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Cicadidae types (Hemiptera-Cicadomorpha) housed at the Museo de La Plata entomological collection (Argentina)

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Abstract

A catalog of the 161 type specimens of species of Hemiptera Cicadidae housed in the collection of the Entomology Division of the Museo de La Plata is presented. This collection represents 52 species grouped in 19 genera. For each species the original and current names, bibliographic references, type category, number of specimens, gender, Museo de La Plata code numbers, and transcription of data from labels (country, province, locality, date of collection, collector's name, and hosts) are given. Information about the state of preservation of the specimens in each series and photographs of each type species are also provided.

Key words: Catalogue, entomological types, Cicadidae, Argentina

Resumen

En este trabajo se presenta un listado de los hemípteros de la familia Cicadidae, que se encuentran en la colección de la División Entomología del Museo de La Plata, Argentina. Esta colección reúne 161 ejemplares tipos pertenecientes a 52 especies y 19 géneros. Para cada especie se provee el nombre original y el nombre actual, referencias bibliográficas, categoría del tipo, número y sexo de los especímenes, número de código del Museo de La Plata y transcripción de todos los datos mencionados en las etiquetas. También se incorpora información sobre el estado de preservación de los ejemplares de la serie y fotografías de todas las especies aquí incluidas como tipos.

Palabras clave: catálogo, tipos entomológicos, Cicadidae, Argentina

Introduction

The Hemiptera Cicadomorpha represents about 35,000 sap-sucking species from all continents except Antarctica (Larivière *et al.*, 2010). The leafhoppers and treehoppers (Membracoidea) encompass by far the most diverse group within the Cicadomorpha that also includes spittlebugs (Cercopoidea) and cicadas (Cicadoidea). Cicadas are large, generally conspicuous insects in their environments. They draw attention because of males' calling songs that are thought of as a sign of summer, and they are part of the popular culture in multiple regions of the world.

A series of three catalogues on the Cicadoidea include all the literature published up to 2010: Metcalf (1963a, b, c), Duffels & van der Laan (1985) and Sanborn (2013). The diversity of the Neotropical cicadas was studied through several papers providing new information of cicadas from Central America and the Caribbean (Maes *et al.* 2012; Sanborn 2001a, b, 2006a, b, 2007b, 2009, 2010b, 2011a, 2012, 2014a; Sanborn & Maes, 2012) and South America (Maccagnan *et al.*, 2012; Sanborn 2007a, 2008, 2010a, 2011b, c, 2014b; Sanborn & Heath 2014; Santos & Martinelli 2009a, b; Santos *et al.* 2010).

Most species from Argentina were firstly studied by the eminent naturalist and entomologist Carolus Berg,

who lived in Argentina from 1892 until he passed away in 1902, and by L. F. A. Deletang, author of two monographs on Cicadidae from Argentina (Deletang, 1919, 1923). He was followed in the study of the group by the distinguished Argentinean professor and researcher Belindo A. Torres, who had a very rich scientific production throughout the years 1945 to 1965, the year of his death. After 50 years without further research, several important contributions were recently published including species from Argentina, particularly De Santis *et al* (2007), Bachmann (2012) and Sanborn & Health (2014).

The purpose of this catalogue is to provide a record of the Cicadidae types present in the collections of the División Entomología of Museo de La Plata, Argentina, as a part of a series of contributions on the Auchenorrhyncha housed there (Paradell *et al.* 2008; Paradell *et al.* 2010, Remes Lenicov *et al.* 2010). The great importance of this repository of Cicadidae deserves to be highlighted because it holds type material of nearly 50% of the cicadas known for Argentina. As Sanborn & Health (2014) pointed out, the country has the fourth greatest alpha diversity from the Americas after USA, Brazil, and Mexico. The 4th edition of the International Code of Zoological Nomenclature (Article 72 F4) recommends publishing works documenting the type material housed at different museums and other scientific institutions (ICZN, 1999).

The species of Cicadidae from Argentina, Bolivia, Chile, Paraguay and Uruguay housed in MLP are included in three subfamilies: Cicadinae Latreille, Cicadettinae Buckton and Tibicininae Distant (Moulds 2005). Argentine Cicadinae include three tribes: Cicadatrini Distant, Fidicinini Distant (with two subtribes, Fidicinina Distant and Guyalnina Boulard & Martinelli) and Zammarini Distant. Argentine Cicadettinae include three tribes: Carinetini Distant, Parnisini Distant, Taphurini Distant (with the subtribe Taphurina Distant). The Tibicininae is a diverse group within the single tribe present in Argentina, the Tettigadini Distant.

The present contribution offers updated information on the 52 spp. of 19 genera of both subfamilies. The 161 type specimens studied by the specialists mentioned above included 23 holotypes, 113 paratypes and 21 syntypes. To stabilize the classification, holotypes by monotypy for *Carineta diplographa* Berg, 1879, *Fidicina pullata* Berg, 1879, *Proarna dactyliophora* Berg, 1879, *Tympanoterpes arechavaletae* Berg, 1879 and *Tympanoterpes cordubensis*, Berg, 1884, and syntypes for *Fidicina bonaerensis* Berg, 1879, *Odopoea insignifera* Berg, 1879, *Tettigades auropilosa* Torres, 1944, *Tettigades lacertosa* Torres, 1944, *Tettigades major* Torres, 1944 and *Tettigades sarcinatrix* Torres, 1944 were considered. In order to assist future researches, specimens labeled as “Homeotypes”, not intended as types, and one specimen “cum type comparate”, *Proarna capistrata* Distant, 1885 and *Chonosia crassipennis* (Walker, 1858) respectively, are included in the last heading.

Material and methods

For each species we provide the following information:

- Names of the species
- Bibliographic references for the species
- Category of types
- Sex and number of the specimens/category: Each species is coded with a four-digit number followed by a slash, and second number that indicates the type category, according to the present status and rules of the Museo de La Plata Entomological Collection (MLP): /1, holotype and lectotype; /2, allotype; /3, and subsequent numbers, paratypes and paralectotypes; /1 and subsequent numbers, syntypes.
- Data on the label: exact transcription of the text on the labels associated with each specimen: country, province, locality, date of collection, collector's name, and host when indicated.
- Additional information on the type specimens was included as “Remarks”.

All the type specimens included in this catalogue bear a rectangular red printed label such as those used throughout the collection, as well as the original hand-written labels, particularly those corresponding to species erected by Torres. The label of each specimen was compared with the information from the original description of the species, to certify the type status of the material. Ten specimens labelled as “typus” and “cotype” by the author of the species, which were the basis for published descriptions, are designated as syntypes here. Full bibliographic references for each species are mentioned in “References”.

The name Banda Oriental (currently República Oriental del Uruguay) is preserved here as locality following the original label. The abbreviations and full data of the other repositories are listed as follows: IML, Fundación Miguel Lillo, Tucumán, Argentina; MACN, Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos Aires, Argentina; MNHN CL, Museo Nacional de Historia Natural, Santiago, Chile; BM, British Museum of Natural History, London, UK.

One individual of each type species and its labels were photographed using Nikon D80 digital reflex camera with macro multiphot equipment, macrolens Nikkor 1:6.3, f=12cm.

Results

SUBORDER AUCHENORRHYNCHA

INFRAORDER CICADOMORPHA

FAMILY CICADIDAE

SUBFAMILY CICADINAE

Tribe Cicadatrini Distant, 1905

Pachysaltria Stål, 1861

haematodes, *Pachysaltria* Torres, 1959a (Figure 1b)

1959a. *Primer Congreso Sudamericano de Zoología* 2, 227–230.

Holotype, male MLP N° 1661/1.

Argentina, Tucumán.

01-III-1911, P. Jorgensen, leg.

Paratype, male MLP N° 1661/3.

Argentina, Tucumán, Dto. Tafí, San José.

III-1933, Inst. M. Lillo leg., Inst. M. Lillo col.

Remarks. Holotype male 1661/1 with left wings extended, paratype male 1661/3 with extended wings. Author mentions that 5 male paratypes from Tucumán, Dto. Tafí, San José, III-1933, and one specimen from Tucumán, Dto. Famaillá, Cuesta de Anfama, are deposited in IML col.

peristicta, *Pachysaltria* Torres, 1959a (Figure 1a)

1959a. *Primer Congreso Sudamericano de Zoología* 2, 230–233.

Holotype, male MLP N° 1662/1.

Argentina, Jujuy, Tabladitas, 3.500 m.

8-II-1958, Torres-Ferreyra col.

Allotype, female MLP N° 1662/2.

Same date as holotype.

Paratype, male (21), female (10) MLP N° 1662/3-33.

Same date as holotype.

Paratype, male (7), female (2) MLP N° 1662/34-42.

Argentina, Jujuy, Lumara, 3.700m.

10-II-1958, Torres-Ferreyra, col.

Remarks. One paratype female with genitalia dissected in vial.

Tribe Fidicinini Distant, 1905

Subtribe Fidicinina Distant, 1905

Fidicina Amyot & Audinet-Serville, 1843

pullata, Fidicina Berg, 1879 (Figure 1c)

= ***Bergalna pullata*** (Berg, 1879): Boulard & Martinelli, 1996.

1879. *Anales de la Sociedad Científica Argentina* 8: 207.

