIL: State of Mato Grosso, Varzea Grande Co., Cuiaba, Parque de Exposicao/Roger Williams 23-V-72 blacklight trap”

**Body** elongate, parallel-sided, convex; length, 1.54 mm.

**Head** 1.95X wider than long; sparsely punctate, punctures longitudinally elliptical, smaller than an eye facet, separated by one to two puncture diameters, each subtending a long, pale seta; surface between punctures smooth and shining; clypeus prolonged, comprising 0.36 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides not strongly reflexed; angle above antennal insertion obtuse, strongly elevated; antennal scape large, length equal to 0.81 length of head; from dorsal view roughly triangular, with a dark tubercle about 0.40 behind apex (Fig. 15); in lateral view with a long posteroventrally directed process (Fig. 26); pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye moderately, evenly convex, about 0.54 length of head.

**Pronotum** 1.10X wider than long; surface sculpture and pubescence as for head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.21X width across posterior angles; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles right, not produced.

**Elytra** 1.80X longer than combined width; parallel-sided for basal half, then gradually converging; all three cells visible, lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

**Type material. Paratype:** 1, "ARGENTINA: Prov. Salta, Dept. Gen. San Martin, Rio Carapari, 8 km. S. of Pocitos/A. Martinez & R.E. Woodruff 16-II-69 blacklight trap" (FSCA)

**Variation.** Length of male paratype, 1.66mm, otherwise very similar to holotype. A single female in the FSCA with same data as paratype is identified as this species but is excluded from the type series. It resembles the males but without the secondary sexual characters.

**Etymology.** The specific epithet refers to the bizarre modifications of the male scape.

**Distribution.** Argentina, Brazil (Map 4).

***Dysmerus politus* Thomas, new species**

Fig. 16, 39, Map 5

**Diagnosis.** Individuals of this species can be distinguished from other members of the genus by a combination of the following character states: head with short median carina (Fig. 16); integument smooth and shiny; inconspicuous dorsal pubescence; and male scape simple, strongly curved (Fig. 16).

**Description. Holotype,** male, in FSCA, with label data as follows: "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 8-20-XI-1994 J.E. Eger, L.B. & C.W. O'Brien, blacklight trap"

**Body** elongate, parallel-sided, convex; length, 2.01 mm.

**Head** 2.50X wider than long; punctures shallowly impressed, longitudinally elliptical, smaller than an eye facet, separated by 1-2 or more puncture diameters, sparse medially, denser laterally and basally; each subtending a short, pale seta; surface between punctures smooth and shiny; a short median longitudinal carina begins just posterior to the antennal insertions and ends with a small tubercle at about the midpoint of the eye; clypeus prolonged, comprising 0.26 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides not reflexed; angle above antennal insertion obtuse, very strongly elevated, carinate margin of clypeus extends onto the elevation above the antennal insertion, forming an acute tubercle; antennal scape large, length equal to 0.70 length of head; from dorsal view strongly curved medially, apical portion of scape flattened laterally and distally rounded (Fig. 16), dorsally without a dark tubercle; pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye moderately, evenly convex, about 0.57 length of head.

**Pronotum** slightly wider than long (1.13:1.00); surface sculpture and pubescence as head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.15X width across posterior angles; sides steeply descending from sublateral line to margin; anterior angles acute, not produced; posterior angles right, not produced.

**Elytra** 1.84X longer than combined width; parallel-sided for basal half, then gradually converging; lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

Male genitalia as in Fig. 39.

**Female, allotype,** in FSCA, with same label data as holotype, length 1.78mm. Proportions as follow: head, 1.92X wider than long; clypeus 0.21 length of head; eye, 0.50 length of head; pronotum as wide as long, 1.09X as wide apically as posteriorly; elytra 1.77X longer than wide. All else as in male except for the simple scape.

