

NOTA CIENTÍFICA

New records of biting midges from Argentina and Chile (Diptera: Ceratopogonidae)

SPINELLI, Gustavo R., Pablo I. MARINO and Ana L. GADDI

División Entomología, Museo de La Plata, Paseo del Bosque s/n, 1900 La Plata, Argentina;
e-mail: spinelli@fcnym.unlp.edu.ar

Nuevos registros de Ceratopogonidae (Diptera) para Argentina y Chile

■ **RESUMEN.** Se brindan nuevas citas de 22 especies de Ceratopogonidae para Argentina y Chile, de las cuales 12 pertenecen a *Forcipomyia* Meigen, dos a *Atrichopogon* Kieffer y *Culicoides* Latreille, y una a *Leptoconops* Skuse, *Dasyhelea* Kieffer, *Paradasyhelea* Macfie, *Alluaudomyia* Kieffer, *Macrurohelea* Ingram & Macfie y *Palpomyia* Meigen. *Forcipomyia* (F.) *harpegonata* Wirth & Soria, F. (F.) *pictoni* Macfie, F. (F.) *sexvittata* Wirth, F. (*Lepidohelea*) *annulatipes* Macfie, F. (L.) *kuanoskeles* Macfie, F. (*Phytohelea*) *jocosa* Saunders y F. (*Thyridomyia*) *nana* (Macfie) son registradas por primera vez para Argentina, mientras que *Leptoconops ricardoi* Ronderos & Spinelli, *Atrichopogon endemicus* Spinelli & Marino, *Culicoides chacoensis* Spinelli & Wirth, *Paradasyhelea brevipalpis* (Ingram & Macfie) y *Alluaudomyia schnacki* Spinelli lo son para Chile. Se excluye *Forcipomyia calchaqui* Spinelli & Marino del subgénero *Thyridomyia* Saunders y se la asigna a *Synthyridomyia* Saunders.

PALABRAS CLAVE. Polvorines. Diptera. Ceratopogonidae. Nuevas citas. Argentina. Chile.

■ **ABSTRACT.** New records are provided for 22 species of biting midges (Diptera: Ceratopogonidae) from Argentina and Chile, 12 belonging to *Forcipomyia* Meigen, two to *Atrichopogon* Kieffer and *Culicoides* Latreille, and one to *Leptoconops* Skuse, *Dasyhelea* Kieffer, *Paradasyhelea* Macfie, *Alluaudomyia* Kieffer, *Macrurohelea* Ingram & Macfie and *Palpomyia* Meigen. *Forcipomyia* (F.) *harpegonata* Wirth & Soria, F. (F.) *pictoni* Macfie, F. (F.) *sexvittata* Wirth, F. (*Lepidohelea*) *annulatipes* Macfie, F. (L.) *kuanoskeles* Macfie, F. (*Phytohelea*) *jocosa* Saunders and F. (*Thyridomyia*) *nana* (Macfie) are firstly recorded from Argentina, and *Leptoconops ricardoi* Ronderos & Spinelli, *Atrichopogon endemicus* Spinelli & Marino, *Culicoides chacoensis* Spinelli & Wirth, *Paradasyhelea brevipalpis* (Ingram & Macfie) and *Alluaudomyia schnacki* Spinelli are firstly recorded from Chile. *Forcipomyia calchaqui* Spinelli & Marino is removed from the subgenus *Thyridomyia* Saunders and assigned to the subgenus *Synthyridomyia* Saunders.

KEY WORDS. Biting midges. Diptera. Ceratopogonidae. New records. Argentina. Chile.

The Entomology Division of the Museo de La Plata (MLPA) houses a large collection of biting midges (Diptera: Ceratopogonidae) collected during the past 30 years in several regions of Argentina and neighboring countries, mainly Chile. This collection contains several new records from southern South America, which are herein presented. We have also discovered additional new records among the specimens collected by J. Antony Downes during 1984 in southern Argentina and Chile and housed in the Canadian National Collection of Insects (CNCI). For each of the 22 recorded species the citation of the original description is presented, followed by the previous known distribution and new records. For all specimens from the CNCI the collector's nomenclature is provided after the locality (e.g., JAD 1691/2).

