

Neotropical Diptera

Neotropical Diptera 14: 1-31 (April 15, 2009)
ISSN 1982-7121
www.neotropicaldiptera.org

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Catalogue of Neotropical Diptera. Mydidae¹

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Introduction

The family Mydidae is represented in the area covered by this catalogue by 8 subfamilies, 21 genera and 116 species, as shown in the table below.

Genus		Number of species			
Subfamily	Tribe	Subtribe	Genus	Species-group	No. of species
Apiophorinae					5
			<i>Apiophora</i>		3
			<i>Eumydas</i>		1
			<i>Paramydas</i>		1
Diochlistinae					9
			<i>Mitrodetus</i>		9
Ectyphinae					3
			<i>Heteromydas</i>		1
			<i>Opomydas</i>		2
Leptomydinae					18
			<i>Nemomydas</i>		13
			<i>Plyomydas</i>		1
			<i>Pseudonomoneura</i>		4
Megascelinae					5
			<i>Megascelus</i>		5
Mydinae					63
	Dolichogasterini				1
			<i>Dolichogaster</i>		1
	Messiasiini				18
			<i>Messiasia</i>		18
	Mydini				41
		Mydina			27
			<i>Ceratomydas</i>		4
			<i>Gauromydas</i>		4
			<i>Mapinguari</i>		1

¹ This project was supported by FAPESP grants # 2003/10.274-9 and 2007/50878-1.

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	<i>Mydas</i>	18
	<i>fulvifrons</i>	3
	<i>hardyi</i>	1
	<i>interruptus</i>	9
	<i>xanthopterus</i>	5
	<i>Utinga</i>	1
Protomydina		3
	<i>Protomydas</i>	3
Stratiomydina		11
	<i>Baliomydas</i>	4
	<i>Chrysomydas</i>	1
	<i>Stratiomydas</i>	6
Phyllomydini		3
	<i>Phyllomydas</i>	3
Rhaphiomidinae		9
	<i>Rhaphiomydas</i>	8
Rhopaliinae		4
	<i>Midacritus</i>	3
	<i>Pseudorhopalia</i>	1

List of abbreviations and acronyms

AMNH – American Museum of Natural History, New York, New York, U. S. A.
 BMNH – National Museum of Natural History, London, England -
 BZM – Berliner Zoologischer Museum, Humboldt-Universität, Berlin, Germany
 CAS – California Academy of Sciences, San Francisco, California, U. S. A.
 CNC – Canadian National Collection, Ottawa, Canada
 CU – Cornell University, Ithaca, New York, U. S. A.
 DZUC – Departamento de Zoología, Universidad de Concepción, Concepción, Chile
 EFC – Eric Fisher Collection, California, U. S. A.
 FSCA – Florida State Collection of Arthropods, Gainesville, Florida, U. S. A.
 HT - holotype
 IBUNAM – Instituto de Biología, Universidad Nacional Autónoma de México, México, D. F., Mexico
 IML – Instituto Miguel Lillo, Universidad Nacional de Tucumán, Tucumán, Argentina
 IMZUT – Istituto e Museo di Zoologia, Università di Torino, Turin, Italy
 INHSC – Illinois Natural History Survey Collection, Urbana, Illinois, U. S. A.
 LT - lectotype
 MCZ – Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, U. S. A.
 MNHNP – Muséum National d’Histoire Naturelle, Paris, France
 MNHNS – Museo Nacional de Historia Natural, Santiago, Chile
 MNRJ – Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Rio de Janeiro, Brazil
 MPEG – Museu Paraense Emílio Goeldi, Belém, Pará, Brazil
 MZUSP – Museu de Zoologia, Universidade de São Paulo, São Paulo, São Paulo, Brazil
 NMW – Naturhistorisches Museum Wien, Vienna, Austria
 NT - neotype
 OXF – Hope Department of Entomology, Oxford University, Oxford, England
 RNHL – Rijksmuseum van Natuurlijke Historie, Leiden, Holland
 ST - syntypes
 Stockholm
 TP – type
 UK – University of Kansas
 USNM – National Museum of Natural History, Smithsonian Institution, Washington, D. C., U. S. A.
 ZSBS – Zoologische Sammlungen des Bayerischen Staates, Munich, Germany

Family Mydidae Latreille, 1809

Mydasii Latreille, 1809: 240, 293 (Midasii in footnotes, pp. 241, 244). Type-genus, *Mydas* Fabricius, 1794.
 Mydasides Leach, 1815: 161.
 Mydasia Rafinesque, 1815: 132.
 Midasia Burmeister, 1829: 24.
 Mydasidae Samouelle, 1819: 294.
 Midasii Berthold, 1827: 496.
 Mydasites Newman, 1834: 379, 392.
 Mydasina Perty, 1841: 891.
 Mydasinae Rondani, 1841: 281.
 Midasidae Westwood, 1841: 49.
 Midoidea Agassiz, 1846: 241.
 Mydasidae Walker, 1851: 72.
 Mydasites Walker, 1855: 357.
 Mydasiae Philippi, 1865: 641.
 Midasida Marschall, 1873: 321ff (as Midacida, p. 335).
 Mydaidae Osten Sacken, 1874: 174.
 Midaidae Osten Sacken, 1877: 280.
 Mididae Pascoe, 1880: 124.
 Mydasidi Bigot, 1890: 262.
 Mydiadae Hunter, 1900: 121.
 Mydidae Bezzi, 1903: 99.
 Mydoidea Séguy, 1926: 15.
 Mydeidae Chinery, 1973: 231.

Subfamily Apiophorinae Papavero & Wilcox, 1974

Apiophorinae Papavero & Wilcox, 1974a: 9, 12. Type-genus, *Apiophora* Philippi, 1865.

Genus *Apiophora* Philippi, 1865

Apiophora Philippi, 1865: 682. Type-species, *Apiophora paulseni* Philippi, 1865 (orig. des.).

Ref. – Artigas & Palma, 1979: 12, 15-22 (rev.).

paulseni Philippi, 1865: 682. Type-locality: Chile, Santiago. Distr. – Chile (Coquimbo to Talca, 31°S-36° S). Ref. – Gerstaecker, 1868: 99 (*Mydas*); Schiner, 1868: 99 (*Rhopalia*); Hunter, 1901: 154 (cat.; *Rhopalia*); Kertész, 1909: 42 (cat.; *Rhopalia*); Papavero & Wilcox, 1968: 3 (cat.); Artigas & Palma, 1979: 15, figs. 1-3, 8, 11-12, 17-19, 73-74, 85, 93-94, 128-131, 158; Papavero & Artigas, 1990: 118 (cat.). HT male, MNHNS.

elvirae Reed & Ruiz, 1941: 489. Type-locality: Chile, O'Higgins, Baños de Cauquenes. Ref. - Papavero & Wilcox, 1968: 3 (cat.). HT female, CAS.

quadricinctata Artigas & Palma, 1979: 18, figs. 20, 86, 95, 134, 136, 150, 159. Type-locality: Chile, Ñuble, Cueva de Los Pincheira, 13 km east of Recinto. Ref. - Papavero & Artigas, 1990: 118 (cat.). HT female, DZUC.

rubrocincta (Blanchard), 1852: 361, pl. 2, fig. 11 (*Mydas*). Type-locality: Chile, Concepción Prov. Refs. – Philippi, 1865: 683 (*Mydas*); Gerstaecker, 1868: 99 (*Mydas*); Hunter, 1901: 154 (cat.; *Mydas*); Kertész, 1909: 40 (cat.; *Mydas*); Papavero & Wilcox, 1968: 3 (cat.); Artigas & Palma, 1979: 20, figs. 21, 84, 97, 98, 135, 137, 160; Papavero & Artigas, 1990: 118 (cat.). HT female, MNHNP.

Genus *Eumydas* Wilcox & Papavero, 1971

Eumydas Wilcox & Papavero, 1971: 83. Type-species, *Eumydas corupas* Wilcox & Papavero (orig. des.).

corupas Wilcox & Papavero, 1971: 85, figs. 79-81 (male terminalia). Type-locality: Brazil, Santa Catarina, Corupá. Ref. - Papavero & Artigas, 1990: 118 (cat.). HT male, MZUSP.

Genus **Paramydas** Carrera & d'Andretta, 1948

Paramydas Carrera & d'Andretta, 1948: 490. Type-species, *Mydas igniticornis* Bigot (orig. des.).

igniticornis (Bigot), 1857: 288 (*Mydas*). Type-locality: "Chile". Distr. – Chile (between provinces of Coquimbo [29° S] and Talca [33° S]). Refs. – Philippi, 1865: 683 (*Mydas*); Gertaecker, 1868: 97 (*Mydas*); Kertész, 1909: 35 (cat.; *Mydas*; as syn. of *apicalis* Wiedemann, 1830); Claude-Joseph, 1928: 125 (prey of *Zyzyx chilensis* (Eschscholtz, 1822), Sphecidae); Artigas & Palma, 1979: 47, figs. 10, 69, 70, 81, 83, 87, 88-92, 126-127, 132-133, 165; Papavero & Artigas, 1990: 118 (cat.). HT male, OXF.

lugens Philippi, 1865: 684 (*Midas*). Type-locality: Chile, Colchagua, Llico. TP? ?MNHNS.

apicalis Wiedeman of Schiner, 1868: 153 (*Mydas*), misident.

Subfamily **Dioclistinae** Bequaert, 1963

Dioclistinae Bequaert, 1963: 3. Type-genus, *Dioclistus* Gerstaecker, 1868.

Genus **Mitrodetus** Gerstaecker, 1868

Mitrodetus Gerstaecker, 1868: 76. Type-species, *Cephalocera dentitarsis* Macquart, 1850 (mon.).

Refs. – Artigas & Palma, 1979 (rev.).

australis Artigas & Palma, 1979: 29, figs. 35, 111-115, 141, 161. Type-locality: Argentina, Chubut, San Jorge. Ref. - Papavero & Artigas, 1990: 118 (cat.). HT male, DZUC.

dentitarsis (Macquart), 1850: 360 (1850: 56), pl. 4, fig. 1 (*Cephalocera*). Type-locality: Chile, Coquimbo. Distr. – Chile (between parallels 27°S and 37°S). Refs. – Gerstaecker, 1868: 76 (n. comb.); Hunter, 1901: 153 (cat.); Kertész, 1909: 33 (cat.); Papavero & Wilcox, 1968: 5 (cat.); Artigas & Palma, 1979: 30, figs. 6, 13-15, 43-48, 53-60, 71, 75, 78, 114-116, 123-125, 138, 139, 144, 161; Artigas & Papavero, 1990: figs. 10-13 (male terminalia), 14-15 (spermathecae); Papavero & Artigas, 1990: 118 (cat.). TP female, MNHNP.

albobincta Blanchard, 1852: 361, pl. 2, fig. 10 (*Cephalocera*). Type-locality: Chile, Coquimbo. Refs. – Philippi, 1865: 680 (*Cephalocera*); Schiner, 1868: 154 (*Cephalocera*). ST male, MNHNP.

elegans Philippi, 1865: 680 (*Cephalocera*). Type-locality: Chile, Santiago. ST male, female, ?MNHNS.

chilensis Reed & Ruiz, 1941: 491. Type-locality: Chile, Coquimbo, Elqui and Puerto Hurtado. Refs. - Papavero & Wilcox, 1968: 5 (cat.); Papavero & Artigas, 1990: 118 (cat.). ST CAS.

mathei Reed & Ruiz, 1941: 491. Type-locality: Chile, Coquimbo, Elqui. Ref. - Papavero & Wilcox, 1968: 6 (cat.). ST male, female, CAS.

reedi Reed & Ruiz, 1941: 492. Type-locality: Chile, Coquimbo, Punta Teatinos. Ref. - Papavero & Wilcox, 1968: 6 (cat.). ST male, female, CAS.

dimidiatus (Philippi), 1865: 681 (*Cephalocera*). Type-locality: Chile, Coquimbo, Illapel. Neotype-locality: Chile, Coquimbo, Condoriaco [Artigas & Palma, 1979: 36]. Distr. – Chile (between parallels 29°S and 31°S). Refs. – Gerstaecker, 1868: 76 (n. comb.); Hunter, 1901: 153 (cat.); Kertész, 1909: 33 (cat.); Papavero & Wilcox, 1968: 5 (cat.); Artigas & Palma, 1979: 35, figs. 61-68, 80, 105-107, 140, 162; Papavero & Artigas, 1990: 118 (cat.). NT male, DZUC [des. by Artigas & Palma, 1979: 35].

thereviformis Séguy, 1939: 274. Type-locality: Chile, Coquimbo, Las Trancas. Ref. - Papavero & Wilcox, 1968: 6 (cat.). ST male, female, MNHNP.

irwini Kondratieff & Carr, 2001: 221, figs. 1 (wing), 2 (abdomen), 3-5 (male terminalia), 6 (aedeagus). Type-locality: Argentina, La Rioja, General La Madrid, 1 km east of Vinchinia, Highway 26, km 244, 4240 ft. Distr. – Argentina (La Rioja). HT male, INHSC.

- leucotrichus** (Philippi), 1865: 681 (*Cephalocera*). Type-locality: Chile, Coquimbo, Illapel. Distr. – Chile (between parallels 29°S and 31°S). Refs. – Gertaecker, 1868: 76; Hunter, 1901: 153 (cat.); Kertész, 1909: 33 (cat.); Artigas & Palma, 1979: 38, figs. 49-52, 79, 108-110, 141; Papavero & Artigas, 1990: 119 (cat.). LT male, MNHNS [des. by Artigas & Palma, 1979: 38].
- microglossa** Séguy, 1951: 12. Type-locality: Chile, Antofagasta, Oasis de Toconao, 2500 m. Distr. – Chile (Antofagasta [29°30'S]). Refs. – Papavero & Wilcox, 1968: 6 (cat.); Artigas & Palma, 1979: 41, figs. 36, 161; Papavero & Artigas, 1990: 119 (cat.). HT male, MNHNP.
- nanoglossa** Artigas & Palma, 1979: 42, figs. 4, 7, 37, 38, 76, 117-119, 143, 161. Type-locality: Chile, Atacama, Huasco. Distr. – Chile (from Atacama [27°S] to Coquimbo [29°S] provinces). Ref. - Papavero & Artigas, 1990: 119 (cat.). HT male, DZUC.
- vestitus** Artigas & Palma, 1979: 44, figs. 39-42, 120-122, 145, 151, 161. Type-locality: Chile, Coquimbo, Huanta. Distr. – Chile (province of Atacama [27°S] to province of Valparaiso [33°15'S]). Ref. - Papavero & Artigas, 1990: 119 (cat.). HT male, DZUC.

Subfamily Ectyphinae Wilcox & Papavero, 1971

Ectyphinae Wilcox & Papavero, 1971: 66. Type-genus, *Ectyphus* Gerstaecker, 1868.

Genus *Heteromydas* Hardy, 1944

Heteromydas Hardy, 1944: 227. Type-species, *Heteromydas bicolor* Hardy, 1944 (orig. des.).

Ref. – Wilcox & Papavero, 1971: 86 (descr.), map 1 (distr.).

bicolor Hardy, 1944: 227, pl. 15, figs. 3a-f. Type-locality: U. S. A., California, Onyx. Distr. – U. S. A. (California), ?Mexico (Baja California Norte). Refs. – Wilcox & Papavero, 1971: 49, figs. 6, 16, 82-84; Artigas & Papavero, 1990: figs. 28-30 (spermathecae); Papavero & Artigas, 1990: 119 (cat.). TP male, female, UK.

Genus *Opomydas* Curran, 1934

Opomydas Curran, 1934: 165 (in key), figs. 4, 12 (p. 164). Type-species, *Ectyphus limbatus* Williston, 1886 (orig. des.).

Refs. – Wilcox & Papavero, 1971: 100 (descr.), map 1 (distr.); Kondratieff & Fitzgerald, 1996. (rev.).

limbatus (Williston), 1886: 292 (*Ectypus* [sic]). Type-locality: U. S. A., Arizona. Distr. – U. S. A. (Arizona, extreme se. California, extreme southern Nevada), Mexico (Baja California Sur and probably Sonora). Refs. – Williston, 1898: 57 (*Ectyphus*); Aldrich, 1905: 250 (cat.; *Echthyphus* [sic]); Kertész, 1909: 45 (cart.; *Ectyphus*); Johnson, 1926: 141 (*Ectyphus*); Curran, 1934: 165 (n. comb.); Wilcox & Papavero, 1971: figs. 30, 116-118; Artigas & Papavero, 1990: figs. 26-27 (spermathecae); Papavero & Artigas, 1990: 119 (cat.); Kondratieff & Fitzgerald, 1996: 349, figs. 1-3 (male terminalia), 4 (antenna), 5 (spermathecae and genital fork), 6 (female terminalia). HT female, UK.

athama Séguy 1928: 141, fig. 22 (*Ectyphus*). Type-locality: Mexico, Baja California. Ref. - Wilcox & Papavero, 1971: figs. 29, 50; Papavero & Artigas, 1990: 119 (cat.); Kondratieff & Fitzgerald, 1996: 349 (syn.); Papavero, 1996: 629 (cat.). HT female, MNHNP.

townsendi (Williston), 1898: 58 (*Ectyphus*). Type-locality: U. S. A., New Mexico, Las Cruces. Distr. – U. S. A. (Arizona, extreme southeasrern California, New Mexico, southwestern Texas), Mexico (probably in Chihuahua and Sonora). Refs. – Aldrich, 1905: 250 (cat.; *Echthyphus* [sic]); Kertész, 1909: 45 (cat.; *Ectyphus*); Johnson, 1926: 141 (*Ectyphus*); Wilcox & Papavero, 1971: fig. 31; Papavero & Artigas, 1990: 119 (cat.); Kondratieff & Fitzgerald, 1996: 352, figs. 7-8 (male terminalia), 9 (antenna), 10 (spermathecae and genital fork), 11 (female terminalia).