Typus, male N° 1657/1.

Argentina, Corrientes.

Remarks. Typus 1657/1 with wings extended. The author mention Caa-Catí, Corrientes, as the locality of the type. The specimen labelled as “typus” by Berg, is considered here as holotype by monotypy (ICZN, art. 73.2.1).

Subtribe Guyalnina Boulard & Martinelli, 1996

bonaerensis, Fidicina Berg, 1879 (Figure 1d)

= ***Guyalna bonaerensis*** Boulard & Martinelli, 1996: 20.

1879. *Anales de la Sociedad Científica Argentina* 8: 208.

Typus, male and female MLP N° 1658/1, 2. Buenos Aires.

Remarks. Typus 1658/1, is labelled as *Fidicina bonaerensis* Berg, handwr; and *Dorisia bonaerensis* (Berg), handwr. Male and female with left wing extended. Specimens 1658/1, 2 labelled as “typus” by Berg, are considered here syntypes (ICZN, art. 73.2.1).

***Elassoneura* Torres, 1964**

carychrous, Elassoneura Torres, 1964 (Figure 1e)

1964a. *Anais Do II Congresso Latino-Americano de Zoología* 1, 136–139.

Holotype, male MLP N° 1669/1.

Argentina, Santiago del Estero, Campo del Cielo.

I-1934, Bosq col.

Allotype, female MLP N° 1669/2.

Same date as holotype.

Paratype, males (6) and females (2) MLP N° 1669/3-10.

Same date as holotype.

Paratype, female (2) MLP N° 1669/10, 11..

Argentina, Corrientes, Manantiales.

II-1940, Biraben col.

Paratype, male MLP N° 1669/11.

Paraguay, Berg col.

Paratype, female MLP N° 1669/12.

Argentina, Santiago del Estero, Campo Gallo.

I-1940, Prosen col.

Remarks. Paratypes: male 1669/3 and female 1669/10 with left wings extended; male 1669/5 and /7 with wings extended; male 1669/9 with hind right wing glued on a piece of card. The original publication indicates one paratype female with the same date as holotype and one female without locality, Berg col., that are missing: also one paratype female from Argentina, Corrientes, San Cosme, deposited in MACN.

***Prasinosoma* Torres, 1963**

***fuembuenai*, *Prasinosoma* Torres, 1963 (Figure 1f)**
1963. *Revista de la Sociedad Uruguaya de Entomología* 5, 17–18.

Holotype, male, MLP N° 1652/1.

Bolivia.

Paratype, male (2) MLP N° 1652/3,4.

Bolivia, Santa Cruz.

IX-1917.

Paratype, male, MLP N° 1652/5.

Bolivia, Buenavista.

X-1949, Prosen leg.

Paratype, male, MLP N° 1652/6.

Bolivia, Tacanas.

IML col.

Remarks. Holotype 1652/1 with both wings extended; apex of left tegmen broken. Paratype 1652/5 with left tegmen stick with apex broken, left wing extended; 1652/4 with fore wings with broken tips; 1652/6 with both wings extended. Author mentions that allotype female is deposited in MACN.

***heidemanni*, *Prasinosoma* (Distant, 1905) (Figure 2a)**

= ***Proarna heidemanni*** Distant 1905. *Annals and Magazine of Natural History*, Series 7, 15, 311.

Prasinosoma heidemanni: Torres, 1963. *Revista de la Sociedad Uruguaya de Entomología* 5: 15.

Allotype, female MLP N° 1653/2.

Argentina, Corrientes, San Roque.

II- 1920. Bosq col.

Remarks. Allotype female with left wings extended.

***inconspicua*, *Prasinosoma* (Distant, 1906) (Figure 2b)**

= ***Proarna inconspicua*** Distant, 1906. *Annales de la Société Entomologique de Belgique*, 50: 150.

Prasinosoma inconspicua: Torres 1963. *Revista de la Sociedad Uruguaya de Entomología* 5: 16–17.

Allotype, male MLP N° 1654/2.

Argentina, Misiones, San José.

11-XII-1953, Rdo. R. Fuenbuena leg.

Remarks. Allotype, male with left wings extended.

***Proarna* Stål, 1864**

***dactyliophora*, *Proarna* Berg, 1879 (Figure 2c)**
1879. *Anales de la Sociedad Científica Argentina* 8, 211.

Typus, female MLP N° 1656/1.

Argentina, Tucumán, Berg col.

Remarks. Specimen with right wings extended; left tegmen with broken apex. The specimen 1656/1 labelled as “typus” by Berg, is considered here as holotype by monotypy (ICZN, art. 73.2.1).

***Tympanoterpes* Stål, 1861**

***arechavaletae*, *Tympanoterpes* Berg, 1879 (Figure 2d)**

= *Ariasa arechavaletae* (Berg, 1879): Torres, 1963. *Revista de la Sociedad Uruguaya de Entomología* 5, 14. 1879. *Anales de la Sociedad Científica Argentina* 7, 194

Typus, male MLP N° 1659/1.

Banda Oriental. Berg col.

Remarks. Male typus 1659/1 with left wings extended. Specimen 1659/1 labelled as “typus” by Berg, is considered here as holotype by monotypy (ICZN, art. 73.2.1).

cordubensis, *Tympanoterpes* Berg, 1884 (Figure 2e)

1884. *Hem. Arg. Addend. et Emend.*, 113, 114.

Typus, male MLP N° 1660/1.

Argentina, Cordoba, Berg col.

Remarks. Male typus 1660/1 with wings extended, left wings and fore right wing broken at the apex. Specimen 1660/1 labelled as “typus” by Berg, is considered here as holotype by monotypy (ICZN, art. 73.2.1).

Tribe Zammarini Distant, 1905

Odopoea Stål, 1861

insignifera, *Odopoea* Berg, 1879 (Figure 2f)

1879. *Anales de la Sociedad Científica Argentina* 8, 205.

Typus, male MLP N° 1651/1.

Argentina, Salta.

Typus, male MLP N° 1651/2.

Argentina, Tucumán.

Remarks. Typus male, 1651/1 with both wings extended, left tegmen broken; 1651/2 with left wings extended. The original description mentions Mendoza as Type locality. Specimens 1651/1, 2 labelled as “typus” by Berg, here are considered a syntype (ICZN, art. 73.2.1).

SUBFAMILIA CICADETTINAE

Tribu Carinetini Distant, 1905

Carineta Amyot et Audinet-Serville, 1843

crassicauda, *Carineta* Torres, 1948 (Figure 3a)

1948a. *Notas del Museo de La Plata*, 13 (103), 125–127.

Holotype, male MLP N° 1663/1.

Argentina, Catamarca.

Schaefer col., Torres leg.

Allotype, female MLP N° 1663/2.

Same data as holotype.

Paratype, male MLP N° 1663/3.

Same data as holotype.

Remarks. Holotype and allotype with left wings extended. Paratype male with fore right leg broken. The original publication also indicates a paratype male, Catamarca province, Queñoa Pelado, Rohmer leg. (IML), paratype female, Tucumán province, Tafí del Valle (IML) and two paratype females, from Salta (MACN).

diplographa, *Carineta* Berg, 1879 (Figure 3b)

= *Carineta fasciculata* (Germar, 1821): 97.

1879. *Anales de la Sociedad Científica Argentina* 8, 212–213.

Typus, female MLP N° 1664/1.

Argentina, Misiones (near Córpus).

Date unknown, Berg leg.

Remarks. Specimen with left wings extended. This species was originally placed by Berg near *Carineta fasciculata* Germ. It holds six labels. The specimen labelled as “typus” by Berg, is considered here as holotype by monotypy (ICZN, art. 73.2.1).

limpida, *Carineta* Torres, 1948 (Figure 3c)

1948a. *Notas del Museo de La Plata* 13 (103), 121–122.

Allotype, male MLP N° 1665/2.

Uruguay, San José, Cufré.

Tremoleras col.

Paratype, female MLP N° 1665/3.

Argentina, Misiones.

Ritcher col.

Remarks. Allotype with left wings extended. The original publication indicates that the holotype female is from Misiones province, Puerto Bemberg, Hayward-Willink-Goldbach, col. (IML).

liturata, *Carineta* Torres, 1948 (Figure 3d)

1948a. *Notas del Museo de La Plata* 13 (103), 116–118.

Holotype, male MLP N° 1666/1.

Argentina, Catamarca.

Paratype, male (1) and females (2) MLP N° 1666/3-5.

Argentina, Catamarca, Las Mansas, Dto. Belen.

III- 1938.

Remarks. Paratype male 1666/3 with left wings extended; female 1666/5 with left wings extended, right wings missing. The original publication also indicates an allotype female, paratypes males (2) and female (1), from Catamarca province, Las Mansas (IML).

maculosa, *Carineta* Torres, 1948 (Figure 3e)

1948a. *Notas del Museo de La Plata* 13 (103), 114–116.

Allotype, female MLP N° 1667/2.

Argentina, Catamarca, Amadores.

26-III-1939, Biraben-Scott leg.

Paratype, male MLP N° 1666/3.

Argentina, Tucumán, Vallecito, Suncho.

24-III-1942, Röhner leg.