**Type material. Paratypes:** 10, as follows: 8, "BOLIVIA: Santa Cruz, 3.7km SSE Buena Vista, Hotel Flora & Fauna 405m. 5-15-XI-2001 17°29.949'S, 63°33.152'W M.C. Thomas & B.K. Dozier tropical transition forest" (FSCA); 2, "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 8-20-XI-1994 J.E. Eger, L.B. & C.W. O'Brien, blacklight trap" (FSCA).



**Map 3.** Distribution of *Dysmerus* species.



**Variation.** The paratypes range in length from 1.52 mm to 2.00 mm. Otherwise, they are very similar to the holotype.

**Etymology.** The specific epithet refers to the glossy integument of this species.

**Distribution.** Brazil, Bolivia (Map 5).

***Dysmerus rondoniensis* Thomas, new species**

Fig. 17, 27, 40, Map 5

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: distinct dorsal pubescence; median carina present on head (Fig. 17); head above antennal insertions strongly produced, lobe-like (Fig 17); male scape with a dorsal tubercle (Fig. 17).

**Description. Holotype** male, deposited in FSCA, with the following label data: "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 8-20-XI-1994 J.E. Eger, L.B. & C.W. O'Brien, blacklight trap"

**Body** elongate, parallel-sided, convex; length, 1.58 mm.

**Head** 1.75X wider than long; sparsely punctate, punctures longitudinally elliptical, much smaller than an eye facet, separated by one to two or more puncture diameters, each subtending a long, pale seta; surface between punctures smooth and shining; clypeus prolonged, comprising 0.33 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides not strongly reflexed; angle above antennal insertion obtuse, strongly elevated, with a rounded tubercle directed anterolaterally; a short longitudinal, median carina begins behind the antennal insertions and extends posteriorly to about the anterior fourth of the eyes; antennal scape large, length equal to 0.67 length of head; from dorsal view roughly rectangular with the inner apical angle strongly curved medially and acutely produced, with a dark tubercle about 0.60 behind apex (Fig. 17); in lateral view roughly triangular (Fig. 27); pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye moderately, evenly convex, about 0.50 length of head.

**Pronotum** 1.05X wider than long; surface sculpture and pubescence as head, punctures slightly larger than on head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.10X width across posterior angles; shallowly, longitudinally impressed medially; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles right, not produced.

**Elytra** 2.04X longer than combined width; parallel-sided for basal half, then gradually converging; all three cells visible, lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

Male genitalia as in Fig. 40.

**Type material. Paratypes**, 1, as follows: 1, "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 1-X-1994 U. Schmitz blacklight trap" (FSCA)

Three females in the FSCA, two with same data as the holotype and one, "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 11-X1-1994 C.W. O'Brien blacklight trap", are identified as this species but are excluded from the type series. They resemble the male but without the frontal carina and with a simple antennal scape.

**Variation.** Length of male paratype, 1.63mm, otherwise very similar to holotype.

**Etymology.** The specific epithet refers to the state of Rondonia in Brazil, the only know place where this species has been found.



**Map 4.** Distribution of *Dysmerus* species.

**Distribution.** Brazil (Map 5).

***Dysmerus skellei* Thomas, new species**

Fig. 18, Map 5

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: scape with a long ventral process and head with long median carina (Fig. 17).

**Description. Holotype**, male, in FSCA, with the following label data: "PERU: Dept. Loreto 160km NE Iquitos, Exploranapo Camp, 2km from Rio Napo on Rio Sucusari"/"Skelley, Castner, et al 27-31-VIII-1992 at light".

**Body** elongate, parallel-sided, convex; length, 1.76 mm.

**Head** 1.47X wider than long; punctures mostly circular, smaller than an eye facet, separated by 1-2 or more puncture diameters, sparse medially, denser laterally and basally; each subtending a short, pale seta; surface between punctures smooth and shiny; a long median longitudinal carina begins just posterior to clypeal margin and ends at about the midpoint of the eye; clypeus prolonged, comprising 0.41 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides not reflexed; angle above antennal insertion right, strongly elevated, terminating in an acute denticle (Fig. 17); antennal scape large, length equal to 0.60 length of head; from dorsal view more or less triangular, dorsally with a small tubercle just behind apex (Fig. 17); in lateral view with a long acute ventral process so that the outline in lateral view is very broadly triangular (Fig. 17); pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye strongly, evenly convex, about 0.60 length of head.