Subfamily Leptomydinae Papavero & Wilcox, 1974

Leptomydinae Papavero & Wilcox, 1974a: 9, 15. Type-genus, *Leptomydas* Gerstaecker, 1868.

Genus *Nemomydas* Curran, 1934

Nemomydas Curran, 1934: 165 (in key). Type-species, *Leptomydas pantherinus* Gerstaecker (orig. des.).

Ref. – Kondratieff & Welch, 1990 (rev.).

- alifoleya** Fitzgerald & Kondratieff, 1998: 464, figs. 1-2 (male terminalia). Type-locality: Mexico, Oaxaca, Valle Nacional, San Mateo Yetla. Distr. – Mexico (Oaxaca). Holotype male, IBUNAM.
- bequaerti** (Johnson), 1926: 144, pl. 3, figs. 20-21 (*Leptomydas*). Type-locality: Honduras, Puerto Castilla. Distr. – Honduras. Refs. – Papavero & Wilcox, 1968: 10 (n. comb.); Papavero & Artigas, 1990: 119 (cat.); Kondratieff & Welch, 1990: 472, figs. 1, 24. HT male, MCZ.
- brachyrhynchus** (Osten Sacken), 1886: 69 (*Leptomydas*). Type-locality: Mexico, northern Sonora. Distr. – U. S. A. (Arizona, California, Texas), Mexico (Sonora) [Cresson, 1919: 189, says that specimens from California are *pantherinus* Gerstaecker and not *brachyrhynchus*]. Refs. – Williston, 1898: 54 (*Leptomydas*), 1901: 267 (*Leptomydas*); Aldrich, 1905: 150 (cat.; *Leptomydas*); Kertész, 1909: 45 (cat.; *Leptomydas*); Johnson, 1926: 142 (n. comb.); Hardy, 1950: 25; Papavero & Wilcox, 1968: 10 (cat.); Papavero & Artigas, 1990: 119 (cat.); Kondratieff & Welch, 1990: 473, figs. 2, 15; Papavero, 1996: 629 (cat.); Papavero & Ibáñez Bernal, 2003: 159 (hist. Mexican dipterol.). HT female, BMNH.
- dominicanus** Kondratieff & Perez-Gelabert, 2004: 380, figs. 1-3 (male terminalia). Type-locality: Dominican Republic, Santo Domingo province, La Malena de Boca Chica, near sea level. HT male, USNM.
- hooki** Welch & Kondratieff, 1991a: 643, figs. 1a-b. Type-locality: U. S. A., Texas, Bastrop County, Sayersville. Distr. – U. S. A. (Texas), Mexico (Veracruz). Ref. – Fitzgerald & Kondratieff, 1998: 465 (Mexican rec.). HT male CAS.
- lamia** (Séguy), 1928: 146 (*Nomoneura*). Type-locality: Costa Rica, La Caja. Distr. – Costa Rica. Refs. – Papavero & Wilcox, 1968: 11 (n. comb.); Wilcox & Papavero, 1971: 49, figs. 11, 42; Kondratieff & Welch, 1990: 474, fig. 3; Papavero & Artigas, 1990: 120 (cat.). LT male MNHNP [des. by Kondratieff & Welch, 1990: 474].
- loreni** Welch & Kondratieff, 1991b: 130. Type-locality: Costa Rica, Guanacaste, S. Cañas. Distr. – Costa Rica. HT male, USU.
- ?panamensis** (Curran), 1934: 165, fig. 111 (no description, only figure of head in lateral aspect) (*Nomoneura*). Type-locality: Panama, Canal Zone, Bruja Point. Refs. – Papavero & Wilcox, 1968: 11 (cat.; n. comb.); Kondratieff & Welch, 1990: 461 (*nomen dubium*); Papavero & Artigas, 1990: 120 (cat.) HT male, AMNH.
- pantherinus** (Gerstaecker), 1868: 85 (*Leptomydas*). Type-locality: U. S. A., California. Distr. – Canada (British Columbia), U. S. A. (Washington and Wyoming S. to Colorado and California), Mexico (Baja California Norte). Refs. – Osten Sacken, 1877: 280 (*Leptomydas*); Williston, 1886: 291 (*Leptomydas*), 1897: 54 (cat.; *Leptomydas*); Aldrich, 1905: 250 (cat.; *Leptomydas*); Kertész, 1909: 46 (cat.; *Leptomydas*); Johnson, 1926: 142 (*Leptomydas*); Hardy, 1950: 30, figs. 7a-d (n. comb.); Wilcox & Papavero, 1971: 49, figs. 9, 27, 69, 113-115; Artigas & Papavero, 1990: figs. 53-54 (spermathecae); Kondratieff & Welch, 1990: 479, fig. 11; Papavero & Artigas, 1990: 120 (cat.); Papavero, 1996: 629 (cat.). HT female, BZM.
- sponsor** (Osten Sacken), 1886: 68 (*Leptomydas*). Type-locality: Guatemala, Baja Verapaz, San Jerónimo. Distr. – Guatemala, Nicaragua, Costa Rica. Refs. – Williston, 1898: 54 (*Leptomydas*); Kertész, 1909: 46 (cat.; *Leptomydas*); Kondratieff & Welch, 1990: 475, fig. 4 (n. comb.); Papavero & Artigas, 1990: 120 (cat.) HT male, BMNH.
- tenuipes** (Loew), 1872a: 61 (Cent. 10, no. 20) (*Midas*). Type-locality: U. S. A., California. Refs. – Williston, 1898: 53 (*Leptomydas*); Aldrich, 1905: 250 (cat.; *Leptomydas*); Kertész, 1909: 46 (cat.; *Leptomydas*); Johnson, 1926: 142 (*Leptomydas*); Hardy, 1950: 33, figs. 8a-b (n. comb.); Kondratieff & Welch, 1990: 477, fig. 7; Papavero & Artigas, 1990: 120 (cat.); Papavero, 1996: 629 (cat.). HT male, MCZ.
- venosus** (Loew), 1866: 15 (Cent. 7, no. 26) (*Midas*). Type-locality: “U. S. A., New Mexico” [Osten Sacken, 1878: 83, corrects locality to Pecos River, western Texas]. Distr. – U. S. A. (Arizona to Texas, Colorado and Kansas), Mexico (Sonora). Refs. – Gerstaecker, 1868: 101 (*Mydas*); Loew, 1872a: 62 (*Leptomydas*); Williston, 1898: 53 (*Leptomydas*); Hine, 1903: 244 (*Leptomydas*); Aldrich, 1905: 250 (cat.; *Leptomydas*); Kertész, 1909: 46 (cat.; *Leptomydas*); Hardy, 1950: 34, figs. 9a-b (descr. of male and female); Wilcox & Papavero, 1971: fig. 52; Kondratieff & Welch, 1990: 480, fig. 13; Papavero & Artigas, 1990: 120 (cat.); Papavero, 1996: 629 (cat.). HT ?male, MCZ (tip of abdomen missing, but long hairs on femora indicate it is a male).
- wendyae** Kondratieff & Welch, 1990: 476, fig. 5. Type-locality: Mexico, Guerrero, Acapulco. Distr. – Mexico (Guerrero). Ref.

- Papavero, 1996: 629 (cat.). HT male University of Colorado, Boulder.

Genus **Plyomydas** Wilcox & Papavero

Plyomydas Wilcox & Papavero, 1971: 106. Type-species, *Plyomydas peruviansis* Wilcox & Papavero (orig. des.).

peruviansis Wilcox & Papavero, 1971: 108, figs. 33, 55, 125-127, 128, map 7 (distr.). Type-locality: Peru, Lima. Ref. - Papavero & Artigas, 1990: 120 (cat.). HT male, MZUSP.

Genus **Pseudonomoneura** Bequaert, 1961

Pseudonomoneura Bequaert, 1961: 13. Type-species, *Leptomydas hirtus* Coquillett (orig. des.).
Nomoneura, authors, not Bezzi.

Ref. – Fitzgerald & Kondratieff, 1995 (rev.).

bajaensis Fitzgerald & Kondratieff, 1995: 30, figs. 17-19 (male terminalia). Type-locality: Mexico, Baja California Sur, Pto. Chale, 60 km S. San Carlos. Distr. – Mexico (Baja California Sur). HT male, CAS.

calderwoodi Fitzgerald & Kondratieff, 1997: 171, figs. 1-3 (male terminalia). Type-locality: Mexico, Baja California Norte, 13 km N of Guerrero Negro. Distr. – Mexico (Baja California Norte). HT male, CAS.

californica (Hardy), 1950: 11, figs. 1a-e (*Nomoneura*). Type-locality: U. S. A., California, Riverside Co., Blythe. Distr. – U. S. A. (Arizona, California), Mexico (Baja California). Refs. – Papavero & Artigas, 1990: 120 (cat.); Fitzgerald & Kondratieff, 1995: 23, figs. 1-3 (male terminalia), 4 (female terminalia); Papavero, 1996: 629 (cat.). HT male, CAS.

hirta (Coquillett), 1904: 39 (*Leptomydas*). Type-locality: U. S. A., California, Los Angeles Co., Claremont. Distr. – U. S. A. (California), Mexico (Baja California). Refs. – Kertész, 1909: 45 (cat., *Leptomydas*); Hardy, 1950: 15, figs. 2a-f (*Nomoneura*); Bequaert, 1961: 13 (n. comb.); Artigas & Papavero, 1990: figs. 55-56 (spermathecae); Papavero & Artigas, 1990: 120 (cat.); Fitzgerald & Kondratieff, 1995: 23, figs. 5-7 (male terminalia), 8 (female terminalia); Papavero, 1996: 629 (cat.). HT male, USNM.

concinus Coquillett, 1904: 39 (*Leptomydas*). Type-locality: U. S. A., California, Los Angeles Co. Refs. – Kertész, 1909: 45 (cat.; *Leptomydas*); Hardy, 1950: 15 (syn.). LT male USNM [des. by Fitzgerald & Kondratieff, 1995: 24].

Subfamily **Megascelinae** Cazier, 1941

Megascelinae Cazier, 1941: 598. Tuype-genus, *Megascelus* Philippi, 1865.

Genus **Megascelus** Philippi, 1865

Megascelus Philippi, 1865: 683. Type-species, *Megascelus nigricornis* Philippi (mon.).

Refs. – Cazier, 1941: 598 (key), fig. 1 (distr.); Paramonov, 1948; Carrera & d'Andretta, 1948: 494; Artigas, 1970: 110; 1973: 140 (key).

albovillosus Artigas, 1973: 140, figs. 1 (head), 2-5, 7 (male terminalia), 6 (ovipositor). Type-locality: Chile, Coquimbo, Fray Jorge National Park. Distr. – Chile (Coquimbo). Ref. – Cekalovic & Artigas, 1974: 423 (in list of types). HT male DZUC.

melanoproctus Artigas, 1970: 111, fig. 38 (distr.). Type-locality: Chile, Valparaíso, Perales, Subida de la Ermita. Distr. – Chile (Valparaíso). Ref. – Cekalovic & Artigas, 1974: 423 (in list of types). HT male DZUC.

nigricornis Philippi, 1865: 683, pl. 25, figs. 21 (habitus), 21a (head), 21b (wing). Type-locality; unknown. Neotype-locality: Chile, Malleco, Angol. Distr. – Chile (Cautín, Curicó, Linares, Malleco, Santiago, Valparaíso). Refs. – Hunter, 1901:

155 (cat.); Kertész, 1909: 47 (cat.; *Dolichogaster*); Séguy, 1939: 268 (*Dolichogaster*); Cazier, 1941: 590, 593, pl. 1, fig. 8 (wing); Reed & Ruiz, 1941: 488 (*Dolichogaster*); Wagenknecht, 1944: 131 (*Dolichogaster*); Rapp Jr. & Snow, 1945: 159 (cat.); Stuardo Ortiz, 1946: 78 (cat.; *Dolichogaster*); Carrera & d'Andretta, 1948: 495, figs. 7 (antenna), 8 (leg), 9 (female terminalia), 11 (wing); Artigas, 1970: 112, figs. 10 (wing), 13-14 (head), 32-34, 36 (male terminalia), 35 (ovipositor), 37 (spermatheca), 38 (distr.); Cekalovic & Artigas, 1974: 423 (in list of types). NT male DZUC [des. by Artigas, 1970: 112].

nigrovillosus Artigas, 1970: 115, fig. 38 (distr.). Type-locality: Chile, Valparaiso, Marga. Distr. – Chile (Valparaiso). Ref. – Cekalovic & Artigas, 1974: 423 (in list of types). HT male DZUC.

palmicola Artigas, 1970: 115, fig. 38 (distr.). Type-locality: Chile, O'Higgins, Las Palmas, Cocalán. Distr. – Chile (O'Higgins). Ref. – Cekalovic & Artigas, 1974: 423 (in list of types). HP male DZUC.

Subfamily Mydinae Latreille, 1809

Tribe Dolichogastrini Papavero & Wilcox, 1974

Dolichogasterini Papavero & Wilcox, 1974b: 37. Type-genus, *Dolichogaster* Macquart, 1848

Dolichogastrini Sabrosky, 1999: 116 (corrected spelling).

Genus *Dolichogaster* Macquart, 1848

Dolichogaster Macquart, 1848: 170 (1848: 18). Type-species, *Midas brevicornis* Wiedemann, 1821 (mon.).

brevicornis (Wiedemann), 1821: 117 (*Midas*). Type-locality: "Brazil". Distr. – Brazil (Pará to São Paulo). Refs. – Wiedemann, 1828: 242, pl. 2, fig. 4 (*Midas*), 1831: 37, 45, pl. 53, fig. 9 (*Midas*); Westwood, 1841: 52 (*Midas*); Macquart, 1848: 17, pl. 2, fig. 2 (n. comb.); Walker, 1854: 371; Gerstaecker, 1868: 103; Osten Sacken, 1874: 175 (cites Walker, who says incorrectly that this species occurs in Florida and Massachusetts); Röder, 1883: 426; Aldrich, 1905: 250 (cat.); Kertész, 1909: 47 (cat.); Paramonov, 1948: 357; d'Andretta & Carrera, 1951: 9, figs. 9-22; Papavero & Wilcox, 1968: 3 (cat.); Artigas & Papavero, 1990: figs. 35-36 (spermathecae); Papavero & Artigas, 1990: 121 (cat.). LT female NMW [des. by Papavero & Wilcox, 1974a: 38, from Brazil, Bahia]. [**Plate II, fig. 9**].

iopterus Wiedemann, 1828: 241 (*Midas*). Type-locality: "Brazil". Refs. – Westwood, 1841: 52 (*Midas*); Walker, 1848: 228 (*Mydas*), 1854: 361 (*Mydas*); Williston, 1898: 57; Hunter, 1901: 155 (cat.). Type female ?.

Tribe Messiasiini Papavero & Wilcox, 1974

Messiasiini Papavero & Wilcox, 1974b: 37, 38. Type-genus, *Messiasia* d'Andretta, 1951.

Genus *Messiasia* d'Andretta, 1951

Messiasia d'Andretta, 1951: 52. Type-species, *Messiasia carrerai* d'Andretta, 1951 (orig. des.).

Refs. – Papavero & Wilcox, 1968: 4 (cat.); Wilcox & Papavero, 1971: 88, map. 3, 1975 (rev.).

californica (Cole), 1970: 181 (*Mydas*). Type-locality: U. S. A., California, Riverside Co., Whitewater, at western edge of Colorado Desert. Distr. – U. S. A. (California, Arizona, New Mexico), Mexico (Baja California Norte, Sonora). Refs. – Wilcox & Papavero, 1975: 15, figs. 1-3 (n. comb.); Papavero & Artigas, 1990: 121 (cat.); Papavero, 1996: 630 (cat.). ST male and female, CAS.