Remarks. Allotype with left wings extended and vial with genitalia dissected. The original publication also mentions the holotype male and paratypes males (4) from Tucumán province, Vallecito, Röhner leg., and one female from Tucumán province, Villa Nougués, as well as other studied specimens: two males, one from Villa Nougués and the other without locality (IML).

propinqua, *Carineta* Torres, 1948 (Figure 3f)

1948a. *Notas del Museo de La Plata* 13 (103), 122–124.

Paratype, male MLP (N°5578/3).

Argentina, Tucumán, Vipos, 4-931.

Remarks. The original publication indicates holotype male and allotype female from Jujuy province, Volcán, and also two females, without locality from Tucumán province (IML).

scripta, Carineta Torres, 1948 (Figure 4a)
1948a. *Notas del Museo de La Plata* 13 (103), 118–120.

Holotype, male MLP N° 1668/1.

Argentina, Jujuy.

Allotype, female MLP N° 1668/2.

Argentina, Salta, Orán, San Andrés.

III-1945, Pierotti col.

Remarks. Holotype with left wings extended and without subgenital plate. The original publication indicates two paratypes: one male from Tucumán province, Villa Nougués and one female, Catamarca province, Dto. Belén (IML).

***Guaranisaria* Distant, 1905**

bicolor, Guaranisaria Torres, 1958 (Figure 4b)
1958c. *Neotrópica* 4(13), 23–26.

Holotype, male MLP N° 1700/1.

Argentina, Misiones, Pindapoy.

5-31-I-1953, R. Fuembuena leg.

Paratype, male MLP N° 1700/3.

Same data that holotype.

Remarks. Holotype and paratype with extended wings. Author mentions the female allotype and one female paratype from Misiones, Sta. María, Dto. Concepción in MACN.

llanoi, Guaranisaria Torres, 1964 (Figure 4c)

1964b. *Anais Do II Congresso Latino-Americano de Zoología (S. Paulo 1962)* I, 149–152.

Holotype, male MLP N°1701/1.

Argentina, Entre Ríos, Pronunciamiento.

XI-1960. M. Zelich leg., R. Llano col.

Paratype, female MLP N°1701/3.

Same data that holotype.

Remarks. Holotype and paratype with extended wings. The author also mentions the female allotype and one female paratype that were not found.

Tribe Parnisini Distant 1905

***Acyroneura* Torres, 1958**

singularis, Acyroneura Torres, 1958 (Figure 4d)
1958c. *Neotropica* 4 (13), 18–21.

Holotype, male MLP N°1698/1.

Argentina, Corrientes, Ituzaingo.

08-XII-1949.

Paratype, males (3) MLP N° 1698/3-5.

Argentina, Entre Ríos, Dto. La Paz, Distrito Banderas.

J. J. Boero leg.

Remarks. Holotype 1698/1 and paratype 1698/3 with extended wings; paratype 1698/4,5 with fore wings glued to a piece of card, hind wings broken.

***Derotettix* Berg, 1882**

***mendosensis*, *Derotettix* Berg, 1882** (Figure 4e)

1882. *Anales de la Sociedad Científica Argentina* 14, 47.

1884. id *Hem. Arg. Addend. et Emend.*, 130.

1945, Torres. *Notas del Museo de La Plata. Zoología* 10 (83), 73–75.

Holotype, male MLP N° 1670/1.

Argentina, Mendoza.

Berg col.

Allotype, female MLP N° 1670/2.

Same date as holotype.

Bosq col.

Remarks. Allotype with left wings extended. In his revision, Torres (1945) indicates other two male specimens studied by him and deposited in MLP: Valcheta (Rio Negro), M. Biraben col. and Algarrobo Grande (Mendoza), G. Magistretti leg., respectively.

***proseni*, *Derotettix* Torres, 1945** (Figure 4f)

1945. *Notas del Museo de La Plata. Zoología* 10 (83), 77–79.

Holotype, male MLP N° 1671/1.

Argentina, Santiago del Estero, Villa Unión.

M. Castro col., A. Prosen leg.

Paratype, male MLP N° 1671/3.

Same date as holotype.

Remarks. Holotype with left wings extended; paratype with wings extended.

Tribe Taphurini Distant, 1905

Subtribe Taphurina Distant, 1905

***Elachysoma* Torres, 1964**

***quadrivittata*, *Elachysoma* Torres, 1964** (Figure 4g)

1964a. *Anais Do II Congresso Latino-Americano de Zoologia (S. Paulo 1962)* 1, 139–141.

Paratype, male UNLP N° 1697/3.

Argentina, Chaco.

XI-1987, S. Venturi, leg., Berg col.

Paratype, male UNLP N° 1697/4.

Chaco, P. Denier col.

Remarks. Paratype 1697/3 with left tegmen extended; remainder wings broken. Author mentions the male holotype from Formosa, Picani, 29-XII-1948, Golbach col. in IML, and one male paratype, from Chaco, Resistencia, 10-XII-1935, Daguerre col., in MACN.

SUBFAMILY TIBICININAE

Tribe Tettigadini Distant, 1905

Acuticephala Torres, 1958

alipuncta, *Acuticephala* Torres, 1958 (Figure 5a)
1958c. *Neotrópica* 4(13), 22–23.

Holotype, female MLP N° 1699/1.

Argentina, Entre Ríos.

Allotype, male MLP N° 1699/2.

Argentina, Río Negro, San Javier

J. Chebataroff leg. MHN Cl.

Remarks. Holotype and allotype with extended wings. Allotype not mentioned in the original description.

Alarcta Torres, 1958

quadrimaculata *Alarcta* Torres, 1958 (Figure 5b)
1958b: *Revista del Museo de La Plata (Nueva Serie). Sección Zoología* 7, 26–28.

Holotype, male UNLP N° 1691/1.

Argentina, Mendoza, El Sosneado.

Remarks. The author mentions a female allotype from Argentina, La Pampa, Conhelo in A. Prosen, coll.

Babras Jacobi, 1907

sonorivox, *Babras* Jacobi, 1907 (Figure 5c)
1907. *Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin*: 206.

Torres 1959b: *Acta Zoológica Lilloana*, 17, 260.

Allotype, male MLP N° 1693/2.

Argentina, La Rioja, Mascasim.

II-1959, E. J. Andrade leg.

Remarks. Allotype with red label, “Allotype/ *Babras sonorivox* Jac”. Torres (1959) mentions a female holotype from Argentina, Suncho Corral, Santiago del Estero, Steinbach col.. in Musée zoologique de la ville de Strasbourg, France as well as one female from Dep. Ojo de Agua in the same province, Maldonado Bruzzone leg. (MLP) which was not found.

Chonosia Distant, 1905

atrodorsalis, *Chonosia* Torres, 1945 (Figure 5d)
1945. *Notas del Museo de La Plata. Zoología* 10 (83), 62–64.

Paratype, females (2) UNLP N° 1694/3, 4.

Argentina, La Rioja, Chilecito.

Paratype, male UNLP N° 1694/5.

Argentina, Tucumán, Amaicha.

II-1917.

Paratype, male (2) UNLP N° 1694/6, 7.

Argentina, Tucumán.

Remarks. Paratypes 1694/3-6 with left wings extended.

trigonocelis*, *Chonosia Torres, 1945 (Figure 5e)
1945. *Notas del Museo de La Plata. Zoología* 10 (83), 64–66.

Paratype, female UNLP N° 1696/3.

Argentina, Tucumán, Albillo.

10-X-1941, Instituto Miguel Lillo leg.

Remarks. Paratype 1696/3 with extended left wings and genitalia dissected in vial. The author mention that male holotype, female allotype, 2 male paratypes and one female paratypes from the same locality are deposited in IML, and 1 male from San Juan in MACN.

***Psephenotettix* Torres, 1958**

grandis*, *Psephenotettix Torres, 1958 (Figure 5f)
1958d. *Neotrópica* 4 (14), 37–41.

Holotype, male MLP N° 1702/1.

Argentina, Salta.

Paratype, males (4) and female MLP N° 1702/3-7.

Argentina, Mendoza

C. S. Reed col.

Paratype, male MLP N° 1702/8.

Argentina, San Juan.

Remarks. Allotype from Salta, Molinos, Willink-Monros col., is deposited IML. Holotype with extended wings; paratypes 1702/3-6 with extended lefts wings; 1702/7 with extended wings; 1702/8 with mesonotum partially broken, left wings lost, right tegmen extended and partially broken.

minor*, *Psephenotettix Torres, 1958 (Figure 5g)
1958d. *Neotrópica* 4 (14), 35–37.

Paratype, male and female MLP N° 5579/3, 4.

Argentina, Jujuy, Puna Jujeña.

B.A. Torres, leg.

Remarks. Paratype female with broken abdomen, glued on a piece of card. Holotype, allotype, 7 male and 1 female paratypes from Puna Jujeña were not found.

***Tettigades* Amyot & Audinet-Serville, 1843**

albicerata*, *Tettigades Torres, 1949 (Figure 6a)
= *Alarcta albicerata* (Torres, 1949). Torres, 1958b: *Revista del Museo de La Plata (Nueva Serie). Sección Zoología* 7, 29–30.
1949. *Notas del Museo de La Plata. Zoología* 14 (125), 181–184.

Holotype, female UNLP N° 1688/1.