All specimens are slide-mounted in Canada balsam using the methods described by Wirth and Marston (1968).

Leptoconops ricardo Ronderos & Spinelli
Leptoconops ricardo Ronderos & Spinelli, 1992: 43 (female; Argentina).

Previous known distribution. Argentina (*Nothofagus* forest of Río Negro).

New Records. Chile, Malleco, Malleco river bridge (JAD 1683/1), 27-XII-1984, J. Downes, 1 female, net (CNCI).

Atrichopogon comechingon Spinelli & Marino

Atrichopogon comechingon Spinelli & Marino, in Spinelli *et al.*, 2006: 306 (male, female; Argentina).

Previous known distribution. Argentina (Córdoba and steppes of Río Negro).

New records. Argentina, La Rioja, km 216 provincial route n° 76, 29° 13' 31.7'' S, 68° 14' 40.9'' W, 1213 m, 21-XI-2007, G. Spinelli, 1 male, net; San Luis, provincial route n° 5, Bajo de Veliz, 32° 18' 48.2'' S, 65° 24' 43.3'' W, 583 m, 16-XI-2007, G. Spinelli, 3 males, 2 females, net (MLPA); La Pampa, General Acha (JAD 1646/1), 21-XI-1984, J. Downes, 2 males, 5 females, net (CNCI).

Atrichopogon endemicus Spinelli &

Marino

Atrichopogon endemicus Spinelli & Marino, in Spinelli *et al.*, 2006: 307 (male, female; Argentina).

Previous known distribution. Argentina (steppes of Río Negro).

New records. Chile, Metropolitan area of Santiago, Reserva Nacional Río Clarillo (JAD 1710/3), 24-I-1985, J. Downes, 1 male, 1 female, net (CNCI). Argentina, San Luis, Merlo, Reserva Municipal Arroyo El Molino, 32° 21' 09.7'' S, 64° 57' 11.3'' W, 1240 m, 15-XI-2007, G. Spinelli, 2 males, 2 females, net (MLPA).

Forcipomyia (Forcipomyia) harpegonata Wirth & Soria

Forcipomyia harpegonata Wirth & Soria, 1975: 19 (male, female, larva, pupa; Puerto Rico).

Previous known distribution. Widespread: Costa Rica, Bahamas, Jamaica, Puerto Rico, Trinidad to Brazil (Amazonas, Pará and Bahia).

New record. Argentina, Corrientes, Santa Tecla, 30 km E Ituzaingó, VII-2001, G. Spinelli, 1 male, CDC light trap (MLPA).

Forcipomyia (Forcipomyia) multipicta Ingram & Macfie

Forcipomyia multipicta Ingram & Macfie, 1931: 157 (male, female; Argentina).

Previous known distribution. Argentina (*Nothofagus* forests of Neuquen, Río Negro, Chubut and Santa Cruz), Chile (from Valparaiso to Antartica Chilena prov.).

New records. Argentina, Tierra del Fuego, complementary route b, 44 km W Río Grande, 53° 55' 17.8'' S, 68° 20' 58.6'' W, 2-XII-2005, 4 males, 1 female, G. Spinelli, net; Tierra del Fuego, km 73.5 complementary route j, 54° 55' 36.0'' S, 66° 57' 28.8'' W, 113 m, 2/6-XII-2008, G. Spinelli – M. Donato, 1 female, Malaise; Parque Nacional Tierra del Fuego (mallín), 54° 51' 23.6'' S, 68° 35' 37.3'' W, 31 m, 1/4-XII-2008, G. Spinelli - M. Donato, 2 females, Malaise; same data except 4/7-XII-2008, 2 females (MLPA).