- carioca** Wilcox & Papavero, 1975: 17. Type-locality: Brazil, Rio de Janeiro, Rio de Janeiro. Distr. – Brazil (Rio de Janeiro). Ref. - Papavero & Artigas, 1990: 121 (cat.). HT female, MZUSP.
decor Osten Sacken of d'Andretta, 1951: 68 (part, only female from Rio de Janeiro), misident.
- carrerai** d'Andretta, 1951: 55, figs. 16-21, 40, 83-85, 161, 169, 175, 183. Type-locality: Brazil, Santa Catarina, Imbituba. Distr. – Brazil (Santa Catarina). Refs. – Papavero & Wilcox, 1968: 4 (cat.); Wilcox & Papavero, 1975: 18; Papavero & Artigas, 1990: 121 (cat.). HT male, MNRJ.
- dalcyna** d'Andretta, 1951: 62, figs. 46, 160, 167, 173, 179. Type-locality: Brazil, Rio de Janeiro, Rio de Janeiro (Restinga de Marambaia). Distr. – Brazil (Rio de Janeiro). Refs. – Papavero & Wilcox, 1968: 4 (cat.); Wilcox & Papavero, 1971: 44, 89, figs. 85-87, 89, 1975: 20; Artigas & Papavero, 1990: figs. 37-38 (spermathecae); Papavero & Artigas, 1990: 121 (cat.). HT male, MZUSP.
- decor** (Osten Sacken), 1886: 71 (*Midas*). Type-locality: Panama, Bugaba, 800-1500 ft. Distr. – Costa Rica, Panama. Refs. – Williston, 1898: 55 (in key and text; *Mydas*; misident.), 1901: 263 (*Mydas*); Aldrich, 1905: 251 (*Mydas*); Kertész, 1909: 37 (*Mydas*); d'Andretta, 1951: 68, figs. 44, 52, 76, 77, 159, 165, 174, 180 (n. comb.); Papavero & Wilcox, 1968: 5 (cat.); Wilcox & Papavero, 1971: 51, fig. 17, 1995: 21, figs. 4-6, 1975: 21, figs. 4-6; Papavero & Artigas, 1990: 121 (cat.). HT male, BMNH.
- lanei** d'Andretta, 1951: 56, figs. 41, 193, 194, 195. Type-locality: Peru, Lima. Distr. – Ecuador, Peru. Refs. – Papavero & Wilcox, 1968: 4 (cat.); Wilcox & Papavero, 1975: 24, figs. 7-9; Papavero & Artigas, 1990: 121 (cat.). HT female, USNM.
- mocoronga** Wilcox & Papavero, 1975: 25. Type-locality: Brazil, Pará, Boa Vista, rio Tapajós. Distr. – Brazil (Pará), Bolívia. Ref. - Papavero & Artigas, 1990: 121 (cat.). HT female, MZUSP.
polita Wiedemann of d'Andretta, 1951: 64 (part, only female from Brazil, Pará, Boa Vista, rio Tapajós), misident.
clavatus var. *atratus* Walker of d'Andretta, 1951: 64, misident.
- notospila** (Wiedemann), 1828: 244 (*Midas*). Type-locality: Uruguay, Montevideo. Distr. – Brazil (Mato Grosso), Uruguay, Paraguay, Argentina (Buenos Aires). Refs. – Wiedemann, 1831: 37, 52, pl. 64, fig. 20 (*Mydas*); Walker, 1837: 339 (*Mydas*); Westwood, 1841: 54 (*Midas*); Walker, 1848: 228, 1854: 355 (*Mydas*); Gerstaecker, 1868: 101 (*Mydas*); Williston, 1898: 57 (*Mydas*); Hunter, 1901: 154 (*Mydas*; cat.); Kertész, 1909: 39 (*Mydas*; cat.); d'Andretta, 1951: 60, figs. 43, 70, 71, 164, 168, 171 (n. comb.); Papavero & Wilcox, 1968: 4 (cat.). Wilcox & Papavero, 1971: 90, fig. 90, 1975: 27; Papavero & Artigas, 1990: 121 (cat.). HT female, BZM. [Plate III, fig. 20].
cingulatus Williston, 1898: 57 (*Mydas*). Type-locality: Paraguay, shore of río Paraguay, below Concepción. Refs. – Hunter, 1901: 153 (cat.; *Mydas*); Kertész, 1909: 36 (cat.; *Mydas*); Grossbeck, 1912: 373 (*Mydas*); d'Andretta, 1951: 8, 73 (n. comb.); Papavero & Wilcox, 1968: 7 (cat.); Wilcox & Papavero, 1975: 27 (syn.). HT female, AMNH.
- painteri** Wilcox & Papavero, 1975: 29, figs. 10-12. Type-locality: Mexico, Morelos, 12 miles east of Cuernavaca, 4000 ft, Lobos Canyon. Distr. – Mexico (Morelos, Guerrero). Refs. - Papavero & Artigas, 1990: 121 (cat.); Papavero, 1996: 630 (cat.). HT male, UK.
- penai** Wilcox & Papavero, 1975: 30. Type-locality: Peru, Madre de Dios, Avispas. Distr. – Peru. Ref. - Papavero & Artigas, 1990: 121 (cat.). HT female, CNC.
- perpolita** (Johnson), 1933: 72 (*Mydas*). Type-locality: Mexico, Yucatán, Chichén Itzá. Distr. – Mexico (Chiapas, Chihuahua, Jalisco, Michoacán, Morelos, Oaxaca, Sinaloa, Sonora, Tamaulipas, Yucatán). Refs. – Papavero & Wilcox, 1968: 4 (cat.; as syn. of *politus* Wiedemann, 1828); Wilcox & Papavero, 1975: 31, figs. 13-15; Papavero & Artigas, 1990: 121 (cat.); Papavero, 1996: 630 (cat.). HT male, MCZ.
polita Wiedemann of d'Andretta, 1951: 64, figs. 1, 45, 6, 7, 9-11, 14, 162, 170, 172, 181; Papavero & Wilcox, 1978: 4 (cat.), misident.
- pertenuis** (Johnson), 1926: 134 (in key), 137 (*Mydas*). Type-locality: U. S. A., Arizona, Baboquivari Mts. Distr. – U. S. A. (Arizona), Mexico (Sonora). Refs. – Curran, 1965: 359 (cat.; *Mydas*); Papavero & Wilcox, 1968: 4 (cat.). Wilcox & Papavero, 1971: 51, figs. 19, 47, 69, 1975: 33, figs. 16-18; Papavero & Artigas, 1990: 121 (cat.); Papavero, 1996: 630 (cat.). HT male, MCZ.
- testaceiventris** (Macquart), 1850: 365 (1850: 61), pl. 5, fig. 6 (*Mydas*). Type-locality: Uruguay, Maldonado. Distr. – Uruguay, Argentina (Santiago del Estero). Refs. – Gerstaecker, 1868: 99 (*Mydas*); Berg, 1899: 130 (*Mydas*; biol. notes; probably associated with ants' nests); Hunter, 1901: 155 (*Mydas*; cat.); Kertész, 1909: 41 (cat.; *Mydas*); Séguy, 1928: 143 (*Mydas*); d'Andretta, 1951: 55, 74 (*Mydas*); Papavero & Wilcox, 1968: 9 (*Mydas*; cat.); Wilcox & Papavero, 1975: 35, figs. 19-21 (n. comb.); Papavero & Artigas, 1990: 121 (cat.). HT female, MNHNP.
puniceus Séguy, 1928: 143 (*Mydas*). Type-locality: Argentina, Chaco de Santiago del Estero, margins of the rio Salado near Icaño. Refs. – d'Andretta, 1951: 59, fig. 12; Papavero & Wilcox, 1968: 4 (cat.) HT male, MNHNP.
- uaupes** Wilcox & Papavero, 1975: 37, fig. 32. Type-locality: Brazil, Amazonas, Uaupés. Distr. – Brazil (Amazonas). Ref. - Papavero & Artigas, 1990: 122 (cat.). HT male, MZUSP.
zikani d'Andretta of d'Andretta, 1951: 67, part (only male specimen from Brazil, Amazonas, Uaupés), figs. 163, 166, 176, 177, 178; Wilcox & Papavero, 1971: 90, fig. 92, misident.
- virgata** (Wiedemann), 1830: 630 (*Midas*). Type-locality: "Brazil". Distr. – Brazil (Pará). Refs. – Wiedemann, 1831: 37, 51, pl. 54, fig.

- 19 (*Mydas*); Westwood, 1841: 53 (*Midas*); Walker, 1854: 364 (*Mydas*); Gerstaecker, 1868: 97 (*Mydas*; says type is a male and not a female as reported by Wiedemann); Osten Sacken, 1886: 71 (*Mydas*); Hunter, 1901: 155 (cat.; *Mydas*); Kertész, 1909: 42 (cat.; *Mydas*); d'Andretta, 1951: 8, 73 (n. comb.); Wilcox & Papavero, 1975: 38, figs. 22-24 (n. comb.); Papavero & Artigas, 1990: 122 (cat.). HT male (and not female, as declared by Wiedemann), BZM. [Plate III, fig. 19].
- atratus* var. ? Walker, 1854: 364 (*Mydas*). Brazil, Pará, rio Tapajós. Ref. – Papavero & Wilcox, 1968: 4 (cat.); Wilcox & Papavero, 1975: 38 (syn.).
- sarpedon* Séguy, 1928: 143 (*Mydas*). Type-locality: Vietnam, Tonkin, Hoa Binh (evidently mislabelled). Ref. – Wilcox & Papavero, 1975: 38 (syn.). HT male, MNHNP.
- wilcoxi** Papavero, 1976: 182. Type-locality: Brazil, Espírito Santo, Conceição da Barra. Distr. – Brazil (Espírito Santo). Ref. – Papavero & Artigas, 1990: 122 (cat.). HT male, MZUSP.
- yacochuya** Wilcox & Papavero, 1975: 40, figs. 25-27, 28. Type-locality: Argentina, Salta, Yacochuya (Cafayate Desert), 1950 m. Distr. – Argentina (Salta). Ref. – Papavero & Artigas, 1990: 122 (cat.). HT male, IML.
- zikani** d'Andretta, 1951: 67, figs. 47-87, 163, 166, 176-178. Type-locality: Paraguay, Cordillera, San Bernardino. Distr. – Paraguay. Refs. – Papavero & Wilcox, 1968: 5 (cat.); Wilcox & Papavero, 1975: 41, figs. 29-31, 33-34; Papavero & Artigas, 1990: 122 (cat.). Type male, USNM.

Tribe Mydini Latreille, 1809

Subtribe Mydina Latreille, 1809

Genus *Ceratomydas* Williston, 1898

- Ceratomydas*** Williston, 1898: 58. Type-species, *Ceratomydas fraudulentus* Williston, 1898 (mon.).
- crassipes** (Westwood), 1841: 51, pl. 13, fig. 3 (*Midas*). Type-locality: “?America septentrionalis” (evidently in error). Distr. – Brazil (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo). Refs. – Walker, 1854: 359 (*Mydas*); Gerstaecker, 1868: 97 (*Mydas*); Osten Sacken, 1874: 174 (*Mydas*); Williston, 1898: 55 (*Mydas*), 1898: 55 (in key), 1901: 268 (*Mydas*); Aldrich, 1905: 254 (cat.; *Mydas*); Kertész, 1909: 37 (cat.; *Mydas*); Papavero & Wilcox, 1968: 3 (cat.), 1974b: 43, figs. 1-3 (redescr.); Artigas & Papavero, 1990: figs. 48-49 (spermathecae); Papavero & Artigas, 1990: 122 (cat.). HT female, OXF. [Plate IV, fig. 3].
- darlingtoni** Papavero & Wilcox, 1974b: 47. Type-locality: Dominican Republic, Sánchez. Distr. – Dominican Republic. Ref. – Papavero & Artigas, 1990: 122 (cat.). HT female, MCZ.
- fraudulentus** Williston, 1898: 58. Type-locality: Brazil, Mato Grosso, Chapada dos Guimarães. Distr. – Brazil (Mato Grosso). Refs. – Kertész, 1909: 42 (cat.); Papavero & Artigas, 1990: 122 (cat.). HT female, ?lost.
- fraudentus* Hunter, 1901: 153 (cat.), error.
- vespoides** Papavero & Wilcox, 1974b: 51, figs. 7-9. Type-locality: Brazil, São Paulo, Cajuru, Coqueiro. Distr. – Brazil (São Paulo). Ref. – Papavero & Artigas, 1990: 122 (cat.). HT male, MZUSP.

Genus *Gauromydas* Wilcox, Papavero & Pimentel, 1989

- Gauromydas*** Wilcox, Papavero & Pimentel, 1989: 104. Type-species, *Mydas heros* Perty, 1833 (orig. des.).
- apicalis** (Wiedemann), 1830: 629 (*Midas*). Type-locality: “Brazil”. Distr. – Brazil (Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina), Argentina (Buenos Aires). Refs. – Wiedemann, 1831: 36, 48, pl. 53, fig. 14 (*Mydas*); Westwood, 1841: 53 (*Midas*); Walker, 1854: 365 (*Mydas*); Gerstaecker, 1868: 96 (*Mydas*); Schiner, 1868: 153 (*Mydas*); Bigot, 1878: 222 (*Mydas*); Lynch Arribálzaga, 1883: 141 (cat.; *Mydas*); Hunter, 1901: 153 (cat.; *Mydas*); Kertész, 1909: 35 (cat.; *Mydas*); Carrera & d'Andretta, 1948: 489 (*Mydas*); d'Andretta, 1951: 29 (*Mydas*); Wilcox, Papavero & Pimentel, 1989: 105 (n. comb.); Papavero & Artigas, 1990: 122 (cat.). HT male, BZM. [Plate II, fig. 14].
- bonariensis* Guérin-Méneville, 1835: 543, pl. 97, fig. 5 (*Mydas*). Type-locality: Argentina, Buenos Aires. Refs. – Westwood,

Papavero

- 1841: 51 (*Midas*); Walker, 1854: 365 (*Mydas*); Gertaecker, 1868: 96 (*Mydas*). TP lost.
- annulicornis* Westwood, 1841: 51, pl. 13, fig. 2 (*Midas*). Type-locality: “Brazil”. Refs. – Walker, 1854: 365 (*Mydas*); Williston, 1898: 57 (*Mydas*); Kertész, 1909: 39 (cat.; *Mydas*; as syn. of *mystaceus* Wiedemann, 1830). HT female, OXF. **Plate IV, fig. 2].**
- autuorii** (d’Andretta), 1951: 32, figs. 24, 31, 104, 116, 135, 152 (*Mydas*). Type-locality: Uruguay, Montevideo. Distr. – Brazil (Mato Grosso do Sul), Uruguay. Refs. – Papavero & Wilcox, 1968: 7 (cat.; *Mydas*); Wilcox, Papavero & Pimentel, 1989: 105 (n. comb.); Papavero & Artigas, 1990: 122 (cat.). HT male, USNM.
- heros** (Perty), 1833: 183, pl. 36, fig. 11 (*Mydas*). Type-locality: Brazil, Bahia. Distr. – Brazil (Central, eastern and southern). Refs. – Westwood, 1841: 50 (*Midas*); Walker, 1854: 363 (*Mydas*); Gerstaecker, 1868: 94 (*Mydas*); Hunter, 1901: 154 (cat.; *Mydas*); Kertész, 1909: 38 (cat.; *Mydas*); Zikan, 1942: 1-7, figs. (symbiosis with *Atta* (Hymenoptera, Formicidae), biol., descr. of pupa) (*Mydas*), 1944: 43, figs. 1-2 (egg), 3 (larva), 6 (mimicry with *Pepsis* sp.) (*Mydas*); Carrera, 1944: 440 (*Mydas*); d’Andretta, 1951: 17, figs. 3, 29, 61-62, 66-69, 89, 95, 106-109, 111-113, 136-139, 151, 1787-189, 200-202 (*Mydas*, part); Autuori, 1952: 127, 1971: 76 (*Mydas*, biol.; larvae in nests of *Atta* (Hymenoptera, Formicidae)); Wilcox & Papavero, 1971: figs. 1-2, 99-101, 107 (*Mydas*); Wicox, Papavero & Pimentel, 1989: 105 (n. comb.); Artigas & Papavero, 1990: figs. 43-45 (spermathecae); Papavero & Artigas, 1990: 122 (cat.). HT male, ZSBS.
- praegrans* Austen, 1909: 130 (1910: 17, pl. 15, fig. 4) (*Mydas*). Type-locality: Brazil, Paraná. Refs. – Rotschild, 1910: 461 (*Mydas*, mimicry with *Pepsis heros* (Fabricius), 1798, Hymenoptera, Pompilidae); Bezzi, 1917: 289 (*Mydas*). HT female, BMNH.
- mystaceus** (Wiedemann), 1830: 626 (*Midas*). Type-locality: “Surinam”. Distr. – Surinam. Refs. – Wiedemann, 1831: 36, 40, pl. 52, figs. 3a, 3b (*Mydas*); Westwood, 1841: 51 (*Midas*); Walker, 1854: 365 (*Mydas*); Gerstaecker, 1868: 94 (*Mydas*); Hunter, 1901: 154 (cat.; *Mydas*); Aldrich, 1905: 152 (cat.; *Mydas*); Kertész, 1909: 39 (cat.; *Mydas*); Wilcox, Papavero & Pimentel, 1989: 106 (n. comb.); Papavero & Artigas, 1990: 122 (cat.). HT male, BZM. **[Plate I, figs. 3, 3a, 3b].**

Genus *Mapinguari* Papavero & Wilcox, 1974

Mapinguari Papavero & Wilcox, 1974b: 52. Type-species, *Midas politus* Wiedemann, 1828 (orig. des.).

politus (Wiedemann), 1828: 240 (*Midas*). Type-locality: “Unknown” [Surinam]. Distr. – Surinam, Brazil (Pará). Refs. – Wiedemann, 1831: 36, 43, pl. 53, fig. 7 (*Mydas*); Westwood, 1841: 51 (*Midas*); Walker, 1854: 370 (*Mydas*); Gerstaecker, 1868: 94 (*Mydas*); Kertész, 1909: 94 (cat.; *Mydas*); Papavero & Wilcox, 1968: 4 (cat.; *Messiasia*), 1974b: 54 (n. comb.; redescr.); Wilcox, Papavero & Pimentel, 1989: 111, figs. 21-23 (redescr., male terminalia); Artigas & Papavero, 1990: figs. 50-52 (spermathecae); Papavero & Artigas, 1990: 122 (cat.). HT female, RNHL [cf. Helsdingen, 1996: 177]. **[Plate II, fig. 7].**

Genus *Mydas* Fabricius, 1794

Mydas Fabricius, 1794: 252. Type-species, *Musca clavata* Drury, 1773 (sub. des., Latreille, 1810: 443).

Midas Latreille, 1796: 166, error. Ref. – Osten Sacken, 1895: 345.

Midas Agassiz, 1846: 241, emend.

Lampromydas Séguy, 1928: 144. Type-species, *Lampromydas belus* Séguy, 1928 (mon.).

One fossil species: *Mydas miocenicus* Cockerell (1913: 207), Florissant, Colorado, U. S. A.