Argentina. Rio Negro. Choele-Choel.

XI-1946.

Remarks. Holotype 1688/1 with extended wings; “Holotype / *Tettigades albicerata* Torres” on red label and “*Alarcta albicerata* Torres” on white label below. In Torres (1958b) the author made a new combination as *Alarcta albicerata* (Torres).

auropilosa*, *Tettigades Torres, 1944 (Figure 6b)
1944. *Notas del Museo de La Plata. Zoología* 9 (79), 461–463.

Cotype, males (2) UNLP N° 1672/1, 2.

Chile, Santiago, Queltehués.

XI-1933. MNHN Cl col.

Remarks. Male cotype 1672/1 with wings extended; 1672/2 with left wings extended. The specimen labelled as “cotypus” by Torres, is considered here as a syntype (ICZN, art. 73.2.1).

bahiensis*, *Tettigades Torres, 1942 (Figure 6c)

= *Alarcta bahiensis* (Torres, 1942). Torres 1958b: *Revista del Museo de La Plata (Nueva Serie). Sección Zoología* 7, 25–26.

1942. *Notas del Museo de La Plata. Zoología* 7 (60), 256–257.

Paratype, male UNLP N° 1689/3.

Argentina, Buenos Aires, Bahía Blanca.

Remarks. Paratype N° 1689/3 with extended wings; “Paratype / *Tettigades bahiensis* Torres” on red label, “*Alarcta bahiensis* Torres” on white label below, and a number “6546”. The author mentions that male allotype and male paratypes from Buenos Aires, Bahia Blanca, Gemignani & Ameghino leg. are deposited in MACN. In Torres (1958b), the author made a new combination as *Alarcta bahiensis* (Torres).

blanchardi*, *Tettigades Torres, 1948 (Figure 6d)

= *Alarcta blanchardi* (Torres, 1948). Torres 1958b: *Revista del Museo de La Plata (Nueva Serie). Sección Zoología* 7, 28–29.

1948c. *Notas del Museo de La Plata. Zoología* 13 (108), 181–183.

Holotype, male UNLP N° 1690/1.

Argentina, Neuquén, Zapala. Estancia Zapala. FCS TERR: del Neuquén. 1000msnm.

23-XI-1940, W. P. Benson col., E. E. Blanchard leg.

Paratype, male UNLP N° 1690/3.

Same locality and collector; 15-XI-1940.

Paratype, male (2) UNLP N° 1690/4.

Same locality and collector; 14-XI-1940.

Remarks. Holotype 1690/1 “Holotype / *Tettigades blanchardi* Torres” on red label, and “*Alarcta blanchardi* Torres” on white label below; paratype 1690/3 red label, “Paratype / *Tettigades bahiensis* Torres” and another white label below “*Alarcta bahiensis* Torres”; with extended hind left wing, fore left wing glued on a piece of card; male paratype 1690/4 with left wings, metathorax and legs broken; without paratype label although it is mentioned in the description by the author. In Torres (1958b) the author made a new combination as *Alarcta blanchardi* (Torres).

Ferrocarril Central del Sur (FCS TERR) is an old name of the Ferrocarril General Roca of the Argentine railway system.

bosqi*, *Tettigades Torres, 1942 (Figure 6e)

1942. *Notas del Museo de La Plata. Zoología* 7 (60), 258–259.

Holotype, female MLP N° 1673/1.

Argentina, Mendoza.

C. Lizer & Trelles leg.

Allotype, male MLP N° 1673/2.

Argentina, Mendoza, C.S. Reed col.

Remarks. Holotype 1673/1 with left wings extended, hind tibiae and tarsite broken; allotype, male 1673/2 with extended wings. The author mentions that 7 females from Mendoza, Cacheuta are in MACN.

brevicauda, Tettigades Torres, 1958 (Figure 6f)

1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 88–89.

1959b. *Acta Zoologica Lilloana*, 17, 256.

Allotype, female MLP N° 1674/2.

Argentina, Neuquén. Pucará.

20-XII-1957. Schachovskoy leg.

Remarks. Allotype with extended wings. The author mentions that male holotype from Prov. Ñuble, Cord. Chillan, Germain col. is in MNHN Cl.

brevivenosa, Tettigades Torres, 1942 (Figure 6g)

= **Tettigades parva** Distant, 1892, *Annals and Magazine of Natural History* 10(6), 65.

Torres, 1942. *Notas del Museo de La Plata. Zoología* 7 (60), 259.; Torres, 1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 95–96.

Holotype, male MLP N° 1682/1.

Lizzer leg.

Allotype, female MLP N° 1682/2.

Argentina, Mendoza.

Paratype, male MLP N° 1682/3.

Argentina. Río Negro.

13-XII-1899. S. Venturi, col.

Remarks. Male holotype 1682/1 with left wings extended, hold “*Tettigades, A.S./ ulnaria, Dist*” handwr. on white paper; “Holotype/*Tettigades brevivenosa* Torres” handwr. on red label, and, “*Tettigades parva* Dist” on white label, Torres det. Female allotype 1682/2 hold: “Allotype / *Tettigonia brevivenosa* Torres” on red label and “*Tettigades parva* Dist.”, on white label, Torres det. In the original description (Torres, 1942), the author mentions Rio Negro, Argentina as locality of the holotype of *T. brevivenosa*.

cinnabarina, Tettigades Berg, 1879 (Figure 6h)

= **Calliopsis cinnabarina** (Berg, 1879), Torres, 1958d, *Neotrópica* 4 (14), 42.

1879. *Anales de la Sociedad Científica Argentina*: 205.

Holotype, male UNLP N° 1695/1.

Argentina, Mendoza. Berg col.

Typus, female UNLP N° 1695/2.

Berg col.

Male “cum type comparat” UNLP N° 1695/3.

Argentina, Mendoza.

Remarks. In his revision, Torres (1945: 59–61) selected a male from Mendoza province as the holotype for *Chonosia cinnabarina* (Berg, 1879) but in the MLP collection there are two other specimens also labelled as “Typus” and “cum type comparat” by Berg. Others specimen are also mentioned in Torres’ revision from San Juan, Neuquén and Río Negro, but they were not found. Holotype 1695/1 and male 1695/3 with extended left wings; female type 1695/2 with extended wings.

curvicosta, Tettigades Torres, 1958 (Figure 7a)

1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 100–101.

Paratype, male MLP N° 1676/3.

Remarks. Paratype male 1676/3 with left wings extended. The author mentions that male holotype is from Chile, Gay leg., and the female allotype and one male paratype from Chile are deposited in MNHN CL.

distanti, Tettigades Torres, 1958 (Figure 7b)

1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 98–99.

Paratype, male MLP N° 1677/3.

Chile, Limache.

Dep. Zool. Sao Paulo (Brasil) leg.

Remarks. Paratype 1677/3 with right wings extended. The author mentions that male holotype from Chile, Los Andes, F. & M. Edwards, col., is deposited in BM.

lacertosa, Tettigades Torres 1944 (Figure 7c)

1944. *Notas del Museo de La Plata. Zoología* 9 (79), 464–467.

Cotypus female and male UNLP N° 1678/1–2

Chile, Valparaíso, Salto.

XI-1940, Bosq col.

Cotype female N° 1678/3.

Same locality.

4-XI-1950.

Remarks. Female cotype 1678/1 with left wings extended; male 1678/2 with extended wings; female 1678/3 with genital segment dissected in vial. The author mentions that another studied specimen from Chile is deposited in MNHN CL. Specimens labelled as “cotypus” by Torres, are considered here as syntypes (ICZN, art. 73.2.1).

limbata, Tettigades Torres, 1958 (Figure 7d)

1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 74–75.

Paratype, males (5) UNLP N° 1679/3–7.

Chile, Santiago, Lo. Valdés; 1800 m.s.n.m. 33° 47'LS, 70° 04' LW (altitud 1750 hasta los 5060 msnm).

17-XII-1947. s/Kageneckia, G. Kuschel col. Universidad de Chile, leg.

Remarks. Male paratype 1679/3 with left wing extended and male paratype N° 1679/4, with extended wings. The author mentions that male holotype, female allotype, 3 males paratypes plus 3 males and one female, all from the same locality, are deposited in Univ. Chile coll.

lizeri, Tettigades Torres 1942 (Figure 7e)

1942. *Notas del Museo de La Plata. Zoología* 7 (60), 262–263; Torres, 1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 96–98.

Holotype, female MLP N° 1680/1.

Argentina, Mendoza, Villavicencio, 1960 msnm.

10-XI-1947, C. Lizer & Trelles leg.

Allotype, male MLP N° 1680/2.

Argentina, Mendoza.

C. S. Reed leg.

Paratype, male MLP N° 1680/3.

Argentina, Salta.

I-1897. S. Venturi leg., Berg col.

Remarks. Holotype and allotype 1680/1, 2 with extended wings. In the original description (Torres, 1942), the author mentions that 4 males Lizer & Trelles leg, and one male from Villavicencio, Mendoza are deposited in MLP col. One male without locality in MACN and one male in A. Prosen col.

major, Tettigades Torres, 1944 (Figure 7f)

1944. *Notas del Museo de La Plata. Zoología* 9 (79), 467–469; Torres, 1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 75–77.