Remarks. This is the first record of this species from Tierra del Fuego.

Forcipomyia (Forcipomyia) pictoni Macfie

Forcipomyia pictoni Macfie, 1938: 161 (male; Trinidad).

Previous known distribution. Widespread, from USA to Brazil (Amazonas, Pará, Bahia and São Paulo).

New records. Argentina, La Rioja, national route n° 40, río Miranda, 29° 20' 50.4" S, 67° 42' 12.8" W, 1590 m, 18-XI-2007, G. Spinelli, 1 male, at light; Formosa, laguna Yema (Bermejo), V-2005, H. Calandra, 1 female, at light; Misiones, Corpus, VII-2001, G. Spinelli, 1 male, CDC light trap; Misiones, Posadas, 13-VIII-2002, G. Spinelli, 1 female, CDC light trap; Corrientes, Santa Tecla, 30 km E Ituzaingó, VII-2001, G. Spinelli, 1 male, CDC light trap (MLPA).

Forcipomyia (Forcipomyia) rioplatensis Marino & Spinelli

Forcipomyia (Forcipomyia) rioplatensis Marino & Spinelli, 2002: 314 (male, female; Argentina).

Previous known distribution. Argentina (Buenos Aires), Uruguay.

New record. Argentina, Córdoba, paraje Las Jarillas, río San Antonio, 31° 32' 02.8" S, 64° 33' 01.7" W, 820 m, 25-XI-2007, G. Spinelli, 1 female, Malaise (MLPA).

Forcipomyia (Forcipomyia) sexvittata Wirth

Forcipomyia sexvittata Wirth, 1956: 248 (male, female; Costa Rica).

Previous known distribution. Costa Rica.

New record. Argentina, Misiones, Puerto Iguazú, arroyo Mbocay, 21-VIII-2008, H. Walantus, 1 male, CDC light trap (MLPA).

Forcipomyia (Forcipomyia) somuncurensis Marino & Spinelli

Forcipomyia (Forcipomyia) somuncurensis Marino & Spinelli, 2001: 116 (male, female; Argentina).

Previous known distribution. Argentina (steppes of Río Negro).

New record. Argentina, Córdoba, 4 km NW Cura Brochero, II-2005, H. López, 1 female, at light (MLPA).

Forcipomyia (Lasiohelea) saltensis (Cavalieri)

Lasiohelea saltensis Cavalieri, 1962: 360 (female; Argentina).

Previous known distribution. Argentina (Salta and Jujuy).

New records. Argentina, San Luis, Merlo, 14/16-IX-2007, G. Spinelli, 3 females, Malaise; Córdoba, paraje Las Jarillas, río San Antonio, 31° 32' 02.8" S, 64° 33' 01.7" W, 820 m, 25-XI-2007, G. Spinelli, 1 female, Malaise; Corrientes, Esteros del Iberá, Colonia Pellegrini (camping), 12/14-XI-2008, P. Marino - A. Gaddi, 1 female, Malaise (MLPA).

Forcipomyia (Lepidohelea) annulatipes Macfie

Forcipomyia annulatipes Macfie, 1939: 154 (male; Brazil).

Previous known distribution. Colombia, Brazil (Pará, Bahia and Santa Catarina).

New records. Argentina, Misiones, Puerto Iguazú, arroyo Tacuara, no date, E. Lestani, 2 females, CDC light trap; Misiones, Puerto Iguazú, arroyo Mbocay, 24-VIII-2008, H. Walantus, 2 males, 2 females, CDC light trap; Misiones, Paranay, 14-IV-2007, H. Walantus, 1 male, 4 females, CDC light trap; Misiones, km 813 national route n° 14, arroyo Anyico, 18-V-2008, G. Spinelli, 2 males, 2 females, net (MLPA).

Forcipomyia (Lepidohelea) kuanoskeles Macfie

Forcipomyia kuanoskeles Macfie, 1939: 150 (male; Brazil).