**Pronotum** as wide as long; surface sculpture and pubescence as head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.05X width across posterior angles; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles right, not produced.

**Elytra** 1.82X longer than combined width; parallel-sided for basal half, then gradually converging; lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

**Etymology.** The specific epithet is in honor of Paul E. Skelley, colleague and collector of the only known specimen of this species.

**Distribution.** Peru (Map 5).

**Discussion.** The holotype and only known specimen is partially disarticulated and missing the distal six antennomeres of the right antenna.

***Dysmerus symphilus* Thomas, new species**

Fig. 20, 42, Map 6

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: antennae moniliform and thickened; clypeus longitudinally carinate laterally, the carinae extending onto the frons (Fig. 20); pronotum with two sublateral lines on each side (Fig. 20); dorsal pubescence inconspicuous.

**Description. Holotype** male, deposited in, with the following label data: "BRAZIL: Rondonia 62 km. SW Ariquemes, nr. Fzda. Rancho Grande 18-IX-1992 U. Schmitz blacklight trap"

**Body** elongate, parallel-sided, convex; length, 2.12mm.

**Head** 1.60X wider than long; sparsely punctate, each puncture subtending a short, inconspicuous seta so that the surface appears glabrous; punctures longitudinally elliptical, smaller than an eye facet, separated by 2 or more puncture diameters, surface between punctures smooth and shining; clypeus





**Map 5.** Distribution of *Dysmerus* species.

prolonged, comprising 0.47 of total length of head measured along midline from front of eyes to front of head capsule, deeply emarginate, sides strongly reflexed; angle above antennal insertion obtuse, strongly elevated; a short oblique carina extending from antennal insertion toward midline; antennal scape large, length equal to 0.73 length of head; from dorsal view curved inwards, deeply emarginate at about midpoint, with a small sharp process at base of emargination; in lateral view roughly triangular; pedicel small, transverse; antennomeres III-X very transverse, about equal in length, and tightly articulated; antennomere XI slightly longer and conical; eye moderately, evenly convex, about 0.40 length of head.

**Pronotum** very slightly (1.04X) longer than wide; surface sculpture and pubescence as head, but punctures noticeably larger, roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.14X width across posterior angles; a secondary longitudinal carinate line situated about halfway between sublateral line and lateral margin, extending about 0.67 length of pronotum; sides steeply descending from sublateral line to margin; anterior angles acute, triangularly produced anterolaterally; posterior angles right, not produced.

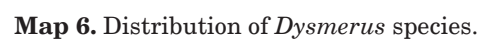
**Elytra** 2.0X longer than combined width; parallel-sided for basal half, then gradually converging; all three cells visible, lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

Male genitalia as in Fig. 42.

**Female, allotype**, deposited in FSCA, with the following label data: "BRAZIL: Rondonia 62km. SW Ariquemes Fzda. Rancho Grande, 10-XI-1994 C.W.O'Brien blacklight trap". It resembles the male, possessing both longitudinal carinae extending from the antennal insertions onto the frons and the secondary lateral lines. It differs from the male primarily in possessing a simple, globular scape. Length 2.10mm; head across eyes 1.77X wider than long; pronotum 1.04X longer than wide.