Refs. – Wilcox, Papavero & Pimentel, 1989 (rev.); Artigas & Papavero, 1990: figs. 46-47 (spermathecae).

clavatus-species-group **[Plate II, fig. 13]**

evansi Wilcox, Papavero & Pimentel, 1989: 93. Type-locality: Mexico, Morelos, Yauatepec, Lobos Canyon. Distr. – Mexico (Morelos). Refs. – Papavero & Artigas, 1990: 123 (cat.); Papavero, 1996: 631 (cat.). HT male, CU.

ventralis Gerstaecker, 1868: 102 (nom. nov. for *rufiventris* Loew, 1866). Type-locality: U. S. A., California. Distr. – U. S. A. (Arizona, California, New Mexico), Mexico (Baja California Norte, Baja California Sur, Sinaloa, Sonora). Refs. – Osten Sacken, 1874: 175, 1878: 84; Williston, 1898: 56 (as syn. of *militaris* Gerstaecker, 1868); Aldrich, 1905: 252; Kertész, 1909: 41 (cat.; as syn. of *rufiventris* Macquart, 1849); Johnson, 1926: 134 (in key), 136; Curran, 1965: 359 (cat.);

- Wilcox, Papavero & Pimentel, 1989: 97; Papavero & Artigas, 1990: 124 (cat.); Papavero, 1996: 631 (cat.).
rufiventris Loew, 1866: 14 (Cent. 7, no. 22) (*Midas*; preocc. Macquart, 1850). Type-locality: U. S. A., California. HT male, MCZ.
cleptes Osten Sacken, 1886: 72 (*Midas*). Type-locality: Mexico, northern Sonora. Refs. – Williston, 1898: 54 (in key); Aldrich, 1905: 251 (cat.); Kertész, 1909: 36 (cat.); Johnson, 1926: 134 (in key), 137 (as *ventralis* var.); Curran, 1965: 358 (cat.); Papavero & Ibáñez Bernal, 2003: 159 (hist. Mexican dipterol.). HT male, BMNH.
chrysites Osten Sacken, 1886: 72 (*Midas*). Type-locality: Mexico, northern Sonora. Refs. – Williston, 1898: 55 (in key); Aldrich, 1905: 251 (cat.); Kertész, 1909: 36 (cat.); Johnson, 1926: 133 (in key), 134; Ségué, 1928: 130, figs. 1-6; d'Andretta, 1951: 8, 73; Papavero & Wilcox, 1968: 3 (cat.; in *Heteromydas*, in error); Wilcox & Papavero, 1971: 88; Papavero & Ibáñez Bernal, 2003: 159 (hist. Mexican dipterol.). HT male, BMNH.
abdominalis Adams, 1904: 434. Type-locality: U. S. A., Arizona, Congress Junction. Refs. – Kertész, 1909: 34 (cat.); Johnson, 1926: 134 (in key), 137 (as *ventralis* var.); Curran, 1965: 359 (cat.). ST male and female, UK.

fulvifrons-species-group

- davidsoni** Wilcox, Papavero & Pimentel, 1989: 69, fig. 6. Type-locality: U. S. A., Arizona, Pima Co., 8 miles north of Tucson. Distr. – U. S. A. (Arizona), Mexico (Sonora). Ref. - Papavero & Artigas, 1990: 123 (cat.). HT male, EFC.

hardyi-species-group

- hardyi** Wilcox, Papavero & Pimentel, 1989: 50, fig. 6. Type-locality: Mexico, Nayarit, Ruiz. Distr. – Mexico (Nayarit). Refs. - Papavero & Artigas, 1990: 123 (cat.); Papavero, 1996: 631 (cat.). HT male, FSCA.

interruptus-species-group

- annularis** Gerstaecker, 1868: 100. Type-locality: "Mexico". Distr. – Mexico (Guerrero, Jalisco, Michoacán, Nayarit, Puebla, Sonora, Venezuela). Refs. – Osten Sacken, 1874: 175, 1878: 84; Williston, 1898: 54 (in key), 1901: 268; Aldrich, 1905: 250 (cat.); Kertész, 1909: 34 (cat.); Wilcox, Papavero & Pimentel, 1989: 25, fig. 3; Papavero & Artigas, 1990: 123 (cat.); Papavero, 1996: 630 (cat.). HT female, BZM.
belus (Ségué), 1928: 144 (*Lampromydas*). Type-locality: Mexico, Puebla, near Puebla. Distr. – Mexico (México, Michoacán, Nuevo León, Puebla, Zacatecas). Refs. – d'Andretta, 1951: 48 (as syn. of *interruptus*); Curran, 1965: 358 (cat.; as syn. of *tricinctus* Bellardi, 1861); Papavero & Wilcox, 1968: 7 (cat.); Wilcox, Papavero & Pimentel, 1989: 30, fig. 4; Papavero & Artigas, 1990: 123 (cat.); Papavero, 1996: 630 (cat.). HT male, MNHNP.
interruptus Wiedemann, 1830: 628 [*Midas*]. Type-locality; "Mexico". Distr. – Mexico (Guerrero, Jalisco, México, Michoacán, Morelos, Oaxaca, Puebla, San Luis Potosí). Refs. – Wiedemann, 1831: 37, 46, pl. 53, fig. 12; Westwood, 1841: 52; Walker, 1854: 362; Gerstaecker, 1868: 100; Osten Sacken, 1874: 175; Williston, 1898: 54 (in key); Aldrich, 1905: 251; Kertész, 1909: 38; Wilcox, Papavero & Pimentel, 1989: 32, fig. 4; Papavero & Artigas, 1990: 124 (cat.); Papavero, 1996: 630 (cat.); Papavero & Ibáñez Bernal, 2001: 75 (hist. Mexican dipterol.). ST male and female, BZM. [**Plate II, fig. 12**].
jalisco Wilcox, Papavero & Pimentel, 1989: 36, fig. 4. Type-locality: Mexico, Jalisco, 11 miles northwest of Guadalajara. Distr. – Mexico (Aguascalientes, Hidalgo, Jalisco, México, Michoacán, Veracruz). Refs. - Papavero & Artigas, 1990: 124 (cat.); Papavero, 1996: 630 (cat.). HT male, CAS.
oaxacensis Wilcox, Papavero & Pimentel, 1989: 38, fig. 3. Type-locality: Mexico, Oaxaca, 62 miles northwest of Oaxaca, Highway 190, 6000-6500 ft. Distr. – Mexico (Oaxaca). Refs. - Papavero & Artigas, 1990: 124 (cat.); Papavero, 1996: 630 (cat.). HT male, FSCA.
sculleni Wilcox, Papavero & Pimentel, 1989: 40, fig. 3. Type-locality: Mexico, Nuevo León, 50 miles south of Monterrey, 1700 ft. Distr. – Mexico (Nuevo León). Refs. - Papavero & Artigas, 1990: 124 (cat.); Papavero, 1996: 631 (cat.). HT male, CAS.
senilis Westwood, 1841: 52 [*Midas*]. Type-locality: Mexico, Distrito Federal, Tacubaya. Distr. – U. S. A. (New Mexico), Mexico (Distrito Federal, Guanajuato, Hidalgo, México, Michoacán). Refs. – Walker, 1854: 361; Osten Sacken, 1874: 175; Gerstaecker, 1868: 101; Williston, 1898: 54 (in key); Aldrich, 1905: 252 (cat.); Kertész, 1909: 41 (cat.); Wilcox, Papavero & Pimentel, 1989: 41, fig. 4; Papavero & Artigas, 1990: 124 (cat.); Papavero, 1996: 631 (cat.); Papavero & Ibáñez Bernal, 2001: 88 (hist. Mexican dipterol.). HT male, OXF.
basalis Westwood, 1841: 53 [*Midas*]. Type-locality: Mexico, Distrito Federal, Tacubaya. Refs. – Walker, 1854: 362; Bellardi, 1861: 10; Gerstaecker, 1868: 100; Osten Sacken, 1874: 175; Williston, 1898: 54 (in key), 55; Aldrich, 1905: 251 (cat.); Kertész, 1909: 35 (cat.); Papavero & Ibáñez Bernal, 2001: 88 (hist. Mexican dipterol.). HT female, OXF.
subinterruptus Bellardi, 1861: 10, pl. 1, fig. 3. Type-locality: Mexico, Michoacán, Angangueo and Pátzcuaro. Distr. – Mexico (Chihuahua, Durango, México, Michoacán). Refs. – Gerstaecker, 1868: 101; Osten Sacken, 1874: 175;

Williston, 1898: 54 (in key); Aldrich, 1905: 252 (cat.); Kertész, 1909: 41 (cat.); Wilcox, Papavero & Pimentel, 1989: 44, fig. 5; Papavero & Artigas, 1990: 124 (cat.); Papavero, 1996: 631 (cat.); Papavero & Ibáñez Bernal, 2001: 105 (hist. Mexican dipterol.). ST male and female, IMZUT.

tricinctus Bellardi, 1861: 8, pl. 1, fig. 2. Type-locality: Mexico, environs of Mexico City. Distr. – U. S. A. (Arizona), Mexico (Chiapas, Jalisco, Morelos, Puebla, Sonora, Veracruz). Refs. – Gerstaecker, 1868: 100 (as syn. of *interruptus* Wiedemann, 1830); Osten Sacken, 1974: 175 (as syn. of *interruptus* Wiedemann, 1830), 1878: 84, 1886: 73 (as syn. of *interruptus* Wiedemann, 1830); Aldrich, 1905: 251 (as syn. of *interruptus* Wiedemann, 1830); Kertész, 1909: 38 (as syn. of *interruptus* Wiedemann, 1830); d'Andretta, 1951: 48 (as syn. of *interruptus* Wiedemann, 1830); Curran, 1935: 358; Papavero & Wilcox, 1968: 10 (cat.); Wilcox, Papavero & Pimentel, 1989: 47, fig. 6; Papavero & Artigas, 1990: 124 (cat.); Papavero, 1996: 631 (cat.); Papavero & Ibáñez Bernal, 2001: 105 (hist. Mexican dipterol.). HT male, IMZUT.

xanthopterus-species-group

evansorum Welch & Kondratieff, 1991c: 784 (*nomen novum* for *evansi* Welch & Kondratieff, 1990). Type-locality: Mexico, Tamaulipas, Villagrán. Ref. - Papavero, 1996: 631 (cat.).

evansi Welch & Kondratieff, 1990: 146, fig. 2a-c (male terminalia) (preocc. Wilcox, Papavero & Pimentel, 1989). Type-locality: Mexico, Tamaulipas, Villagrán. HT male, CAS.

fisheri Wilcox, Papavero & Pimentel, 1989: 54, fig. 7. Type-locality: Mexico, Baja California Sur, 7 miles northwest of La Paz. Distr. – Mexico (Baja California Sur). Refs. - Papavero & Artigas, 1990: 123 (cat.); Papavero, 1996: 631 (cat.). HT male, CIS.

fisheri Welch & Kondratieff, 1990: 147, figs. 4a-c (male terminalia), 7 (spermathecae) (preocc. Wilcox, Papavero & Pimentel, 1989). Type-locality: Mexico, Baja California Sur, 7 miles northwest of La Paz. Ref. – Welch & Kondratieff, 1991c: 784 (syn.). HT male, CAS [same specimen designated as HT by Wilcox, Papavero & Pimentel, 1989].

lavatus Gerstaecker, 1868: 96. Type-locality: “Mexico”. Distr. – Mexico (Tamaulipas). Ref. – Osten Sacken, 1874: 175 (as syn. of *xanthopterus* Loew, 1866), 1878: 84 (as syn. of *xanthopterus* Loew, 1866), 1886: 73 (not quite sure it is a syn. of *xanthopterus* Loew, 1866); Williston, 1898: 55 (cat.; in key); Aldrich, 1905: 252 (cat.; as syn. of *xanthopterus* Loew, 1866); Kertész, 1909: 42 (cat.; as syn. of *xanthopterus* Loew, 1866); Johnson, 1926: 135 (as syn. of *xanthopterus* Loew, 1866); Papavero & Wilcox, 1968: 8 (cat.); Wilcox, Papavero & Pimentel, 1989: 55; Papavero & Artigas, 1990: 124 (cat.). ST male and female, BZM.

luteipennis Loew, 1866: 14 (Cent. 7, no. 23). Type-locality: U. S. A., New Mexico [Actually Texas, Pecos river; cf. Osten Sacken, 1878: 84]. Distr. – U. S. A. (Arizona, New Mexico, Texas), Mexico (Chihuahua, Coahuila, Sonora). Refs. – Gerstaecker, 1868: 102; Osten Sacken, 1874: 175, 1878: 84; Williston, 1886: 291, 1897: 55 (cat.), 1898: 55 (in key); Aldrich, 1905: 251 (cat.); Kertész, 1909: 39 (cart.); Johnson, 1926: 133 (in key), 135; Curran, 1934: 165; 1965: 358 (cat.); Wilcox, Papavero & Pimentel, 1989: 56; Papavero & Artigas, 1990: 124 (cat.); Welch & Kondratieff, 1990: 146, figs. 3a-c (male terminalia), 6 (spermathecae); Papavero, 1996: 631 (cat.). ST male and female, MCZ.

simplex Loew, 1866: 15 (Cent. 7, no. 25). Type-locality: U. S. A., New Mexico [Actually Texas, Pecos river; cf. Osten Sacken 1878: 84]. Refs. - Gerstaecker, 1868: 102; Osten Sacken, 1874: 175, 1878: 84; Williston, 1898: 55 (in key); Aldrich, 1905: 252 (cat.); Kertész, 1909: 41 (cat.); Johnson, 1926: 133 (in key), 135; Curran, 1965: 359 (cat.); Wilcox, Papavero & Pimentel, 1989: 58; Papavero & Artigas, 1990: 124 (cat.); Welch & Kondratieff, 1991c: 784 (syn.). HT male, MCZ.

xanthopterus Loew, 1866: 14 (Cent. 7, no. 24). Type-locality: U. S. A., New Mexico [Actually Texas, Pecos river; cf. Osten Sacken 1878: 84]. Distr. – U. S. A. (Arizona, California, New Mexico, Texas, Utah), Mexico (Baja California Norte, Guanajuato, Hidalgo). Refs. – Osten Sacken, 1874: 175, 1878: 84, 1886: 73; Williston, 1898: 55 (in key); Aldrich, 1905: 152 (cat.); Kertész, 1909: 42 (cat.); Johnson, 1926: 133 (in key), 135 (calls attention to its similarity to *Asilus mydas* Brauer [now *Wyliea mydas*] and the large spider-wasp *Pepsis*]; Curran, 1965: 359 (cat.); Papavero & Wilcox, 1968: 10 (cat.); Meyer, McKenzie & Zalom, 1984: 357 (association with *Pepsis formosa* (Say, 1832) (Hymenoptera, Pompilidae)); Nelson, 1986: 316 (ecol.; interaction with *Hemipepsis ustulata* Dahlbom, 1843 (Hymenoptera, Pompilidae)); Wilcox, Papavero & Pimentel, 1989: 60; Papavero & Artigas, 1990: 125 (cat.); Welch & Kondratieff, 1990: 143, figs. 1a-c (male terminalia), 5 (spermathecae); Papavero, 1996: 631 (cat.). ST male and female, MCZ.

Genus *Utinga* Wilcox, Papavero & Pimentel, 1989

Utinga Wilcox, Papavero & Pimentel, 1989: 107. Type-species, *Utinga francai* Wilcox, Papavero & Pimentel (orig. des.).

francai Wilcox, Papavero & Pimentel, 1989: 109, figs. 13-20. Type-locality: Brazil, Pará, Belém (Utinga). Distr. – Brazil (Pará). Ref. – Papavero & Artigas, 1990: 125 (cat.). HT female, MPEG.

Subtribe Protomydina Wilcox, Papavero & Pimentel, 1989

Protomydina Wilcox, Papavero & Pimentel, 1989: 12, 13. Type-genus, *Protomydas* Wilcox, Papavero & Pimentel, 1989.

Genus *Protomydas* Wilcox, Papavero & Pimentel, 1989

Protomydas Wilcox, Papavero & Pimentel, 1989: 13. Type-species, *Mydas coerulescens* Olivier (orig. des.).

coerulescens (Olivier), 1811: 83 (*Mydas*). Type-locality: “South America”. Neotype-locality: Brazil, Rio de Janeiro, Itatiaia. Distr. – Colombia, Brazil (Amazonia and eastern and southern states). Refs. – Wiedemann, 1831: 33 (*Mydas*); Westwood, 1841: 50 (*Midas*); Gerstaecker, 1868: 95 (*Mydas*); Becher, 1882: 146, pl. 3, fig. 8 (*Mydas*); Hunter, 1901: 154 (cat.; *Mydas*); Kertész, 1909: 37 (cat.; *Mydas*); d’Andretta, 1951: 10, figs. 34, 48, 63-65, 94, 129-130, 142-143 (*Mydas*); Papavero & Wilcox, 1968: 7 (cat.; *Mydas*); Wilcox, Papavero & Pimentel, 1989: 14 (n. comb.); Artigas & Papavero, 1990: figs. 41-42 (spermathecae); Papavero & Artigas, 1990: 125 (cat.). TP lost. NT male MZUSP [des. by Wilcox, Papavero & Pimentel, 1989: 14]. **[Plate I, fig. 1].**

giganteus Thunberg, 1818: 246, fig. 9 (*Mydas*, as *gigantea*). Type-locality: “Brazil”. Refs. – Wiedemann, 1821: 116 (*Midas*, as *gigantea*), 1824: 60 (*Mydas*, as *gigantea*), 1828: 139 (*Mydas*, as *gigantea*); Latreille, 1829: pl. 172, fig. 2 (*Mydas*); Wiedemann, 1831: 36, 38, pl. 52, fig. 1 (*Mydas*); Macquart, 1834: 274 (*Mydas*); Westwood, 1841: 50 (*Midas*); Macquart, 1846: 58 (*Mydas*); Walker, 1848: 228 (*Mydas*); Rondani, 1850: 184 (*Mydas*); Walker, 1854: 363 (*Mydas*). Type ?, Stockholm.

argyrostomus Gerstaecker, 1868: 94 (*Mydas*). Type-locality: “Colombia”. Refs. – Hansen, 1883: pl. 5, figs. 13-21 (*Mydas*); Hunter, 1901: 153 (cat.; *Mydas*); Kertész, 1909: 35 (cat.; *Mydas*); d’Andretta, 1951: 28, figs. 38, 117, 140, 153. HT male, BZM.