Previous known distribution. Brazil (Santa Catarina).

New records. Argentina, Misiones, Puerto Iguazú, arroyo Mbocay, 24-VIII-2008, H. Walantus, 1 male, CDC light trap; Misiones, km 813 national route n° 14, arroyo Anyico, 18-V-2008, G. Spinelli, 2 males, 3 females, net (MLPA).

Forcipomyia (Phytohelea) jocosa Saunders

Forcipomyia (Trichohelea) jocosa Saunders, 1957: 701 (male, female, larva, pupa; Trinidad).

Previous known distribution. Trinidad.

New record. Argentina, Misiones, Posadas (airport), X-2000, G. Spinelli, 1 female, CDC light trap (MLPA).

Forcipomyia (Synthyridomyia) calchaqui

Spinelli & Marino

Forcipomyia (Thyridomyia) calchaqui Spinelli & Marino, 1997: 188 (female; Argentina).

Previous known distribution. Argentina (Salta).

New records. Argentina, Salta, Cachi, 18-I-2000, G. Spinelli, 1 female, at light; Salta, Cafayate, motel ACA, 27-III-2005, G. Spinelli, 2 females, at light; same data except 28-III-2005, 1 male, 4 females; La Rioja, Chilecito, 29-IX-1989, G. Spinelli, 1 female, at light; Santiago del Estero, Añatuya, XII-1998, D. Carpintero, 2 females, at light; Córdoba, paraje Las Jarillas, río San Antonio, 31° 32' 02.8" S, 64° 33' 01.7" W, 820 m, 25-XI-2007, G. Spinelli, 1 female, Malaise; Córdoba, Huerta Grande, confluencia río Suquía y arroyo Huerta Grande, 31° 05' 00.6" S, 64° 30' 05.2" W, 934 m, 21-X-2000, P. Marino, 1 female, net; Buenos Aires, Alberti, 25-XII-1999, G. Spinelli, 1 male, net (MLPA).

Remarks. The features of the hitherto unknown male genitalia of this species indicate that it belongs to the subgenus *Synthyridomyia* instead of *Thyridomyia*, as it was placed in the original description. The males here recorded will be described in a further contribution.

Forcipomyia (Thyridomyia) nana (Macfie)

Lasiohelea nana Macfie, 1939: 171 (female; Brazil); Macfie, 1944: 297 (male; Trinidad).

Previous known distribution. Widespread: Mexico, Jamaica through Caribbean to southern Brazil (Santa Catarina).

New record. Argentina, Buenos Aires, Punta Lara, III-2004, P. Marino, 2 males, 2 females, Malaise (MLPA).

Dasyhelea cincta (Coquillett)

Ceratopogon cinctus Coquillett, 1901: 605 (female; USA, Florida).

Previous known distribution. Widespread,

from USA (California to New York, south to Florida) south through Central and South America to Santa Cruz, Argentina.

New record. Argentina, Tierra del Fuego, Parque Nacional Tierra del Fuego, sendero de la baliza, bahía Lapataia, 54° 51' 36.4" S, 68° 33' 43.7" W, 8 m, 4-XII-2008, M. Donato, 1 female, net (MLPA).

Remarks. This is the first record of this species from Tierra del Fuego.

Culicoides chacoensis Spinelli & Wirth

Culicoides chacoensis Spinelli & Wirth, 1984: 174 (male, female; Argentina).

Previous known distribution. Bolivia, Paraguay, Argentina (Salta, Córdoba, Corrientes, Río Negro, Chubut), Uruguay.

New record. Chile, Metropolitan area of Santiago, Pudahuel, 435 m (JAD 1591/1), 4-I-1983, A. Newton - M. Thayer, 2 females, uv light (CNCI).

Culicoides patagoniensis Ronderos & Spinelli

Culicoides patagoniensis Ronderos & Spinelli, 1997: 34 (male, female; Argentina).