**Type material. Paratypes**, 34, as follows: 3, "BOLIVIA: Santa Cruz, 3.7km SSE Buena Vista, Hotel Flora & Fauna 405m. 5-15-XI-2001 17°29.949'S, 63°33.152'W M.C. Thomas & B.K. Dozier tropical transition forest" (FSCA); 1, "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 1-X-1994 U. Schmitz blacklight trap" (FSCA); 1, "BRAZIL: Rondonia 62 km. SW Ariquemes, nr. Fzda. Rancho Grande 18-IX-1992 U. Schmitz blacklight trap" (FSCA); 3, "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 10-XI-1994 C.W. O'Brien blacklight trap" (FSCA); 1, "BRAZIL: Rondonia, 62km SW Ariquemes, nr Fzda. Rancho Grande 8-20-XI-1994 J.E.Eger,L.B.&C.W. O'Brien blacklight trap" (FSCA); 2, "COSTA RICA: Limon Reventazon, Hamburg Farm XI:1:1927 leg. F. Nevermann/at light/FMNH(HD) 27-2/Field Mus. Nat. Hist. 1966 A. Bierig Colln. Acc. Z-13812" (FMHN); 2, "Costa Rica F. Nevermann 8 V 25/am licht/Dysmerus brevicornis nsp. Nev." (USNM); 1, "Costa Rica F. Nevermann 24 XI 35/am licht" (USNM); 1, "Costa Rica F. Nevermann 15 X 23/an welkem Laub" (USNM); 1, "Costa Rica F. Nevermann 1 VIII 24/am licht" (USNM); 2, "COSTA RICA: Heredia: OTS LaSelva Field Sta., Puerto Viejo de Sarapiquí, Rio Puerto Viejo; 5-11:III:1973/10°26'N, 83°59'W; leg. J. Wagner & J. Kethley/at light" (FMNH); 3, "FRENCH GUIANA: Amazon Nature Lodge on Kaw Rd., 2-8-VI-2005, J.E. Eger & M.T. Messenger, coll./N04°33.570' W052°12.433' 300m UV Trap" (FSCA); 1, "HONDURAS: Atlantida PN Pico Bonito El Portrillo, 28 June 2001 R. Turnbow" (RHTC); 1, "CANAL ZONE, Barro Colorado Is., UV trap 1 (3m. high) 18June1977 H. Wolda" (USNM); 1, "PANAMA: Chiriqui Puerto Armuelles 7-I-1983 Linda Stephens" (FSCA); 1, "PANAMA: Canal Zone Barro Colorado Is. 24 May 1977/H. Wolda Project Light Traps Nivel SMI" (USNM); 1, "PANAMA: Prov. Chiriqui Puerto Armuelles 27-XII-1982 L. Stephens" (FSCA); 1, "TRINIDAD: Simla, Arima-Blachissuese Rd., 17-VII-75 J. Price blacklight trap" (FSCA); 2, "TRINIDAD: Simla, Arima-Blachissuese Rd., 13-VII-75 J. Price blacklight trap" (FSCA); 2, "TRINIDAD: Simla, Arima-Blachissuese Rd., 11-VII-75 J. Price blacklight trap" (FSCA); 1, "TRINIDAD: Simla, Arima-Blachissuese Rd., 1-VIII-75 J. Price blacklight trap" (FSCA); 1, "TRINIDAD: Simla, Arima-Blachissuese Rd., 25-VII-75 J. Price blacklight trap" (FSCA); 1, "TRINIDAD: St. George Co. CIBC, Curepe 6-IX-78 R. M. Baranowski blacklight trap" (FSCA).

**Variation.** Length of paratypes, 1.74mm - 2.12mm. The degree of development of the scape varies slightly, as does the acuteness of the angle above the antennal insertions.





**Etymology.** The specific epithet refers to the structure of the antennae, which resemble the antennae of certain beetle symphiles of social insects.

**Distribution.** Costa Rica south to Bolivia and east to Trinidad (Map 6).

***Dysmerus trinidadensis* Thomas, new species**

Fig. 21, 30, Map 6

**Diagnosis.** Individuals can be distinguished from other members of the genus by a combination of the following character states: distinct dorsal pubescence; head with longitudinal median carina that ends at level of antennal insertions (Fig. 21); male scape without strong tubercle dorsally (Fig. 30); head above antennal insertions strongly produced anterolaterally, lobe-like (Fig. 21).