leucops (Wiedemann), 1830: 628 (*Midas*). Type-locality: “Brazil”. Distr. – Brazil (northeastern states). Refs. – Wiedemann, 1831: 36, 45, pl. 53, fig. 10 (*Mydas*); Westwood, 1841: 52 (*Midas*); Walker, 1854: 364 (*Mydas*); Gerstaecker, 1868: 96 (*Mydas*); Hunter, 1901: 154 (cat.; *Mydas*); Kertész, 1909: 38 (cat.; *Mydas*); d’Andretta, 1951: 14, figs. 25, 97, 114, 131 (*Mydas*); Papavero & Wilcox, 1968: 8 (cat.; *Mydas*); Wilcox, Papavero & Pimentel, 1989: 15 (n. comb.); Papavero & Artigas, 1990: 125 (cat.). HT male, NMW. **[Plate II, fig. 10].**

rubidapex (Wiedemann), 1830: 626 (*Midas*). Type-locality: “Mexico”. Distr. – Mexico south to Colombia, Venezuela and Brazil (Amazonia). Refs. – Wiedemann, 1831: 36, 40, pl. 52, fig. 2 (*Mydas*); Westwood, 1841: 51 (*Midas*); Walker, 1854: 361 (*Mydas*); Bellardi, 1861: 5 (*Mydas*); Gerstaecker, 1868: 96 (*Mydas*); Schiner, 1868: 153 (*Mydas*); Osten Sacken, 1874: 175 (*Mydas*); Brauer, 1885: 387, pl., fig. 2 (*Mydas*); Osten Sacken, 1886: 70 (*Mydas*); Williston, 1898: 55 (in key and text; *Mydas*); Hunter, 1901: 154 (cat.; *Mydas*); Williston, 1901: 167 (*Mydas*); Aldrich, 1905: 252 (cat.; *Mydas*); Kertész, 1909: 40 (cat.; *Mydas*); d’Andretta, 1951: 21, figs. 35, 105, 110, 133, 157; Papavero & Wilcox, 1968: 7 (cat.); Wilcox, Papavero & Pimentel, 1989: 16 (n. comb.); Papavero & Artigas, 1990: 125 (cat.); Papavero, 1996: 632 (cat.); Papavero & Ibáñez Bernal, 2001: 75 (hist. Mexican dipterol.). HT male, BZM. **[Plate I, fig. 2].**

dives Westwood, 1841: 50, pl. 13, fig. 1 (*Midas*). Type-locality: “Unknown”. Refs. – Walker, 1848: 228 (*Mydas*), 1854: 363 (*Mydas*); Gerstaecker, 1868: 94 (*Mydas*); Osten Sacken, 1886: 70 (*Mydas*); Williston, 1898: 55 (in key and text; *Mydas*); Hunter, 1901: 154 (cat.; *Mydas*); Aldrich, 1905: 154 (cat.; *Mydas*); Kertész, 1909: 37 (cat.; *Mydas*); Curran, 1934: 326 (*Mydas*); d’Andretta, 1951: figs. 37, 60, 120, 149 (*Mydas*); Papavero & Ibáñez Bernal, 2001: 87 (hist. Mexican dipterol.). HT female, OXF. **[Plate IV, fig. 1].**

heros Perty of d’Andretta, 1951: 20 (*Mydas*); part, specimens from Brazil, Amazonas: Borba-Guajará, and Colombia, Muzo), misident.

Subtribe Stratiomydina Wilcox, Papavero & Pimentel, 1989

Stratiomydina Wilcox, Papavero & Pimentel, 1989: 12, 111. Type-genus, *Stratiomydas* Wilcox, Papavero & Pimentel, 1989.

Genus **Baliomydas** Wilcox, Papavero & Pimentel, 1989

Baliomydas Wilcox, Papavero & Pimentel, 1989: 130. Type-species, *Mydas gracilis* Macquart, 1834 (orig. des.).
Ceratomydas, gracilis-group of Papavero & Wilcox, 1974b: 40-41.

- brederi** (Curran), 1951: 2 (*Mydas*). Type-locality: Bahamas, South Bimini I. Distr. – Bahamas. Refs. – Curran, 1953a: 6 (*Mydas*); Papavero & Wilcox, 1974b: 42 (*Ceratomydas*; redescr.); Wilcox, Papavero & Pimentel, 1989: 130 (n. comb.); Papavero & Artigas, 1990: 125 (cat.). HT male, AMNH.
- cubanus** (Curran), 1951: 3 (*Mydas*). Type-locality: Cuba, vicinity of Habana. Distr. – Cuba. Refs. – Papavero & Wilcox, 1974b: 45 (*Ceratomydas*; redescr.); Wilcox, Papavero & Pimentel, 1989: 130 (n. comb.); Papavero & Artigas, 1990: 125 (cat.). HT female, AMNH.
- gracilis** (Macquart), 1834: 274, pl. 7, figs. 1a, 1b (*Mydas*). Type-locality: “South America”. Distr. – Dominican Republic, Cuba. Refs. – Westwood, 1841: 52 (*Midas*); Walker, 1854: 366 (*Mydas*); Gerstaecker, 1868: 97 (*Mydas*); Hunter, 1901: 154 (*Mydas*); Kertész, 1909: 38 (*Mydas*); Papavero & Wilcox, 1974b: 48 (*Ceratomydas*, redescr.); Wilcox, Papavero & Pimentel, 1989: 130 (n. comb.); Papavero & Artigas, 1990: 125 (cat.); Kondratieff & Perez Gelabert, 2004: 382 (Dominican Republic record). NT male (Cuba, Havana), MNHNP.
- tricolor** (Wiedemann), 1830: 627 (*Midas*). Type-locality: “Cuba”. Distr. – Cuba. Refs. – Wiedemann, 1831: 36, 42, pl. 53, fig. 5 (*Mydas*); Westwood, 1841: 51 (*Midas*); Walker, 1854: 362 (*Mydas*); Bigot, 1857: 335 (*Mydas*); Gerstaecker, 1868: 98 (*Mydas*); Osten Sacken, 1874: 175; Williston, 1898: 55 (in key); Aldrich, 1905: 152 (cat.; *Mydas*); Kertész, 1909: 42 (caty.; *Mydas*); Papavero & Wilcox, 1974b: 50 (*Ceratomydas*, redescr.); Wilcox, Papavero & Pimentel, 1989: 130 (n. comb.); Papavero & Artigas, 1990: 125 (cat.). HT female, BZM. [Plate II, fig. 5].

Genus **Chrysoomydas** Wilcox, Papavero & Pimentel, 1989

Chrysoomydas Wilcox, Papavero & Pimentel, 1989: 130. Type-species, *Mydas nitidulus* Olivier, 1811 (orig. des.).

- nitidulus** (Olivier), 1811: 82, 83 (*Mydas*). Type-locality: “South America”. Distr. – Guyana, Surinam, French Guiana, Brazil (Mato Grosso). Refs. – Wiedemann, 1830: 626 (*Mydas*), 1831: 32, 36, 41, pl. 52, fig. 4 (*Midas*); Westwood, 1841: 51 (*Midas*); Walker, 1854: 366 (*Mydas*); Gerstaecker, 1868: 94 (*Mydas*); Hunter, 1901: 154 (cat.; *Mydas*); Kertész, 1909: 154 (cat.; *Mydas*); d’Andretta, 1951: 8, 72 (*Mydas*; only listed); Papavero & Wilcox, 1968: 9 (cat.; *Mydas*); Wilcox, Papavero & Pimentel, 1989: 131 (n. comb.); Papavero & Artigas, 1990: 125 (cat.). TP lost. [Plate I, fig. 4].
- nitida* Lichtenstein, 1796: ? (*Midas*), *nomen nudum*.
- claripennis* Williston, 1898: 56 (*Mydas*). Type-locality; Brazil, Mato Grosso, Chapada dos Guimarães. Refs. – Hunter, 1901: 154 (cat.; *Mydas*); Kertész, 1909: 36 (cat.; *Mydas*); d’Andretta, 1951: 8, 73 (only listed); Papavero & Wilcox, 1968: 7 (cat.). HT male, AMNH.
- clarifumis* Grossbeck, 1912: 373 (*Mydas*), error.

Genus **Stratiomydas** Wilcox, Papavero & Pimentel, 1989

Stratiomydas Wilcox, Papavero & Pimentel, 1989: 113. Type-species, *Mydas rufiventris* Macquart, 1850 (orig. des.).

- bitaeniatus** (Bellardi), 1861: 7, pl. 1, fig. 1 (*Mydas*). Type-locality: Mexico, Veracruz, Playa Vicente [Selander & Vaurie, 1962: Playa Vicente, Veracruz, Mexico. Village on the Rio Playa Vicente in southern Veracruz near the border of Oaxaca, 1000± feet, 19°50′, 95°49′]. Distr. – Mexico (Chiapas, San Luis Potosí, Veracruz), Guatemala. Refs. – Gerstaecker, 1868: 100 (*Mydas*); Osten Sacken, 1874: 175 (*Mydas*), 1878: 84 (*Mydas*); Williston, 1898: 55 (in key) (*Mydas*); Aldrich, 1905: 251 (cat.; *Mydas*); Kertész, 1909: 35 (cat.; *Mydas*); d’Andretta, 1951: 8, 73 (*Mydas*); Papavero & Wilcox, 1968: 7 (cat.; *Mydas*); Wilcox, Papavero & Pimentel, 1989: 116, fig. 26 (n. comb.); Papavero & Artigas, 1990: 126 (cat.); Papavero, 1996: 632 (cat.); Papavero & Ibáñez Bernal, 2001: 105 (hist. Mexican dipterol.). HT male, IMZUT.
- colimas** Wilcox, Papavero & Pimentel, 1989: 119, fig. 27. Type-locality: Mexico, Colima, 19 miles north of Manzanillo. Distr. – Mexico (Colima, Oaxaca). Refs. – Papavero & Artigas, 1990: 126 (cat.); Papavero, 1996: 632 (cat.). HT male, CAS.
- lividus** (Curran), 1953b: 2 (*Mydas*). Type-locality: U. S. A., Arizona, Sabino Basin, Santa Catalina Mts. Distr. – U. S. A. (Arizona), Mexico (Sinaloa, Sonora). Refs. – Curran, 1965: 258 (cat.; *Mydas*); Papavero & Wilcox, 1968: 8 (cat.);

- Mydas*); Wilcox, Papavero & Pimentel, 1989: 120, fig. 26 (n. comb.); Papavero & Artigas, 1990: 126 (cat.); Papavero, 1996: 632 (cat.). HT male, AMNH.
- nayaritae** Wilcox, Papavero & Pimentel, 1989: 123, fig. 26. Type-locality: Mexico, Nayarit, Ahuacatlán. Distr. – Mexico (Guerrero, Nayarit). Refs. – Papavero & Artigas, 1990: 126 (cat.); Papavero, 1996: 632 (cat.). HT male, CAS.
- rufiventris** (Macquart), 1850: 364 (1850: 60) (*Mydas*). Type-locality: “Brazil” (in error). Distr. – Mexico (Colima, Guerrero, Jalisco, Nayarit, Puebla, San Luis Potosí, Sinaloa, Veracruz), Guatemala. Refs. – Gerstaecker, 1868: 99 (*Mydas*); Williston, 1898: 56 (*Mydas*; as syn. of *militaris* Gerstaecker, 1868); Hunter, 1901: 252 (cat.; *Mydas*); Williston, 1901: 154 (*Mydas*); Aldrich, 1905: 252 (cat.; *Mydas*); Kertész, 1909: 41 (cat.; *Mydas*); d’Andretta, 1951: 38, figs. 26, 101, 122, 127, 156 (*Mydas*); Papavero & Wilcox, 1968: 9 (cat.; *Mydas*); Wilcox, Papavero & Pimentel, 1989: 127, fig. 27 (n. comb.); Papavero & Artigas, 1990: 126 (cat.); Papavero, 1996: 632 (cat.). HT male, MNHNP.
- vittatus* Macquart, 1850: 364 (1850: 60), pl. 4, fig. 6 (preocc. Wiedemann, 1828). Type-locality: “Mexico”. Refs. – Bellardi, 1861: 7 (*Mydas*); Williston, 1898: 57 (*Mydas*, as syn. of *militaris* Gerstaecker, 1868); Papavero & Ibáñez Bernal, 2001: 86 (hist. Mexican dipterol.). HT female, MNHNP.
- militaris* Gerstaecker, 1868: 99 (*Mydas*; nom. nov. for *Mydas vittatus* Macquart, 1850). Type-locality: “Mexico”. Refs. – Osten Sacken, 1874: 175 (*Mydas*), 1878: 84 (*Mydas*); Williston, 1886: 291 (*Mydas*), 1897: 56 (cat.; *Mydas*), 1898: 54 (in key; *Mydas*), 1901: 268 (*Mydas*); Aldrich, 1905: 251 (cat.; *Mydas*); Kertész, 1909: 41 (cat.; *Mydas*); Johnson, 1926: 134 (*Mydas*); d’Andretta, 1951: 43, figs. 23, 54, 103, 123, 132, 154 (*Mydas*); Curran, 1953: 3 (*Mydas*), 1965: 358 (cat.; *Mydas*); Papavero & Wilcox, 1968: 9 (cat.; *Mydas*). TP ?
- quadrilineatus* Williston, 1898: 56 (*Mydas*). Type-locality: “Mexico”. Refs. – Williston, 1901: 268 (*Mydas*); Aldrich, 1905: 252 (cat.; *Mydas*); Kertész, 1909: 40 (cat.; *Mydas*); Wilcox, Papavero & Pimentel, 1989: 125; Papavero & Artigas, 1990: 126 (cat.); Welch & Kondratieff, 1991c: 784 (syn.); Papavero, 1996: 632 (cat.). ST ?
- wygodzinskyi** Wilcox, Papavero & Pimentel, 1989: 129. Type-locality: Peru, Loreto, Iquitos. Distr. – Peru (Loreto). Ref. – Papavero & Artigas, 1990: 126 (cat.). HT male, AMNH.

Tribe Phyllomydini Papavero & Wilcox, 1974

Phyllomydini Papavero & Wilcox, 1974b: 37, 56. Type-genus, *Phyllomydas* Bigot, 1880.

Genus *Phyllomydas* Bigot, 1880

Phyllomydas Bigot, 1880: xlv. Type-species, *Phyllomydas phyllocerus* Bigot, 1880 (mon.).

Refs. – Wilcox, 1978 (rev.); Artigas & Papavero, 1990: figs. 39-40 (spermathecae).

- currani** Hardy, 1943: 51. Type-locality: U. S. A., Arizona, Douglas. Distr. – U. S. A. (Arizona, New Mexico, Texas), Mexico (Coahuila). Refs. – Curran, 1965: 360 (cat.); Papavero & Wilcox, 1968: 12 (cat.); Cole, 1970: 184 (note); Wilcox & Papavero, 1971: 52, fig. 37; Papavero & Wilcox, 1974b: 56; Wilcox, 1978: 116, figs. 2-3, 18-19, 31; Papavero & Artigas, 1990: 126 (cat.); Papavero, 1996: 632 (cat.). HT male, AMNH.
- eupolis** (Séguy), 1928: 143 (*Mydas*). Type-locality: Mexico, Jalisco, Huejotitán, 1700 m. Distr. – Mexico (Durango, Jalisco, Nayarit). Refs. – Papavero & Wilcox, 1968: 8 (cat.; *Mydas*); Wilcox & Papavero, 1971: 106 (n. comb.); Papavero & Wilcox, 1974b: 56; Wilcox, 1978: 118, figs. 4-5, 16-17, 32; Papavero & Artigas, 1990: 126 (cat.); Papavero, 1996: 632 (cat.). HT female, MNHNP.
- scitulus** (Williston), 1886: 291 (*Mydas*). Type-locality: U. S. A., Arizona. Distr. – U. S. A. (Arizona), Mexico (Sonora). Refs. – Williston, 1898: 54 (in key; *Mydas*); Aldrich, 1905: 252 (cat.; *Mydas*); Kertész, 1909: 41 (cat.; *Mydas*); Johnson, 1926: 133 (in key; *Mydas*); Hardy, 1943: 32 (n. comb.); Curran, 1965: 360 (cat.); Papavero & Wilcox, 1968: 12 (cat.); Cole, 1970: 184 (note); Wilcox & Papavero, 1971: 52, fig. 34; Papavero & Wilcox, 1974b: 56; Wilcox, 1978: 125, figs. 11, 26-27, 36; Papavero & Artigas, 1990: 126 (cat.); Papavero, 1996: 633 (cat.). HT male, UK.

Subfamily Rhaphiomidinae Hendel, 1936

Rhaphiomidinae Hendel, 1936: 1922. Type-genus, *Rhaphiomidas* Osten Sacken, 1877.

Rhaphiomidae Van Dyke, 1940: 266.

“Rhaphiomidinae of Williston” Cazier, 1941: 598 (spelling correct; as syn. of Apioceratinae).

Genus **Rhaphiomidas** Osten Sacken, 1877

Rhaphiomidas Osten Sacken, 1877: 281. Type-species, *Rhaphiomidas episcopus* Osten Sacken (mon.).

Apiomydas Coquillett, 1892: 315. Type-species, *Apiomydas trochilus* Coquillett (mon.).

Raphiomydas Aldrich, 1905: 250, 253, emend.