Cotype, female UNLP N° 1681/ 1.

Argentina, Mendoza.

Cotype, females (2) MLP N° 1681/2, 3.

Argentina, Neuquén.

Cotype, male (2) MLP N° 1681/4.

Argentina, Rio Negro, Dto. Avellaneda, Bajo de Sta. Rosa.

17-XII-1943, Maldonado Bruzzone col.

Remarks. Female cotype 1681/1 hold “*Tettigades compacta* Walk”, handwr. on white paper, with genitalia dissected in vial; female 1681/2 with genitalia dissected in vial; female 1681/3 with left wings extended and genitalia dissected in vial; male 1681/4 with left wings extended. Author mentions one male and one female from Rio Negro, San Antonio, A. Carcelles col., and other specimens (1 male and 2 female without locality) in MACN. Specimens labelled as “cotypus” by Torres, are considered here as syntypes (ICZN, art. 73.2.1).

pauxilla, Tettigades Torres, 1958 (Figure 8a)

1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 66–67.

Holotype, male MLP N° 1683/1.

Chile, Cura Cautin.

Remarks. Male holotype 1683/1 with extended wings. The author mentions that male paratypes from Chile are deposited in BM and MACN. Another male specimen without locality is deposited also in MACN.

sarcinatrix, Tettigades Torres, 1944 (Figure 8b)

1944. *Notas del Museo de La Plata. Zoología* 9 (79), 469–472.

Cotype, males (4) and female (1) N° 1684/ 1-5.

Argentina, Río Negro, San Carlos de Bariloche.

Havrilenko col., Torres leg.

Cotype female (2) MLP N° 1684/6,7.

Argentina, Rio Negro, Nahuel Huapi.

Torres leg.

Remarks. Male Cotype 1684/1 with extended wings; 2 males and female 1684/2-4 and female 1684/5 with left wings extended. The author mentions 1 male specimen from Nahuel Huapi, A. Bridarolli J. S. leg. not found in MLP. Specimens labelled as “cotypus” by Torres, are considered here as syntypes (ICZN, art. 73.2.1).

sordida, Tettigades Torres, 1944 (Figure 8c)

1944. *Notas del Museo de La Plata. Zoología* 9 (79), 463–464; Torres, 1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 67.

Allotype, male UNLP N° 1685/ 1.

Chile.

C. S. Reed col.

Remarks. Male allotype 1685/1 with left wings extended. The author mentions that the holotype and one female paratype are in MNHN CL.

undata, Tettigades Torres, 1958 (Figure 8d)

1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 63–66.

Holotype, male UNLP N° 1686/1.

Chile, San Bernardo.

XII-1935. Porter col., Torres leg.

Paratype, male UNLP N° 1686/3.

Chile, Prov. Linares, Linares.

IX-1948, Universidad Chile leg.
Paratype, female UNLP N° 1686/4.
Chile, Prov. Bio-Bio, Abanico (950msnm).
11-I-1943, G. Kuschel col., Universidad Chile leg.
Paratype, male UNLP N° 1686/5.
Chile, Prov. Bio-Bio, Abanico (800msnm).
08-I-1948, G. Kuschel col., Universidad Chile leg.
Paratype, male and female UNLP N° 1686/6, 7.
Chile, Prov. Bio-Bio, Las Canteras.
15-VIII-1950, G. Kuschel col., Univ. Chile leg.
Paratype, female UNLP N° 1686/8.
Chile, MNHN Santiago col., Univ. Chile leg.
Paratype, males (2) UNLP N° 1686/9, 10.
Chile, Lota, Concepción.
18-XII-1956; G. Kuschel col., Universidad Chile leg.

Remarks. Male holotype 1686/1 with extended wings; paratypes 1686/3-5, 9 with left wings extended; 1686/6, 7 with extended wings. The author mentions other type materials deposited in other Institutions: female allotype from Chile in MNHN CL; 1 male paratype from Chile, Valparaiso, Gaudichoud leg., in BM; 2 males, Chile, Concepción, in MNHN Cl; and 2 males, Chile, Prov. Bio-Bio, Abanico, in Universidad de Chile.

unipuncta, *Tettigades* Torres, 1958 (Figure 8e)
1958a. *Revista del Museo de La Plata (Nueva Serie)* 7, 81–83.

Paratype, male UNLP N° 1687/3.
Chile.

Remarks. Paratype 1687/3 with extended wings. The author mentions that the male holotype from Chile is in MACN.

***Tettigotoma* Torres, 1942**

maculata, *Tettigotoma* Torres, 1948 (Figure 8f)
1948b. *Notas del Museo de La Plata. Zoología* 13 (107), 179–180.

Allotype, female UNLP N° 1692/2.
Argentina, La Pampa, Pedro Luro.
L. Patrono, col. Colegio San Pedro leg.
Remarks. Female allotype 1692/2 with extended wings.

Non type specimens

crassipennis, *Chonosia* (Walker, 1858)
1858. *Fidicina crassipennis* Walker. Ins. Saund., Hom.: 9.
1905. *Chonosia crassipennis* Dist., *Annals and Magazine of Natural History* (7)15: 481.

Male “cum type comparat” UNLP.
Córdoba. Berg col.

Remarks. We assume that the male specimen “cum type comparat” belonging to the Berg collection, was compared by the author with the species *Tettigades papa* Berg, and this comparison was consigned by Torres in his revision (Torres, 1945). Recently the status of *T. papa* was resurrected as valid species by Sanborn & Health (2014).

capistrata, *Proarna* Distant, 1885

1885. *Entomologist's Monthly Magazine* 22, 60.

Homeotype, male cum type comparat MLP N° 1655/1.

Without dates.

Homeotype, male MLP N° 1655/2.

Argentina, Misiones, Pindapoy.

13-12-1941, Biraben-Bezzi leg., Torres det.

Remarks. Both homeotypes with wings extended.

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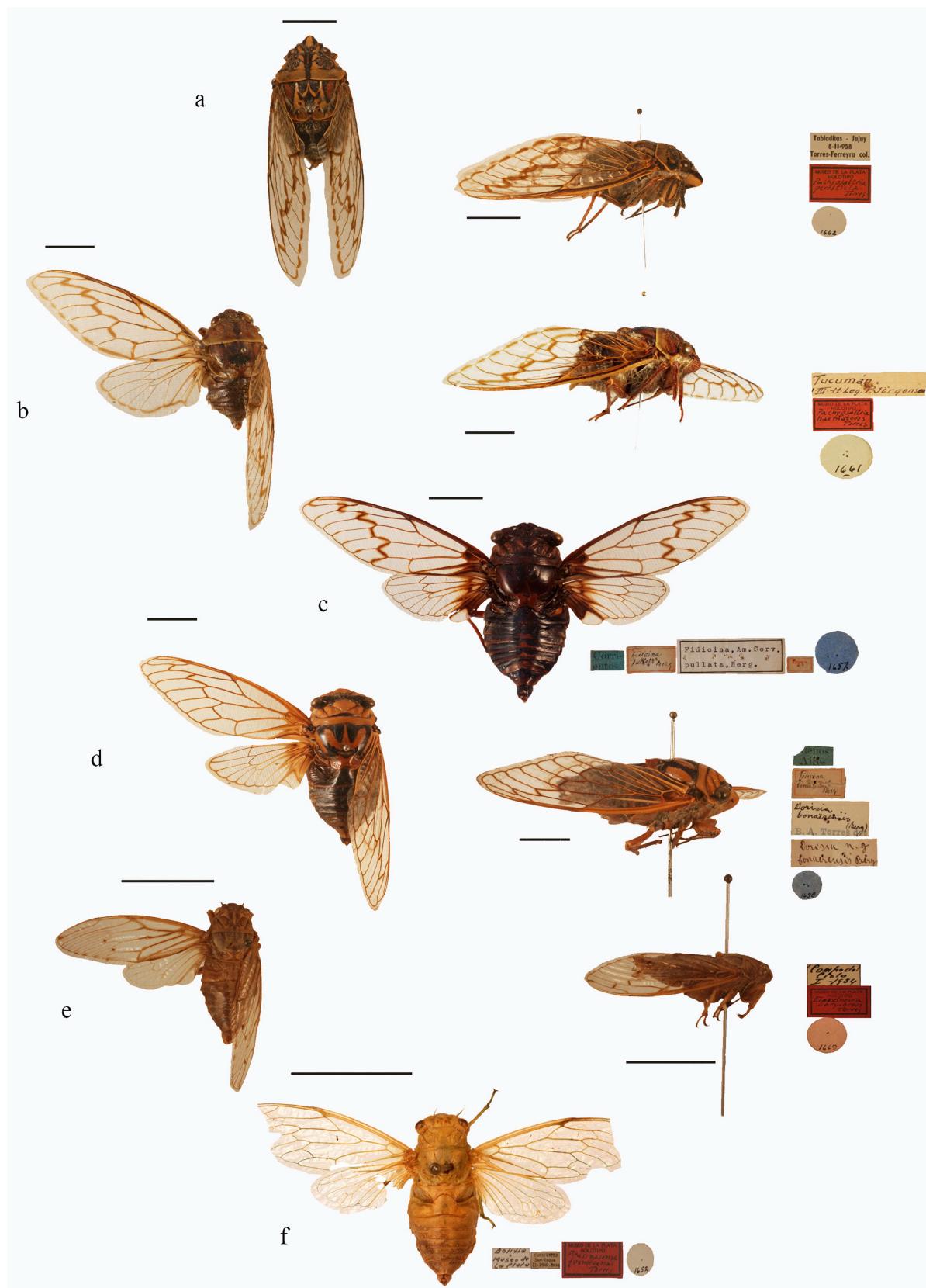


FIGURE 1. CICADINAE. (a) *Pachysaltria peristicta* Torres, Holotype male, dorsal and lateral view. (b) *P. haematodes* Torres, Holotype male, dorsal and lateral view. (c) *Fidicina pullata* Berg, Holotype male, dorsal view. (d) *F. bonaerensis* Berg, Syntype male, dorsal and lateral view. (e) *Elassoneura carychrous* Torres, Holotype male, dorsal and lateral view. (f) *Prasinosoma fuembuenai* Torres, Holotype male, dorsal view. Scale = 1 cm.