Previous known distribution. Argentinean and Chilean Patagonia. Puerto Natales (51° 15' S, 72° 15' W) the southernmost record.

New record. Argentina, Tierra del Fuego, lago Yehuin, 54° 21' 39.6" S, 67° 46' 44.4" W, 45 m, 5-XII-2008, G. Spinelli - M. Donato, 4 males, 3 females, net (MLPA).

Remarks. This is the first record of this species from Tierra del Fuego.

Paradasyhelea brevipalpis (Ingram & Macfie)

Dasyhelea brevipalpis Ingram & Macfie, 1931: 178 (male; Argentina).

Previous known distribution. Argentinean *Nothofagus* forests, from Neuquen to Tierra del Fuego.

New records. Chile, Malleco, Parque Nacional Nahuelbuta (JAD 1680/1), 24-XII-1984, J. Downes, 1 male, net; same data except (JAD 1682/2) 26-XII-1984, 1 female, net; Valdivia, Isla Teja (JAD 1657/1, 1657/2), 1-XII-1984, J. Downes, 5 females, net; Valdivia, Fundo San Martín (JAD 1669/2), 15-XII-1984, J. Downes, 1 female, net (CNCI).

***Alluaudomyia schnacki* Spinelli**

Alluaudomyia schnacki Spinelli, 1983: 403 (male, female, larva, pupa; Argentina).

Previous known distribution. Argentina (Formosa, Entre Ríos, Buenos Aires), Uruguay.

New records. Chile, Metropolitan area of Santiago, Pudahuel, 435 m (JAD 1591/1), 4-I-1983, A. Newton - M. Thayer, 1 female, uv light (CNCl). Argentina, Chubut, Gaiman, III/V-2005, G. Cheli, 1 female, at light (MLPA).

Remarks. This is the first record of the genus *Alluaudomyia* from Patagonia.

***Macrurohelea setosa* Wirth**

Macrurohelea setosa Wirth, 1965: 49 (male, female; Chile).

Previous known distribution. Chile (Atacama), Argentina (Patagonian steppe).

New records. Argentina, San Juan, Paso Aguas Negras, Ojo de agua, 30° 21' 24.1" S, 69° 41' 28.4" W, 3600 m, 16-I-2005, M. Donato, 1 female, Malaise; Chubut, puesto de Gendarmería El Triana, cerro Galera, 2-XII-2002, G. Spinelli, 1 female, Malaise; Santa Cruz, valle río Pinturas, 47° 09' 21.8" S, 70° 39' 31" W, 570 m, 5-XII-1996, G. Spinelli, 1 female, Malaise; Santa Cruz, río Ecker, 5/6-XII-2002, G. Spinelli, 2 females, Malaise (MLPA).

Remarks. The finding of this species at Cerro Galera represents the first record of this species in the *Nothofagus* forest.

***Palpomyia patagonica* Ingram & Macfie**

Palpomyia patagonica Ingram & Macfie, 1931: 222 (female; Argentina).

Previous known distribution. Argentina, in forest and steppe areas of Neuquen, Río Negro, Chubut and Santa Cruz; Chile (Aisen, Magallanes).

New records. Argentina, Tierra del Fuego, río San Pablo and complementary route a, 54° 17' 59.5" S, 66° 42' 42.5" W, 12 m, 3-XII-2008, 1 male, 3 females, G. Spinelli - M. Donato, net; Tierra del Fuego, lago Yehuin, 54° 21' 39.6" S, 67° 46' 44.4" W, 45 m, 5-XII-2008, 1 male, 1 female, G. Spinelli - M. Donato, net (MLPA).

Remarks. This is the first record of this species from Tierra del Fuego.

ACKNOWLEDGEMENTS

We gratefully acknowledge Drs. Art Borkent and Jeff Cumming, who kindly loaned Downes' specimens from southern Chile from the Canadian National Collection of Insects.

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