Refs. – Cazier, 1941: 598 (key), 616, figs. 1-2 (distr.), 1954: 3 (key), 1985: 181-263.

acton maculatus Cazier, 1941: 628 (as species). Type-locality: U. S. A., California, San Diego County, Coronado. Distr. – U. S. A. (California), Mexico (Baja California Norte). Ref. – Cazier, 1954: 4 (in key), 1985: 259, fig. 41, map 7. HT male CAS.

brevirostris Cazier, 1954: 3 (in key), 5. Type-locality: Mexico, Sonora, La Choya. Distr. – U. S. A. (Arizona), Mexico (Sonora). Ref. – Cazier, 1985: 197, figs. 4-6, map 1. HT male, AMNH.

episcopus Osten Sacken, 1877: 281. Type-locality: U. S. A., California (but probably Mexico, Baja California, acc. to Cazier, 1941: 619). Distr. – Mexico (Baja California Sur). Refs. – Townsend, 1895: 603; Painter, 1936: 188; Cazier, 1941: 617 (in key), 618 (in key and text), pl. 2, fig. 10; Rapp Jr. & Snow, 1945: 160 (cat.); Cazier, 1954: 3, 4 (in key), 4 (text), 1985: 234, fig. 27, map 4. HT female MCZ.

ssp. **michelbacheri** Cazier, 1985: 237, fig. 30, map 4. Type-locality: Mexico, Baja California Sur, San Pedro. Distr. – Mexico (Baja California Sur). HT male, CAS.

forficatus Cazier, 1985: 209, figs. 12-14, map 3. Type-locality: Mexico, Baja California Sur, San Ignacio, 560 ft. Distr. – Mexico (Baja California Sur). HT male, CAS.

pachyrhynchus Rogers & Van Dam, 2007: 62, figs. 1a-d, Type-locality: Mexico, Nuevo León, 60 miles south of San Roberto Junction, 5800 ft. Distr. – Mexico (Nuevo León). HT male, USNM.

socorroae Cazier, 1985: 225, figs. 25-26, map 4. Type-locality: Mexico, Baja California Norte, arroyo Socorro, dunes south of San Quintin. Distr. – Mexico (Baja California Norte). HT male CAS.

spineaudus Cazier, 1985: 213, figs. 15-17, map 4. Type-locality: Mexico, Baja California Norte, Millers Landing. Distr. – Mexico (Baja California Norte). HT male CAS.

xanthos Townsend, 1895: 606. Lectotype-locality: Mexico, Baja California Sur, El Taste. Distr. – Mexico (Baja California Sur). Ref. – Painter, 1936: 189; Cazier, 1941: 617 (in key), 619, pl. 2, fig. 8; Rapp Jr. & Snow, 1945: 160 (cat.); Cazier, 1954: 3, 4 (in key), 1985: 182, fig. 28, map 3. LT male UK [des. by Cazier, 1941: 619].

episcopus Osten Sacken of Coquillett, 1891: 85, misident. Ref. – Cazier, 1941: 619.

mellifex Townsend, 1895: 604. Type-locality: Mexico, Baja California Sur, El Taste. Refs. – Painter, 1936: 189 (syn.); Cazier, 1941: 619; Rapp Jr. & Snow, 1945: 160 (cat.). LT female UK [des. by Cazier, 1941: 519].

ssp. **vittatus** Cazier, 1985: 230, fig. 29, map 3. Type-locality: Mexico, Baja California Sur, 27 km northeast of Todos Santos, 900 ft. Distr. – Mexico (Baja California Sur). HT male, LACM.

Subfamily **Rhopaliinae** Papavero & Wilcox, 1974

Rhopaliinae Papavero & Wilcox, 1974a: 9, 16. Type-genus, *Rhopalia* Macquart, 1838.

Rhopalinae Wilcox, 1981: 537.

Genus **Midacritus** Séguy, 1939

Midacritus Séguy, 1939: 269. Type-species, *Midacritus stuardoanus* Séguy, 1939 (orig. des.).

Ref. – Artigas & Palma, 1979 (rev.).

kuscheli Séguy, 1951: 12. Type-locality: Chile, Antofagasta, Toconao. Distr. – Chile (Antofagasta). Refs. - Papavero &

- Wilcox, 1968: 5 (cat.); Artigas & Palma, 1979: 23; Papavero & Artigas, 1990: 126 (cat.). HT female, MNHNP.
- stuardoanus** Séguy, 1939: 270, fig. 29. Type-locality: Chile, Coquimbo, Arenal. Distr. – Chile (From Atacama to Coquimbo, 29°S-30°S). Refs. - Papavero & Wilcox, 1968: 5 (cat.); Artigas & Palma, 1979: 24, figs. 5, 9, 22-31, 72, 82, 99, 103, 104, 148, 149, 153, 164; Papavero & Artigas, 1990: 127 (cat.). ST female, MNHNP.
- wagenknechti** Reed & Ruiz, 1941: 490. Type-locality: Chile, Coquimbo, Elqui, Baños del Toro, 3300 m. Refs. - Papavero & Wilcox, 1968: 5 (cat.); Artigas & Palma, 1979: 26, figs. 32-34, 100-102, 146, 147, 152, 164; Papavero & Artigas, 1990: 127 (cat.). ST male and female, CAS.

Genus **Pseudorhopalia** Wilcox & Papavero, 1971

- Pseudorhopalia** Wilcox & Papavero, 1971: 112. Type-species, *Rhopalia mirandai* d'Andretta & Carrera, 1951 (orig. des.).
- mirandai** (d'Andretta & Carrera), 1951: 7, figs. 1-8 (*Rhopalia*). Type-locality: Brazil, Ceará, Icó. Distr. – Brazil (Ceará). Ref. - Wilcox & Papavero, 1971: figs. 57, 132-134, map 7 (n. comb.); Artigas & Papavero, 1990: figs. 31-32 (spermathecae); Papavero & Artigas, 1990: 127 (cat.). HT male, MZUSP.

References

- Adams, C. F., 1904. Notes on and descriptions of North American Diptera. *Kansas Univ. Sci. Bull.* 2 [= whole series 12]: 433-455 [= *Kansas Univ. Bull.* 4 (6)].
- Agassiz, L., 1846. *Nomenclator zoologici index universalis*, viii + 393 pp. Jent & Gassmann, Soloduri [= Solothurn].
- Aldrich, J. M., 1905. A catalogue of North American Diptera. *Smithson. Misc. Collns* 46 [2 (= publ. 1444)]: 1-680.
- d'Andretta, M. A. V. 1951. Contribuição para o conhecimento da família Mydidae. Gêneros: *Mydas* F., 1794 e *Messiasia*, gen. n. (Diptera). *Papéis avulsos Zool.*, São Paulo 10 (1): 1-76, 195 figs.
- d'Andretta, M. A. V. & M. Carrera, 1951. Sobre alguns Mydidae do Brasil (Diptera). *Arqos Mus. nac.*, Rio de Janeiro 42: 7-11, 4 pls.
- Artigas, J. N., 1970. Los apioceratidos de Chile con la descripción de cinco nuevas especies (Diptera – Apioceratidae). *Boln Soc. Biol. Concepción* 42: 97-122, 38 figs.
- Artigas, J. N., 1973. *Megascelus albobillosus*, nueva especie de apioceratido de Chile y clave para la determinación de las especies de género (Diptera – Apioceratidae). *Boln Soc. Biol. Concepción* 46: 139-144, 7 figs.
- Artigas, J. N. & R. L. Palma, 1979. Los mididos de Chile y una especie argentina (Diptera-Mydidae). *Gayana, Zool.*, Concepción 41: 1-78, 165 figs.
- Artigas, J. N. & N. Papavero, 1990. Studies of Mydidae (Diptera). V. Phylogenetic and biogeographic notes, key to the American genera and illustration of spermathecae. *Gayana (Zool.)* 54 (3-4): 87-116.
- Austen, E. E., 1909. Two remarkable new species of Diptera. *Novit. zool.*, London 16: 129-131.
- Autuori, M., 1952. Fauna das “panelas de lixo” do saubeiro (*Atta sp.*). Mydidae-Diptera. *Ciência e Cultura*, São Paulo 4 (3-4): 127.
- Autuori, M., 1971. Ein Beitrag zur Fauna der Abraumkammern von *Atta rubropilosa* Forel (Formicidae, Hymenoptera). *Zeitschr. angew. Ent.* 68: 76-78, 2 figs.
- Becher, E., 1882. Zur Kenntniss der Mundtheile der Dipteren. *Denkschr. Akad. Wien* 45: 123-162, 4 pls.
- Bellardi, L., 1861. *Saggio di ditterologia messicana. Parte II*: 99 pp., 2 pls. Torino. [Also publ. in *Mem. r. Accad. Sci. Torino* 21: 103-199, 2 pls., 1864].
- Bequaert, M., 1961. Contribution à la connaissance et à la classification des Mydidae (Diptera). *Bull. Inst. r. Sci. nat. Belgique* 37 (19): 1-18, 17 figs.
- Bequaert, M., 1963. Contribution nouvelle à la connaissance des Mydidae de la région Éthiopienne. *Mém. Inst. r. Sci. nat. Belgique* (2nd ser.) 71: 1-68, 15 figs.
- Berg, C., 1899. Apuntes dipterológicos. *Comunic. Mus. nac. Buenos Aires* 1 (4): 124-130.
- Berthold, A. A., 1827. *Latreille's Natürliche Familien des Thierreichs. Aus dem französischen. Mit Anmerkungen und Zusätzen*, x + 606 pp. Gr. H. S. Priv. Landes-Industrie, Weimar.
- Bezzi, M., 1903. Orthorrhapha Brachycera, 396 pp., in Becker, T., M. Bezzi, J. Bischof, K. Kertész & P. Stein, eds., *Katalog der paläarktischen Dipteren* 2: 396 pp. Budapest.
- Bezzi, M., 1917. A maior mosca do mundo. *Chácaras e Quintais*, São Paulo 16: 289-291.
- Bigot, J. M. F., 1857. Diptères nouveaux provenant du Chili. *Ann. Soc. ent. France* (3) 5: 277-308, pls. 6-7.
- Bigot, J. M. F., 1880. [Diagnoses de trois genres nouveaux de diptères]. *Ann. Soc. ent. France* (5) 10 (Bull.): xlvi-xlviii.
- Bigot, J. M. F., 1890. Diptères exotiques nouveaux ou peu connus. 36e. partie. XLV: Dolichopodi. Essai d'une classification générale. *Ann. Soc. ent. France* (6) 10: 261-296.
- Blanchard, E., 1852. Orden IX. Dípteros, pp. 327-468, in Gay, C., ed., *Historia física y política de Chile. Zoología* 7: 471 pp. Paris.
- Brauer, F. M., 1885. Systematische-zoologische Studien. *Sitzber. Akad. Wiss. Wien, math.-naturw. Klasse* 91: 237-413, 1 pl.
- Brèthes, J., 1924. Sur quelques diptères chiliens. *Revta chilena Hist. nat.* 28: 104-111.
- Burmeister, H. C. C., 1829. *De insectorum systemate naturali*, 40 pp. Grunert, Halle.
- Carrera, M., 1944. Relação de alguns dípteros capturados em Monte Alegre, Estado de São Paulo. *Papéis avulsos Zool.*, São Paulo 6 (5): 37-50.
- Carrera, M. & M. A. V. d'Andretta, 1948. Descrição de um novo gênero de Mydidae do Chile e redescricao do gênero *Megascelus* (Apioceratidae) (Diptera). *Revta Ent.*, Rio de Janeiro 19: 489-497, 11 figs.
- Cazier, M. A., 1941. A generic review of the family Apioceratidae, with a revision of the North American species (Diptera – Brachycera). *American Midland Naturalist* 23: 589-631, 2 figs., 4 pls.
- Cazier, M. A., 1954. New species and notes on flies belonging to the genera *Rhaphiomydas* and *Apiocera* (Diptera, Apioceratidae). *American Mus. Novitates* 1696: 1-10.
- Cazier, M. A., 1985. A revision of the North American flies belonging to the genus *Rhaphiomidas* (Diptera, Apioceridae). *Bull. American Mus. nat. Hist.*, New York 182: 181-263.
- Cekalovic T. & J. A. Artigas, 1974. Catálogo de los tipos de Insecta depositados en la colección del Departamento de Zoología de la Universidad de Concepción (INCO) (Enero, 1969 a Enero, 1974) (Parte II). *Boln Soc. Biol. Concepción* 47: 233-346.
- Chinery, M., 1973. *A field guide to the insects of Britain & northern Europe*, 352 pp. William Collins Sons & Co., Glasgow.
- Claude-Joseph, Frère [Hno. Javier], 1928. Recherches biologiques sur les prédateurs du Chili. *Ann. Sci. nat., Zool.* 11 (1): 67-207, 68 figs.

- Cockerell, T. D. A., 1913. The first fossil mydaid fly. *The Entomologist* 46: 207-208.
- Cole, 1970. *The flies of western North America*, xii + 693 pp. Berkeley & Los Angeles ("1969").
- Coquillett, D. W., 1891. A new *Rhaphiomidas* from California. *West America Sci.* 7 (56): 84-86.
- Coquillett, D. W., 1892. A new genus of Diptera allied to *Rhaphiomidas*. *Canadian Entomologist* 24: 314-315.
- Coquillett, D. W., 1904. Reports on Californian and Nevadan Diptera. I, in Baker, C. F., Diptera. *Invertebrata pacifica* 1: 17-39.
- Cresson, E. T., Jr., 1919. Dipterological notes and descriptions. *Proc. Acad. nat. Sci. Philadelphia* 71: 171-189.
- Curran, C. H., 1934a. *The families and genera of North American Diptera*, 512 pp., 235 figs., 2 pls. New York.
- Curran, C. H., 1951. The West Indian species of *Mydas* and *Proctacanthus* (Diptera: Mydidae and Asilidae). *American Mus. Novitates*, New York 1507: 1-9.
- Curran, C. H., 1953a. The Asilidae and Mydidae of the Bimini Islands, Bahamas, British West Indies (Diptera). *American Mus. Novitates* 1644: 1-6.
- Curran, C. H., 1953b. Notes and descriptions of some Mydidae and Syphidae (Diptera). *American Mus. Novitates* 1645: 1-15.
- Curran, C. H., 1965. Family Mydidae (Mydidae, Mydasidae), pp. 357-360, in Stone, A., C. W. Sabrosky, W. W. Wirth, R. H. Foote & J. R. Coulson, eds., A catalog of the Diptera of America North of Mexico. [U. S. Dept. Agric., Agric. Res. Serv.] *Handbook* 276: 1696 pp. Washington, D. C.
- Fabricius, J. C., 1794. *Entomologia systematica emendata et aucta* 4: 472 pp. Hafniae [= Copenhagen].
- Fitzgerald, S. J. & B. C. Kondratieff, 1995. A review of the mydid genus *Pseudonomoneura* Bequaert (Diptera: Mydidae), with the description of two new species. *Proc. ent. Soc. Washington* 97 (1): 22-34.
- Fitzgerald, S. J. & B. C. Kondratieff, 1997. A new species of *Pseudonomoneura* Bequaert (Diptera: Mydidae) from Mexico. *Proc. ent. Soc. Washington* 99 (1): 171-173.
- Fitzgerald, S. J. & B. C. Kondratieff, 1998. A new species of mydas fly (Diptera: Mydidae) from Mexico and a newly recorded species from Mexico. *Proc. ent. Soc. Washington* 100 (3): 464-466.
- Gerstaecker, A., 1868. Systematische Uebersicht der bis jetzt bekannt gewordenen Mydaiden (Mydasii Latr.). *Stettin. ent. Ztg* 29: 65-103, 1 pl.
- Grossbeck, J. A., 1912. Types of insects, except Lepidoptera and Formicidae, in the American Museum of Natural History, additional to those previously listed. *Bull. American Mus. nat. Hist.*, New York 31: 353-379.
- Guérin-Méneville, F. E., 1835. Pls. 92-104, in his *Iconographie du règne animal de G. Cuvier* 1 (Planches des animaux invertébrés, Insectes): 104 pls. Paris.
- Hansen, H. J., 1883. *Fabrica oris dipterorum* 5: 162-169. Copenhagen.
- Hardy, D. E., 1943. Studies in *Phyllomydas* (Mydidae: Diptera). *J. Kansas ent. Soc.* 16: 50-52.
- Hardy, D. E., 1944. New Asilidae and Mydidae (Diptera) in the Snow Collection. *Canadian Entomologist* 86: 226-230, 1 pl.
- Hardy, D. E., 1950. The Nearctic *Nomoneura* and *Nemomydas* (Diptera: Mydidae). *Wasmann J. Biol.* 8: 9-37, 2 pls.
- Helsdingen, J. van, 1996. An annotated list of the Wiedemann types in the Leiden Museum. *Studia dipterol.* 3 (2): 171-193.
- Hendel, F., 1936-1937. 16. Ordnung der Pterygogenea: Diptera – Fliegen, pp. 1729-1756, 1757-1884, 1885-1980 (1936), 1981-2140 (1937), in *Kükenthal's Handbuch der Zoologie* 4 (2). Walter de Gruyter, Berlin & Leipzig.
- Hine, J. S., 1903. Some Diptera from Arizona. *Canadian Entomologist* 35: 244-246.
- Hunter, W. D., 1900-1901. A catalogue of the Diptera of South America. Part II. *Trans. American ent. Soc.* 27: 121-155.
- Johnson, C. W., 1926. A revision of some of the North American species of Mydidae. *Proc. Boston Soc. nat. Hist.* (1925-1928) 38: 131-145, 1 pl.
- Johnson, C. W., 1933. A new species of the genus *Mydas*. *Psyche*, Cambridge 39: 72.
- Kertész, K., 1909. *Catalogus dipterorum hucusque descriptorum. (IV). Oncodidae, Nemestrinidae, Mydidae, Asilidae* 4: 348 pp. Budapest.
- Kondratieff, B. C. & R. J. Carr, 2001. A new species of *Mitrodetus* (Diptera: Mydidae) from Argentina. *Ent. News* 112 (4): 221-224.
- Kondratieff, B. C. & S. J. Fitzgerald, 1996. Review of the mydid genus *Opomydas* Curran (Diptera, Mydidae). *Ann. ent. Soc. America* 89 (3): 348-353.
- Kondratieff, B. C. & D. E. Perez-Gelabert, 2004. A new species of *Nemomydas* and a new record for *Baliomydas gracilis* (Diptera: Mydidae) from Hispaniola. *Florida Entomologist* 87 (3): 380-382, 3 figs.
- Kondratieff, B. C. & J. L. Welch, 1990. The *Nemomydas* of southwestern United States, Mexico, and Central America (Diptera: Mydidae). *Proc. ent. Soc. Washington* 92 (3): 471-482.
- Latreille, P. A., 1796. *Précis des caractères des insectes, disposés dans un ordre naturel*, 179 pp. Paris, "An V".
- Latreille, P. A., 1809. *Genera crustaceorum et insectorum. Tomus quartus et ultimus*, 399 pp. A. Koenig, Parisiis et Argentorati [= Paris & Strasbourg].
- Latreille, P. A., 1810. *Considérations générales sur l'ordre naturel des animaux*, 444 pp., Paris.
- Latreille, P. A., 1829. *Les crustacés, les arachnides et les insectes. Le règne animal distribué d'après son organisation, pour servir de base à l'histoire naturelle des animaux, et d'introduction à l'anatomie comparée, par une réunion de disciples de Cuvier* (2nd ed.), Paris.
- Leach, W. E., 1815. Entomology, pp. 57-172, in Brewster, D., ed., *The Edinburgh encyclopaedia* 9 (1) (ENG-FLU): 1-384. Baldwin, Edinburgh.
- Lichtenstein, A. A. H., 1796. *Catalogus Musaei Zoologici ditissimi Hamburgi III 1796 auctionis lege*