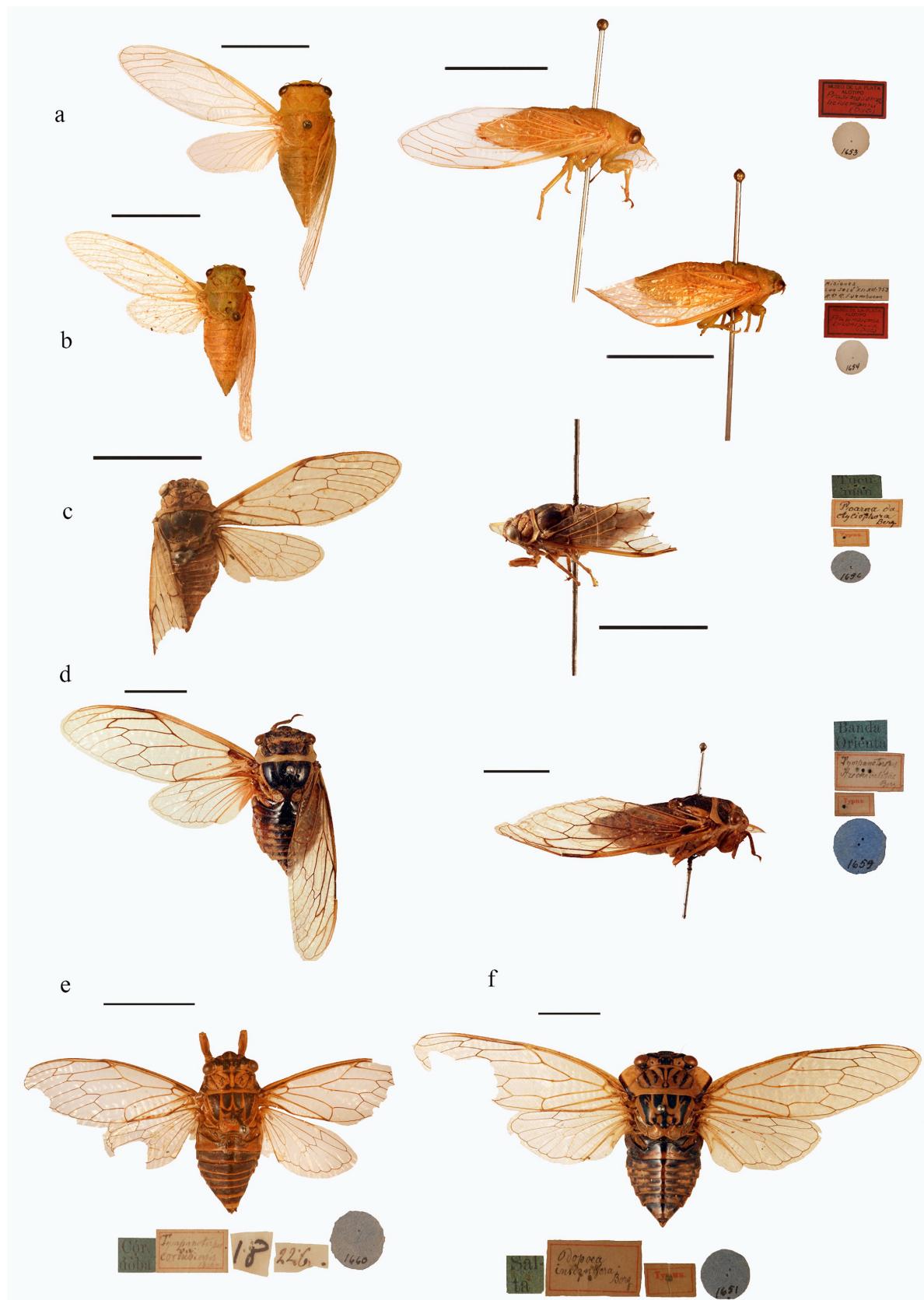


FIGURE 2. CICADINAE. (a) *Prasinosoma heidemanni* (Distant), Allotype female, dorsal and lateral view. (b) *P. inconspicua* (Distant), Allotype male, dorsal and lateral view. (c) *Proarna dactyliophora* Berg, Holotype female, dorsal and lateral view. (d) *Tympanoterpes arechavaletae* Berg, Holotype male, dorsal and lateral view. (e) *T. cordubensis* Berg, Holotype male, dorsal view. (f) *Odopoea insignifera* Berg, Syntype male, dorsal view. Scale = 1 cm.

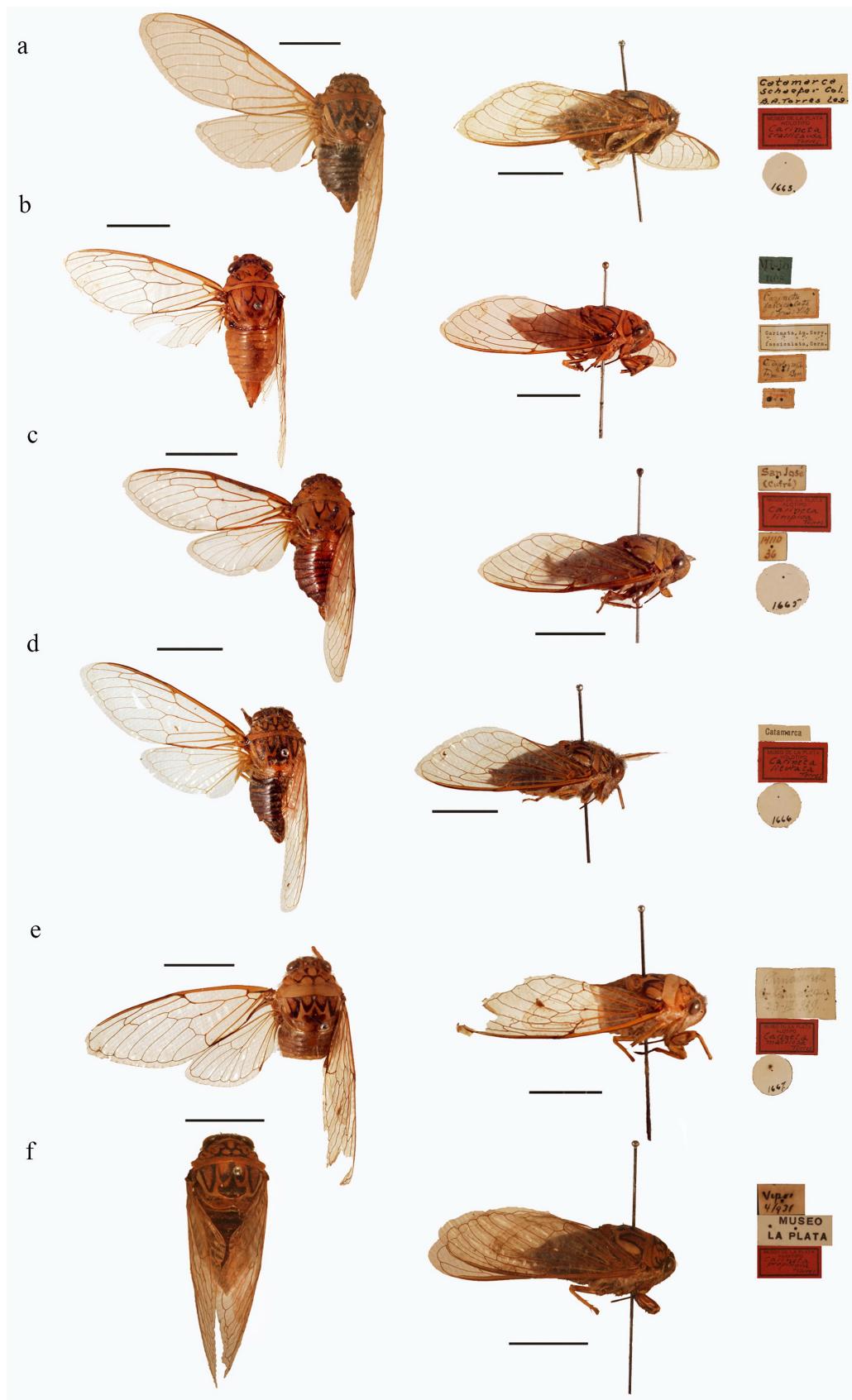


FIGURE 3. CICADETTINAE. (a) *Carineta crassicauda* Torres, Holotype male, dorsal and lateral view. (b) *C. diplographa* Berg, Holotype female, dorsal and lateral view. (c) *C. limpida* Torres, Allotype male, dorsal and lateral view. (d) *C. liturata* Torres, Holotype male, dorsal and lateral view. (e) *C. maculosa* Torres, Allotype female, dorsal and lateral view. (f) *C. propinqua* Torres, Paratype male, dorsal and lateral view. Scale = 1 cm.