**Description. Holotype** male, deposited in FSCA, with the following label data: "TRINIDAD: Simla, Arima-Blachissuense Rd., 12-VII-75 J. Price blacklight trap".

**Body** elongate, parallel-sided, convex; length, 1.64 mm.

**Head** 1.90X wider than long; sparsely punctate, punctures longitudinally elliptical, much smaller than an eye facet, separated by one to two puncture diameters, each subtending a long, pale seta; surface between punctures smooth and shining; clypeus prolonged, comprising 0.36 of total length of head measured along midline from front of eyes to front of head capsule, shallowly emarginate, sides not strongly reflexed; angle above antennal insertion acute, strongly elevated, acutely produced anterolaterally; a longitudinal, median carina begins at about the antennal insertions and extends posteriorly to about the midpoint of the eyes (Fig. 21); antennal scape large, length equal to 0.72 length of head; from dorsal view roughly triangular with the inner apical angle strongly curved medially and acutely produced, without a dark dorsal tubercle (Fig. 21); in lateral view roughly triangular (Fig. 30); pedicel small, quadrate; antennomeres III-VIII quadrate, about equal in length; antennomeres IX-X broader and longer; XI longer than X; eye abruptly convex, about 0.50 length of head.

**Pronotum** 1.15X wider than long; surface sculpture and pubescence as head, punctures slightly larger than on head; roughly rectangular in shape, broadest at apex, thence narrowing slightly to base; width across anterior angles 1.11X width across posterior angles; not impressed medially; sides steeply descending from sublateral line to margin; anterior angles right, not produced; posterior angles right, not produced.

**Elytra** 2.40X longer than combined width; parallel-sided for basal half, then gradually converging; all three cells visible, lateral margin of third cell slightly more prominent than others but scarcely carinate; sides laterally perpendicular to margin.

**Type material. Paratype**, 1, as follows: "BRAZIL: Santa Catharina, Nova Teutonia Sept F. Plaumann" (MCZC).

**Variation.** Length of male paratype, 1.76mm, otherwise very similar to holotype.

Five females, two with same data as the paratype; one, "BRAZIL: Santa Catharina, Nova Teutonia Nov. F. Plaumann" (all MCZC); one, same data as holotype and one, same data as holotype except date is 18-VII-75 (both in FSCA); are identified as this species but are excluded from the type series. They resemble the male but without the frontal carina and with simple antennal scape..

**Etymology.** The specific epithet refers to the type locality of this species.

**Distribution.** Brazil, Trinidad (Map 6).

## Checklist of Species

*Dysmerus basalis* Casey  
*Dysmerus boliviensis* Thomas, **new species**  
*Dysmerus caseyi* (Grouvelle), **new status**  
    *Dysmerus basalis* Casey, in part (Lefkovitch 1958: 97)  
*Dysmerus curvicornis* Thomas, **new species**  
*Dysmerus genaspinosus* Thomas, **new species**  
*Dysmerus hamaticornis* Thomas, **new species**  
*Dysmerus impolitus* Thomas, **new species**  
*Dysmerus skelleyi* Thomas, **new species**  
*Dysmerus mexicanus* Thomas, **new species**  
*Dysmerus monstrosus* Thomas, **new species**  
*Dysmerus politus* Thomas, **new species**  
*Dysmerus rondoniensis* Thomas, **new species**  
*Dysmerus sulcicollis* Grouvelle, **new status**  
    *Dasymerus* [sic] *sulcicollis* Grouvelle  
    *Dysmerus basalis* Casey, in part (Lefkovitch 1958: 97)  
*Dysmerus symphilus* Thomas, **new species**  
*Dysmerus trinidadensis* Thomas, **new species**

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