- distrahendi*. 3 (Insecta): 222 pp. Hamburg.
- Loew, H., 1866. Diptera Americae septentrionalis indigena. Centuria septima. *Berlin. ent. Zeitschr.* 10: 1-54. [Also publ. in Loew, 1872b].
- Loew, H., 1872a. Diptera Americae septentrionalis indigena. Centuria decima. *Berlin ent. Zeitschr.* 16: 19-115. [Also publ. in Loew, 1872b].
- Loew, H., 1872b. *Diptera Americae septentrionalis indigena* 2 (Centuriae 6-10): 300 pp. Berlin.
- Lynch Arribáizaga, E., 1883. Catálogo de los dípteros hasta ahora descritos que se encuentran en las repúblicas del río de La Plata. *Boln Acad. Cienc. nat. Córdoba* 4: 109-152.
- Macquart, J., 1834. *Histoire naturelle des insectes. Diptères* 1: 578 pp., 12 pls. [In N. E. Roret, ed., *Suites à Buffon*]. Paris.
- Macquart, J., 1838. *Diptères exotiques nouveaux ou peu connus* 1 (2): 5-207, 14 pls. [Also publ. in *Mém. Soc. r. Sci. Agric. Arts Lille* 1838 (2): 121-323, 14 pls., 1839].
- Macquart, J., 1846. Diptères exotiques nouveaux ou peu connus. 1er. Supplément. *Mém. Soc. r. Sci. Agric. Arts Lille* (1845) 1844: 133-364, 20 pls. [Also publ. sep., as Supplément I, pp. 5-238, 20 pls., Paris, 1846].
- Macquart, J., 1848. Diptères nouveaux ou peu connus. Suite du 2me. supplément [i. e., 3e. supplément]. *Mém. Soc. r. Sci. Agric. Arts Lille* 1847 (2): 161-237, 7 pls. [Also publ. sep., pp. 1-77, 7 pls., Paris, 1849].
- Macquart, J., 1850. Diptères nouveaux ou peu connus. 4e. supplément (part). *Mém. Soc. r. Sci. Agric. Arts Lille* 1849: 307-465 (text), 466-479 (expl. of figs., index), pls. 1-14. [Also publ. sep., pp. 5-161, Paris].
- Marschall, A. F. de, 1873. *Nomenclator zoologicus continens nomina systematica generum animalium tam viventium quam fossilium, secundum ordinem alphabeticum disposita*, v + 482 pp. C. Ueberreuter, Vindobonae [= Wien].
- Meyer, R. P., T. L. McKenzie & F. G. Zalom, 1984. Association of *Mydas xanthopterus* (Loew) (Diptera: Mydidae) and *Pepsis formosa* Say (Hymenoptera: Pompilidae) in the Chiricahua Mountains of southeastern Arizona. *Pan-Pacific Entomologist* 60 (4): 357.
- Nelson, J. W., 1986. Ecological notes on male *Mydas xanthopterus* (Loew) (Diptera: Mydidae) and their interactions with *Hemipepsis ustulata* Dahlbohm (Hymenoptera: Pompilidae). *Pan-Pacific Entomologist* 62 (4): 316-322.
- Newman, E., 1834. Attempted division of British insects into natural orders. *Ent. Mag.* 2: 379-431.
- Olivier, G. A., 1811. Insectes [i. e., Arthropoda], in Société de Gens de Lettres, de Savants et d'Artistes, *Encyclopédie méthodique. Histoire Naturelle* 8 (5): 1-360. Paris.
- Osten Sacken, 1874. A list of the Leptidae, Mydidae and Dasyopogonina of North America. *Bull. Buffalo Soc. nat. Hist.* 2 ("1873"): 169-175, 186-187.
- Osten Sacken, C. R., 1877. Western Diptera: Descriptions of new genera and species of Diptera from the region west of the Mississippi and especially from California. *Bull. U. S. geol. geogr. Surv. Terr.* 3: 189-354.
- Osten Sacken, C. R., 1878. Catalogue of the described Diptera of North America [2nd ed.]. *Smithson. misc. Collns* 16 (2 [= publ. 270]): 1-276.
- Osten Sacken, C. R., 1886. Diptera, Vol. 1 (part), pp. 1-24, 25-48, 49-72, 73-104, 105-128, pls. 1-2 (cont.), in Goldman, F. D. & O. Salvin, eds., *Biologica centrali-americana. Zoologia-Insecta-Diptera* 1: 378 pp., 6 pls. London.
- Osten Sacken, C. R., 1895. Midas or Mydas. A contribution to entomological nomenclature. *Berlin. ent. Zeitschr.* 40: 345-350.
- Ovtshinnikova, O. G., 2003. Systematic position of the genus *Rhaphiomydas* Osten Sacken, 1877 (Diptera, Mydidae) in the superfamily Asiloidea based on the structure of the muscles of male genitalia. *Ent. Obozr.* 82 (3): 771-778.
- Painter, R. H., 1936. The family Apioceratidae (Diptera) in North America. *Kansas Univ. Sci. Bull.* 37: 187-203.
- Papavero, B., 1971. *Essays on the history of Neotropical Dipterology, with special reference to collectors (1750-1905)* 1: 1-216. Museu de Zoologia, Universidade de São Paulo, São Paulo.
- Papavero, N., 1976. An additional new Brazilian species of *Messiasia* (Diptera, Mydidae). *Papéis avulsos Zool., São Paulo* 29 (21): 181-183.
- Papavero, N., 1996. Mydidae (Diptera), pp. 619-634, in Llorente-Bousquets, J., A. García Aldrete & E. Gonzalez, eds., *Biodiversidad, taxonomía y biogeografía de artrópodos de México: Hacia una síntesis de su conocimiento*. Universidad Nacional Autónoma de México, México, D. F.
- Papavero, N. & J. N. Artigas, 1990. Studies of Mydidae (Diptera). VI. Catalogue of the American species. *Gayana (Zool.)* 54 (3-4): 117-134.
- Papavero, N. & S. Ibáñez-Bernal, 2001. Contributions to a history of Mexican Dipterology. - Part I. Entomologists and their work before the *Biologia Centrali-Americana*. *Acta zool. mexicana* (n. s.) 84: 65-173, 10 figs.
- Papavero, N. & S. Ibáñez-Bernal, 2003. Contributions to a history of Mexican Dipterology. Part II. The *Biologia Centrali-Americana*. *Acta zool. mexicana* (n. s.) 88: 143-232, 4 figs.
- Papavero, N., T. Pimentel & J. A. Rafael, 2002. Insecta – Diptera – Mydidae (Mydidae, Mydasidae). *Fauna da Amazônia brasileira*, Belém 2: 1-15.
- Papavero, N. & J. Wilcox, 1968. Family Mydidae (Mydidae, Mydasidae), in Papavero, N., ed., *A catalogue of the Diptera of the Americas south of the United States* 34: 1-20. Departamento de Zoologia, Secretaria da Agricultura, São Paulo.
- Papavero, N. & J. Wilcox, 1974a. Studies of Mydidae systematics and evolution. I. A preliminary classification in subfamilies, with the description of two new genera from the Oriental and Australian regions. *Arqs Zool., São Paulo* 25 (1): 1-34, 3 tables, 4 maps, 14 figs.
- Papavero, N. & J. Wilcox, 1974b. Studies of Mydidae systematics and Evolution. II. Classification of the Mydinae, with description of a new genus and a revision of *Ceratomydas* Williston. *Arqs Zool., São Paulo* 25

- (1): 35-60, 10 figs.
- Paramonov, S. J., 1948. Ueber die richtige Stellung der Gattung *Dolichogaster* Macq. (Mydidae) und *Megascelus* Philippi (Apioceridae) (Diptera). *Revta Ent.*, Rio de Janeiro 19: 357-360.
- Pascoe, F. P., 1880. *Zoological classification* [Ed. 2], viii + 328 pp. John van Voorst, London.
- Perty, M., 1833. Insecta brasiliensia, pp. 125-224, pls. 25-40, in his *Delectus animalium articulatum quae ex itinere per Brasiliam, annis MDCCCXVII-MDCCCXX jussu et auspiciis Maximiliani Josaepi I. Bavariae Regis augustissimi peracto collegerunt Dr. J. B. de Spix et Dr. C. F. Ph. De Martius*, 44 + 224 pp., 40 pls. Monachii [= München], "1830-1834".
- Perty, M., 1841. *Allgemeine Naturgeschichte als philosophische und Humanitäts-Wissenschaft für Naturforscher, Philosophen und das höher gebildete Publikum* 3: 12 + pp. 467-1119. C. Fischer, Bern.
- Philippi, R. A., 1865. Aufzählung der chilenischen Diptera. *Verh. zool.-bot. Ges. Wien* 15: 595-782, pls. 23-29.
- Rafinesque, C. S., 1815. *Analyse de la nature, ou tableau de l'univers et des corps organisés*, 224 pp. Palermo.
- Rapp, W. F., Jr. & W. E. Snow, 1945. Catalogue of Apioceridae of the world. *Pan-Pacific Entomologist* 21 (4): 157-161.
- Reed, E. C. & P. Ruiz, 1941. Nuevas especies de Mydidae de Chile (Diptera). *Revta Ent.*, Rio de Janeiro 12 (3): 487-493.
- Röder, V. von, 1883. Bemerkungen über *Dolichogaster brevicornis* Wied. und *Nemestrina albofasciata* Wied. *Stettin. ent. Ztg* 44: 426-427.
- Rogers, R. & M. H. van Dam, 2007. Two new species of *Rhaphiomydas* (Diptera: Mydidae). *Zootaxa*, Auckland 1664: 61-68, 3 figs.
- Rondani, C., 1841. *Progetto di una classificazione in famiglie degli insetti ditteri europei. Memoria terza per servir alla ditterologia italiana*, 28 pp. Donati, Parma.
- Rondani, C., 1850. Osservazioni sopra alcune specie di esapodi ditteri del Museo Torinese. *Nuovi Ann. Sci. nat. Rend. Accad. Sci. Ist. Agr. Bologna* (3) 2: 165-197.
- Rotschild, L. W. 1910. [Note to Austen's Pl. XV]. *Novitates zoologicae* 28: 461.
- Sabrosky, C. W., 1999. Family-group names in Diptera. An annotated catalog. Bibliography by F. Christian Thomson, Neal L. Evenhuis & Curtis W. Sabrosky. *Myia* 10: 1-576. [North American Dipterists' Society & Backhuys Publishers, Leiden].
- Samouelle, G., 1819. *The entomologist's useful compendium*, 496 pp., 12 pls. Thomas Boys, London.
- Schiner, I. R., 1868. Diptera, in [Wüllerstorff-Urbair, in charge], *Reise der österreichischen Fregatte Novara um die Erde. Zool. Theil. Diptera* 2 (1, B): 388 pp., 4 pls. Wien.
- Séguy, E., 1926. Diptères (Brachycères). *Faune de France* 13: 1-308.
- Séguy, E., 1928. Étude sur quelques Mydidae nouveaux ou peu connus. *Encycl. ent. (B, II) Diptera* 4: 129-156, 44 figs.
- Séguy, E., 1939. Étude sur quelques Mydidae du Chili. *Revta chilena Hist. nat.* 42 (1938): 266-275, fig. 29, pl. 16.
- Séguy, E., 1951. Deux nouveaux Mydidae chiliens (Dipt.). *Revue française Ent.* 18: 12-13.
- Stuardo Ortiz, C., 1946. *Catálogo de los dípteros de Chile*, 250 pp. Ministerio de Agricultura, Santiago.
- Thunberg, C. P., 1818. *Mydas gigantea* beskrioven. *Kongl. Vetensk. Akad. Handl.* 1818: 246-248, fig. 9.
- Townsend, C. H. T., 1895. On the Diptera of Baja California, including some species from adjacent regions. *Proc. California Acad. Sci.* (2) 4: 601-607.
- Van Dyke, E. C., 1940. The origin and distribution of the coleopterous insect fauna of North America. *Proc. 6th Pacific Sci. Congr.* 4: 255-268.
- Wagenknecht, R., 1944. Consideraciones zoogeográficas de los midasideos chilenos. *Revta chilena Hist. nat.* 48: 131-132.
- Walker, F., 1837. Descriptions, etc., of the insects collected by Cpt. P. P. King, R. N., F. R. S., in the survey of the Straits of Magellan. Diptera. *Trans. Linn. Soc. London* 17: 331-359.
- Walker, F., 1848. *List of the specimens of dipterous insects in the collection of the British Museum* 2: 231-484. London.
- Walker, F., 1851. *Insecta Britannica. Diptera* 1: vi + 314 pp., 10 pls. Reeve & Benham, London.
- Walker, F., 1854. *List of the specimens of dipterous insects in the collection of the British Museum* 5 (Suppl. I): 1-330, 2 figs.; 6 (Suppl. II): 301-506, 8 figs. British Museum, London.
- Walker, F., 1855. *List of the specimens of dipterous insects in the collection of the British Museum* 6. (Suppl. II): 331-506. British Museum, London.
- Welch, J. L. & B. C. Kondratieff, 1990. Review of the genus *Mydas* (Diptera: Mydidae): The *xanthopterus* group of southwestern United States and Mexico. *Ann. ent. Soc. America* 83 (2): 142-148.
- Welch, J. L. & B. C. Kondratieff, 1991a. A new species of *Nemomydas* (Diptera: Mydidae) from Texas. *J. Kansas ent. Soc.* 63 (4) (1990): 643-645, 1 fig.
- Welch, J. L. & B. C. Kondratieff, 1991b. The Mydidae (Diptera) of Costa Rica. *Pan-Pacific Entomologist* 67 (2): 124-134.
- Welch, J. L. & B. C. Kondratieff, 1991c. Nomenclatorial changes in the *xanthopterus* group of the genus *Mydas* (Diptera: Mydidae). *Proc. ent. Soc. Washington* 93 (3): 784-785.
- Westwood, J. O., 1841. Pls. XIII and XIV. Synopsis of the dipterous family Midasidae, with descriptions of numerous species, pp. 49-56, pls. 13-14, in his *Arcana entomologica: Or illustrations of new, rare, and interesting insects* 1: 192 pp., 48 pls. London, "1845".
- Wiedemann, C. R. W., 1821. *Diptera exotica*, 244 pp., 1 fig., 2 pls. Kiliae [= Kiel].
- Wiedemann, C. R. W., 1828. *Aussereuropäische zweiflügelige Insekten* 1: xxxii + 608 pp., 7 pls. Hamm.
- Wiedemann, C. R. W., 1830. *Aussereuropäische zweiflügelige Insekten* 2: xii + 684 pp., 5 pls. Hamm.

- Wiedemann, C. R. W., 1831. Monographia generis Midarum. *Verh. leopold.-carol. Akad. Naturf.* 15 (ser. 2, 5 [= *Verh.* 7]) (2): 19-56, pls. 52-54.
- Wilcox, J., 1978. Studies of Mydidae (Diptera) systematics and evolution. IVa. The genus *Phyllomydas* Bigot (Mydinae: Phyllomydini). *Arqos Zool.*, São Paulo 29 (2): 111-132, 37 figs.
- Wilcox, J., 1981. Family Mydidae, pp. 533-540, in McAlpine, J. F., B. V. Peterson, E. Shewell, G. E. Teskey, J. R. Vockeroth & D. M. Wood, eds. Manual of Nearctic Diptera. *Research Branch, Agriculture Canada. Monograph 27.*
- Wilcox, J. & N. Papavero, 1971. The American genera of Mydidae (Diptera), with the description of three new genera and two new species. *Arqos Zool.*, São Paulo 21 (2): 41-119, 134 figs., 7 maps, 2 tables.
- Wilcox, J. & N. Papavero, 1975. Studies of Mydidae (Diptera) systematics and evolution. III. The genus *Messiasia* d'Andretta in the Americas (Mydinae). *Arqos Zool.*, São Paulo 26 (1): 1-47, 35 figs.
- Wilcox, J., N. Papavero & T. Pimentel, 1989. *Studies of Mydidae (Diptera). IVb. Mydas and allies in the Americas (Mydinae: Mydini).* Museu Paraense Emílio Goeldi, Belém.
- Williston, S. W., 1886. Dipterological notes and descriptions. *Trans. American ent. Soc.* 13: 287-307.
- Williston, S. W., 1898. Notes and descriptions of Mydidae. *Trans. Kansas Acad. Sci.* 15: 53-58.
- Williston, S. W., 1901. Supplement (part), pp. 249-264, 265-272, 273-296, 297-332, pls. 4-5, pl. 6 (figs. 1-6), in Godman, F. D. & O. Salvin, eds., *Biologia Centrali Americana. Zoologia – Insecta – Diptera* 1: 378 pp., 6 pls. London.
- Zikan, J. F., 1942. Also sobre a simbiose de *Mydas* com *Atta*. *Rodriguésia*, Rio de Janeiro 13 (2): 105-136.
- Zikan, J. F., 1944. Novas observações sobre a biologia de *Mydas* (Dipt.) e sua relação com os formigueiros de saúva. *Bolm Minist. Agric.*, Rio de Janeiro 33: 43-55.