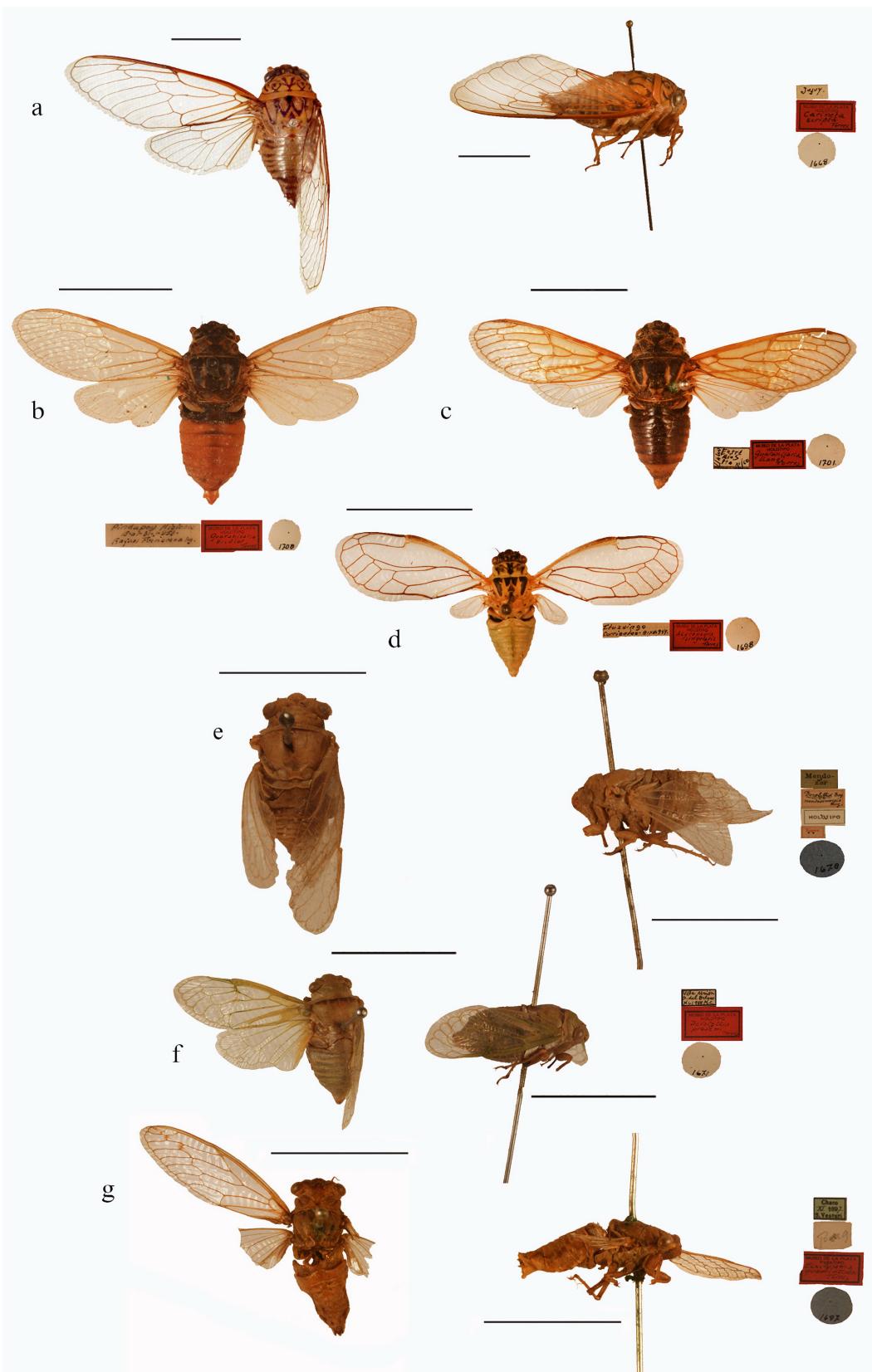


FIGURE 4. CICADETTINAE. (a) *Carineta scripta* Torres, Holotype male, dorsal and lateral view. (b) *Guaranisaria bicolor* Torres, Holotype male, dorsal view. (c) *G. llanoi* Torres, Holotype male, dorsal view. (d) *Acyroneura singularis* Torres, Holotype male, dorsal view. (e) *Derotettix mendosensis* Berg, Holotype male, dorsal and lateral view. (f) *D. proseni* Torres, Holotype male, dorsal and lateral view. (g) *Elachysoma quadrivittata* Torres, Paratype male, dorsal and lateral view. Scale = 1 cm.

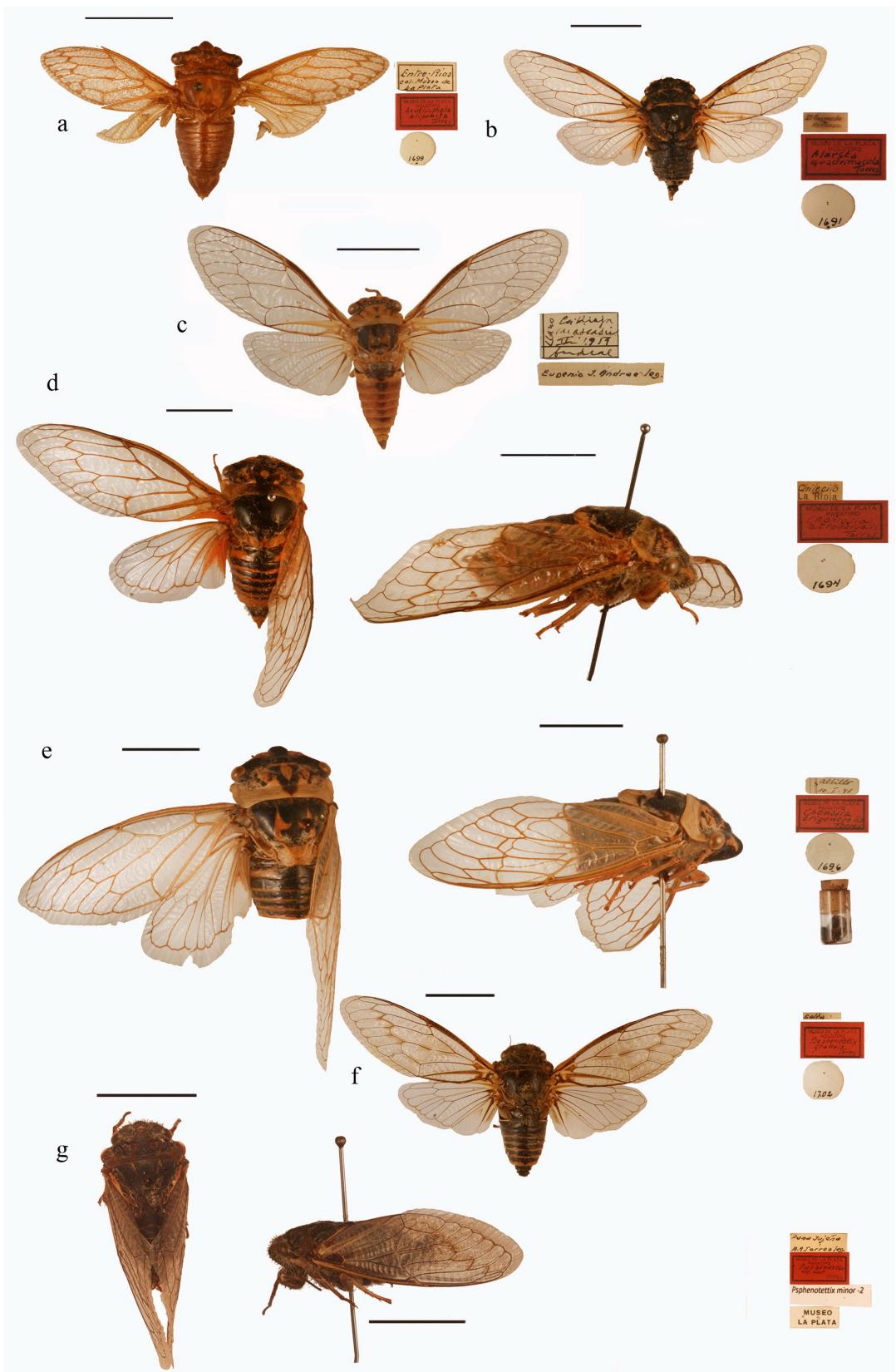


FIGURE 5. TIBICININAE. (a) *Acuticephala alipuncta* Torres, Holotype female, dorsal view. (b) *Alarcta quadrimaculata* Torres, Holotype male, dorsal view. (c) *Babras sonorivox* Jacobi, Allotype male, dorsal view. (d) *Chonusia atrodorsalis* Torres, Paratype female, dorsal and lateral view. (e) *Chonusia trigonocelis* Torres, Paratype female, dorsal and lateral view. (f) *Psephenotettix grandis* Torres, Holotype male, dorsal view. (g) *Psephenotettix minor* Torres, Paratype male, dorsal and lateral view. Scale = 1 cm.