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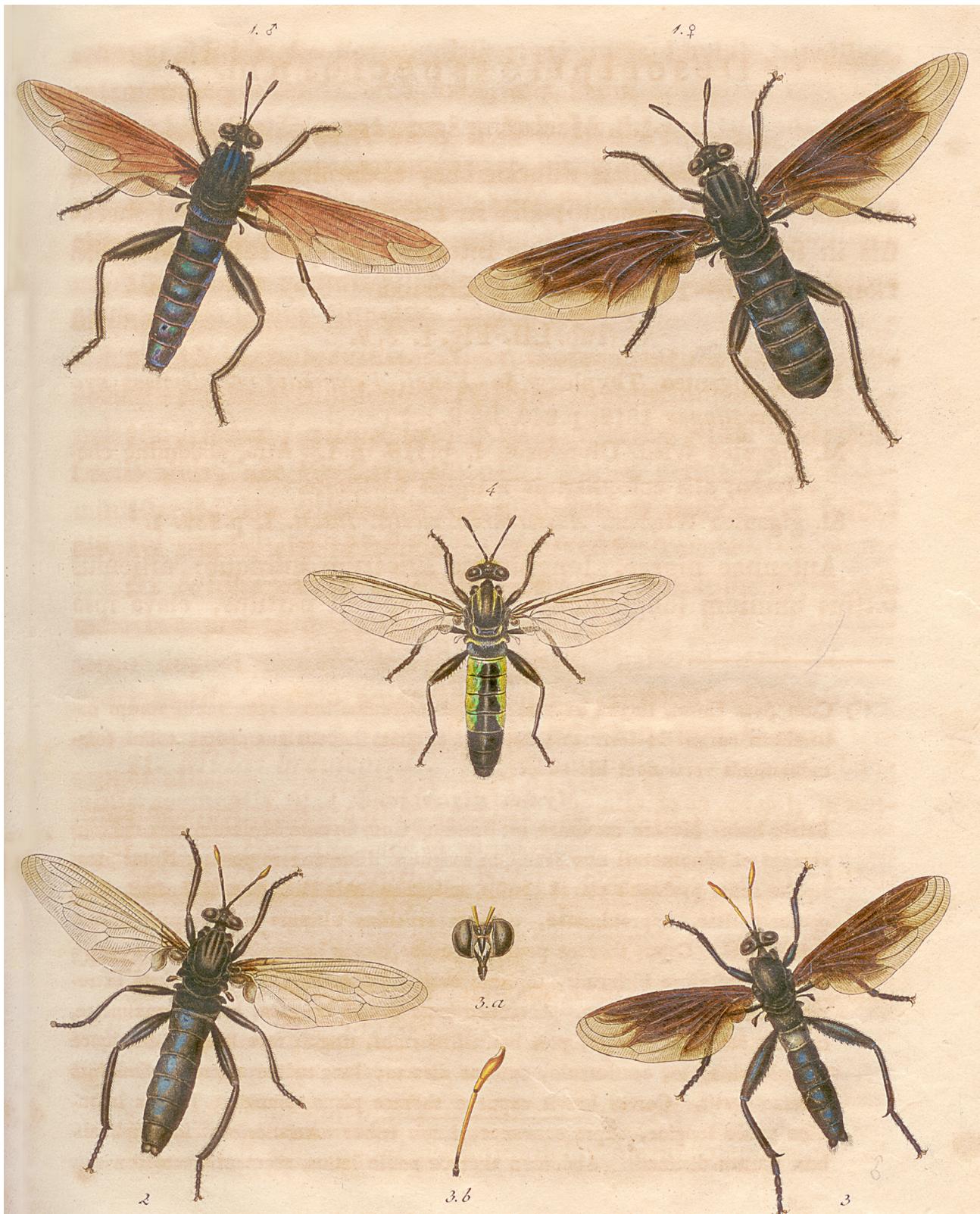


Plate I. 1. *Protomydas coerulescens* (Olivier, 1811) [as *Midas giganteus* Thunberg, 1818]. 2. *Protomydas rubidapex* (Wiedemann, 1830). 3. *Gauromydas mystaceus* (Wiedemann, 1830), a: head, b: antenna. 4. *Chrysomydas nitidulus* (Olivier, 1811). [Apud Wiedemann, 1831: pl. LII].

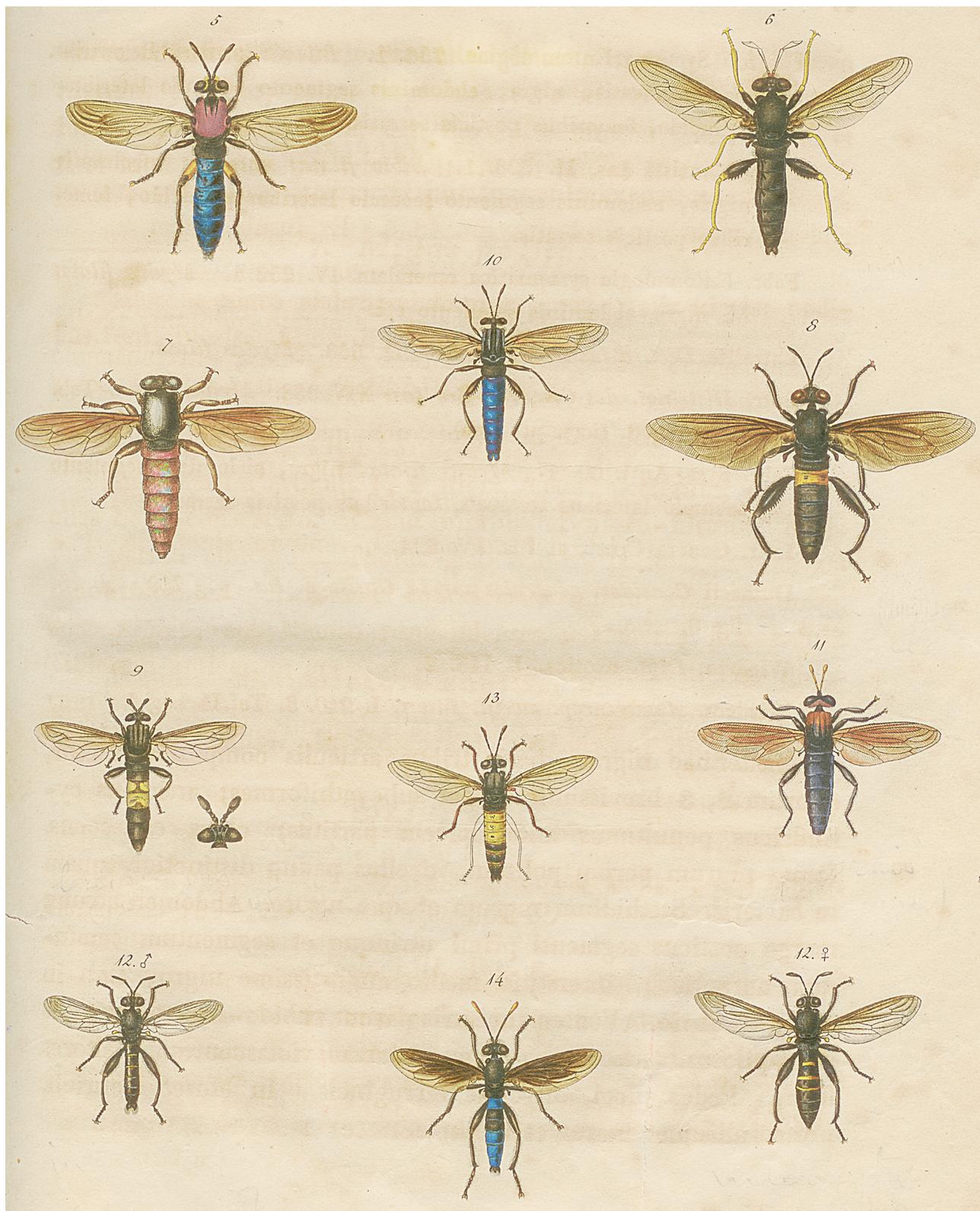


Plate II. 5. *Baliomydas tricolor* (Wiedemann, 1830). 6. *Mydas tibialis* Wiedemann, 1828. 7. *Mapinguari politus* (Wiedemann, 1828). 8. *Mydas clavatus* (Drury, 1773) [as *Midas filatus* (Fabricius, 1775)]. 9. *Dolichogaster brevicornis* (Wiedemann, 1821). 10. *Protomydas leucops* (Wiedemann, 1830). 11. Not Neotropical. 12. *Mydas interruptus* Wiedemann, 1830 (male and female). 13. *Mydas fulvifrons* Illiher, 1801. 14. *Gauromydas apicalis* (Wiedemann, 1830). [*Apud* Wiedemann, 1831: pl. LIII].



Plate III. 19. *Messiasia virgata* (Wiedemann, 1830). 20. *Messiasia notospila* (Wiedemann, 1828). [Apud Wiedemann, 1831: pl. LIV, figs. 10 and 12].

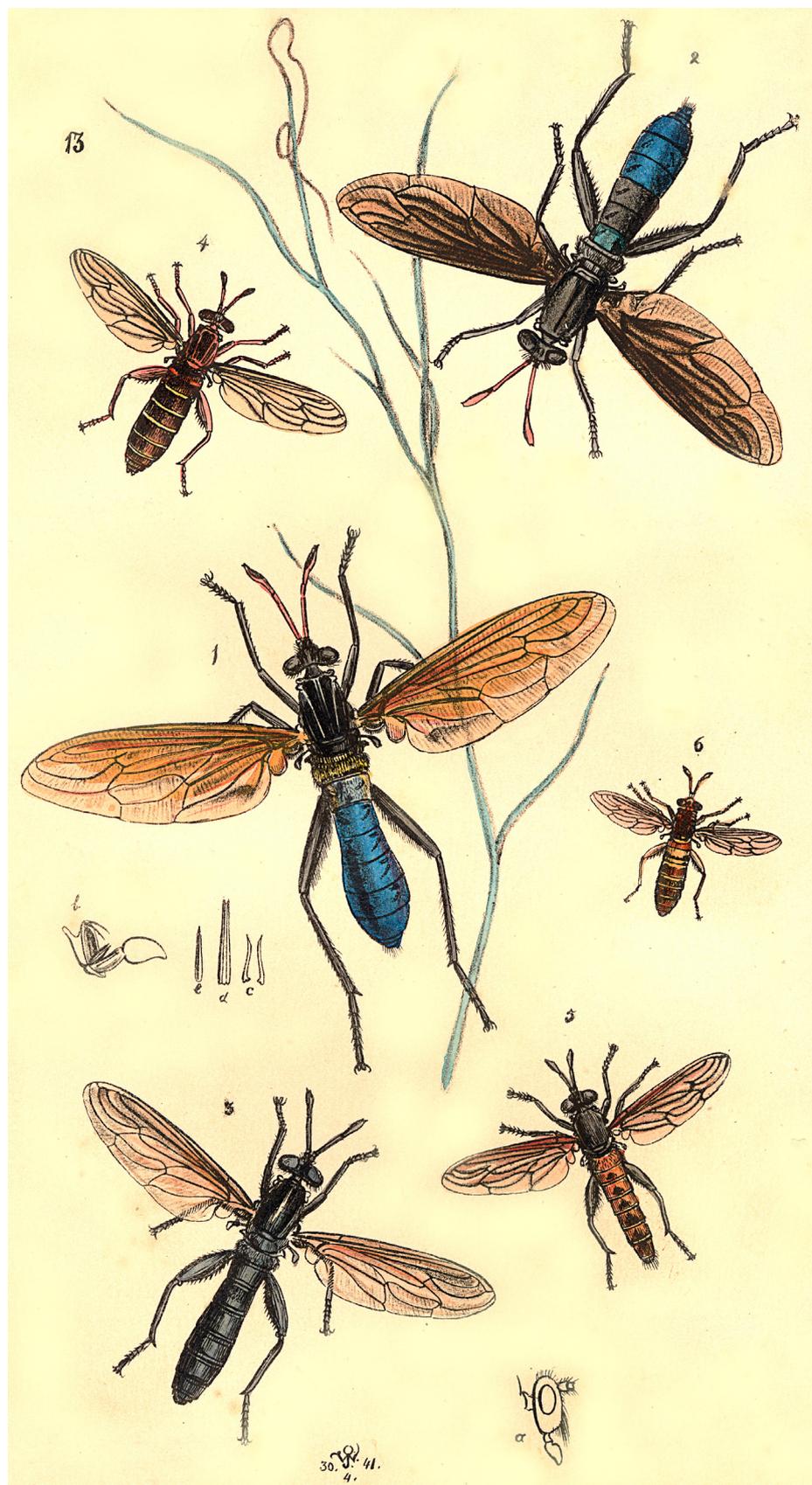


Plate IV. 1. *Protomydas rudidapex* (Wiedemann, 1830) [as *Midas dives* Westwood, 1841]. 2. *Gauromydas apicalis* (Wiedemann, 1830) [as *Mydas annulicornis* Westwood, 1841]. 3. *Ceratomydas crassipes* (Westwood, 1841) [as *Midas*]. 4. *Mydas maculiventris* Westwood, 1835 [as *Midas pachygaster* Westwood, 1841]. 5. *Baliomydas tricolor* (Wiedemann, 1830) [as *Midas*]. 6. *Mydas tibialis* Wiedemann, 1828. [Apud Westwood, 1841, pl. XIII].

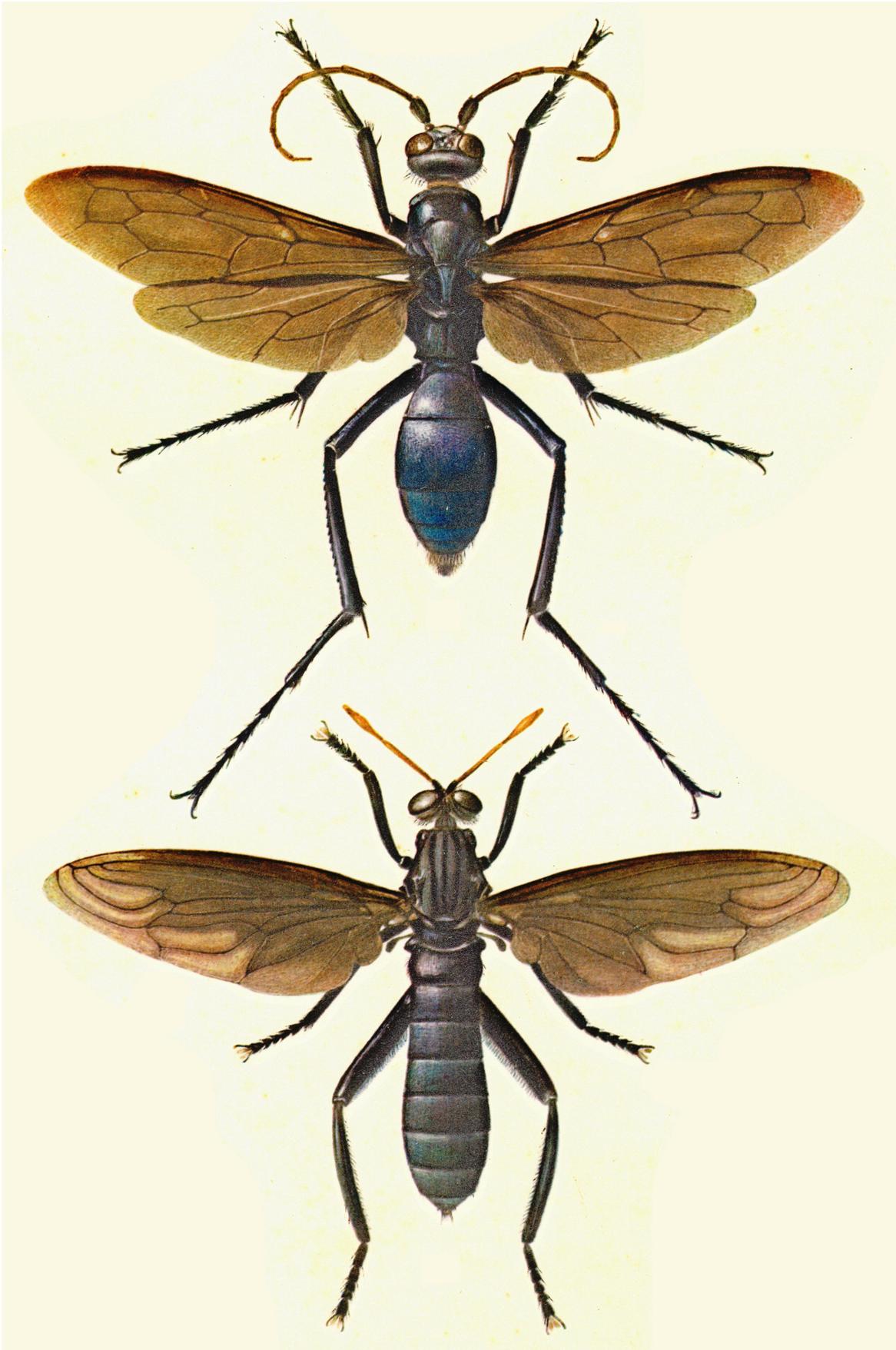


Plate V. *Pepsis heros* (Fabr., 1798) (Hymenoptera, Pompilidae) and its mimic, *Gauromydas heros* (Perty, 1833) [as *Mydas praegrandis* Austen, 1909] (modified from Austen, 1910, pl. XV).