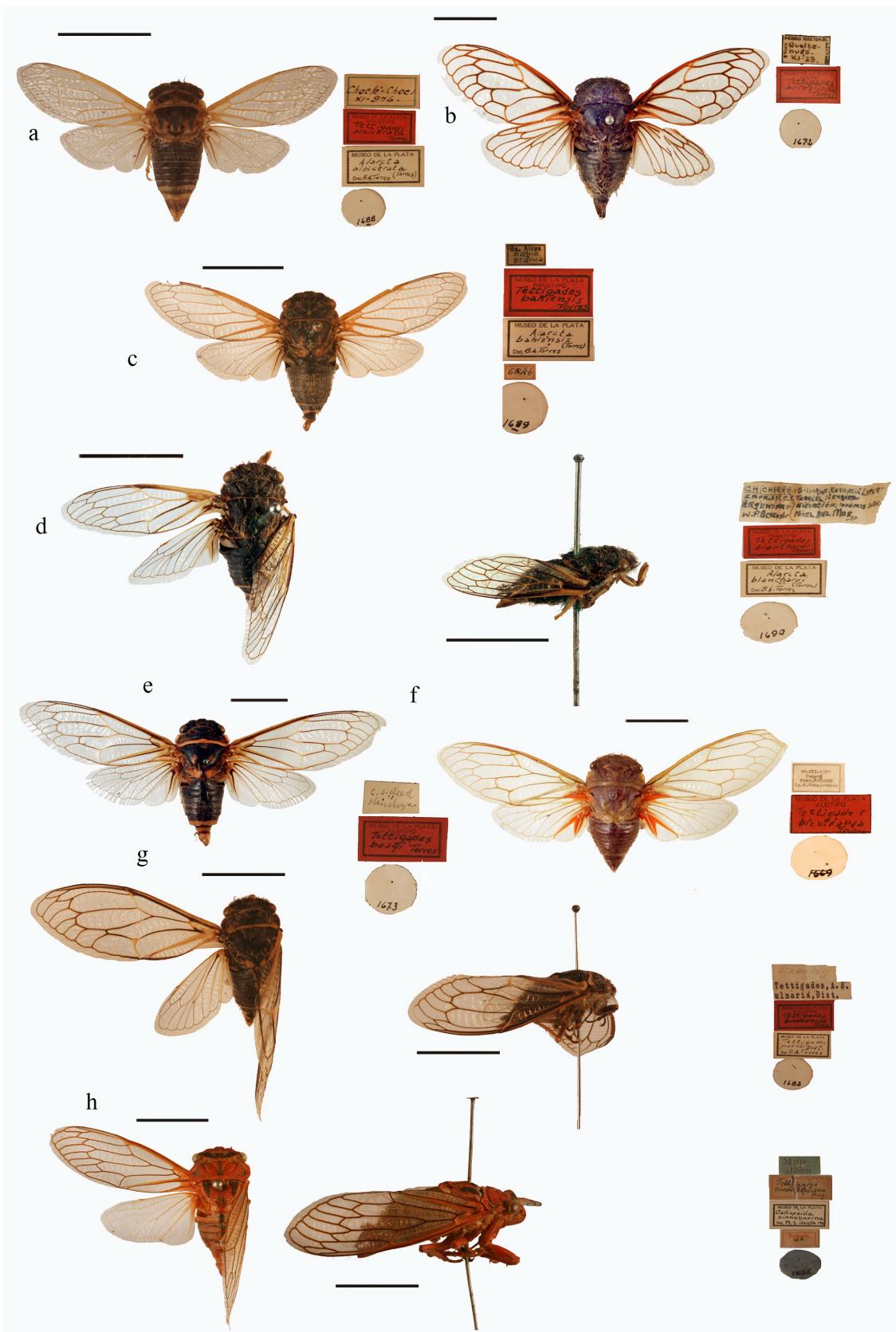


FIGURE 6. TIBICININAE. (a) *Tettigades albicerata* Torres, Holotype female, dorsal view. (b) *T. auropilosa* Torres, Syntype male, dorsal view. (c) *T. bahiensis* Torres, Paratype male, dorsal view. (d) *T. blanchardi* Torres, Paratype male, dorsal and lateral view. (e) *T. bosqi* Torres, Allotype male, dorsal view. (f) *T. brevicauda* Torres, Allotype female, dorsal view. (g) *T. brevivenosa* Torres, Holotype male, dorsal and lateral view (h) *T. cinnabarina* Berg, Holotype female, dorsal and lateral view. Scale = 1 cm.

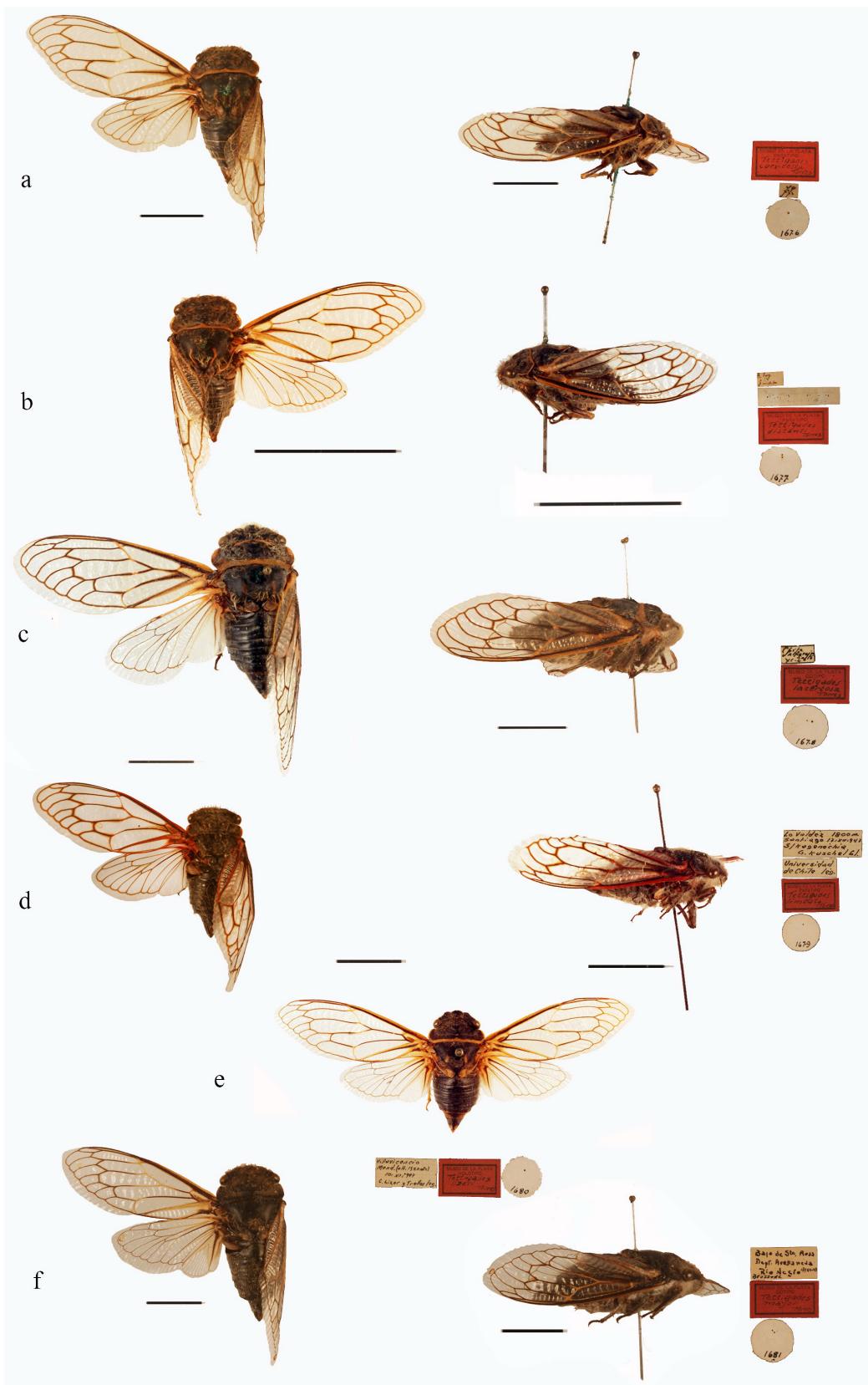


FIGURE 7. TIBICININAE. (a) *Tettigades curvicosta* Torres, Paratype female, dorsal and lateral view. (b) *T. distanti* Torres, Paratype male, dorsal and lateral view (c) *T. lacertosa* Torres, Syntype male, dorsal and lateral view. (d) *T. limbata* Torres, Paratype male, dorsal and lateral view. (e) *T. lizeri* Torres, Holotype female, dorsal view. (f) *T. major* Torres, Syntype female dorsal and lateral view. Scale = 1 cm.

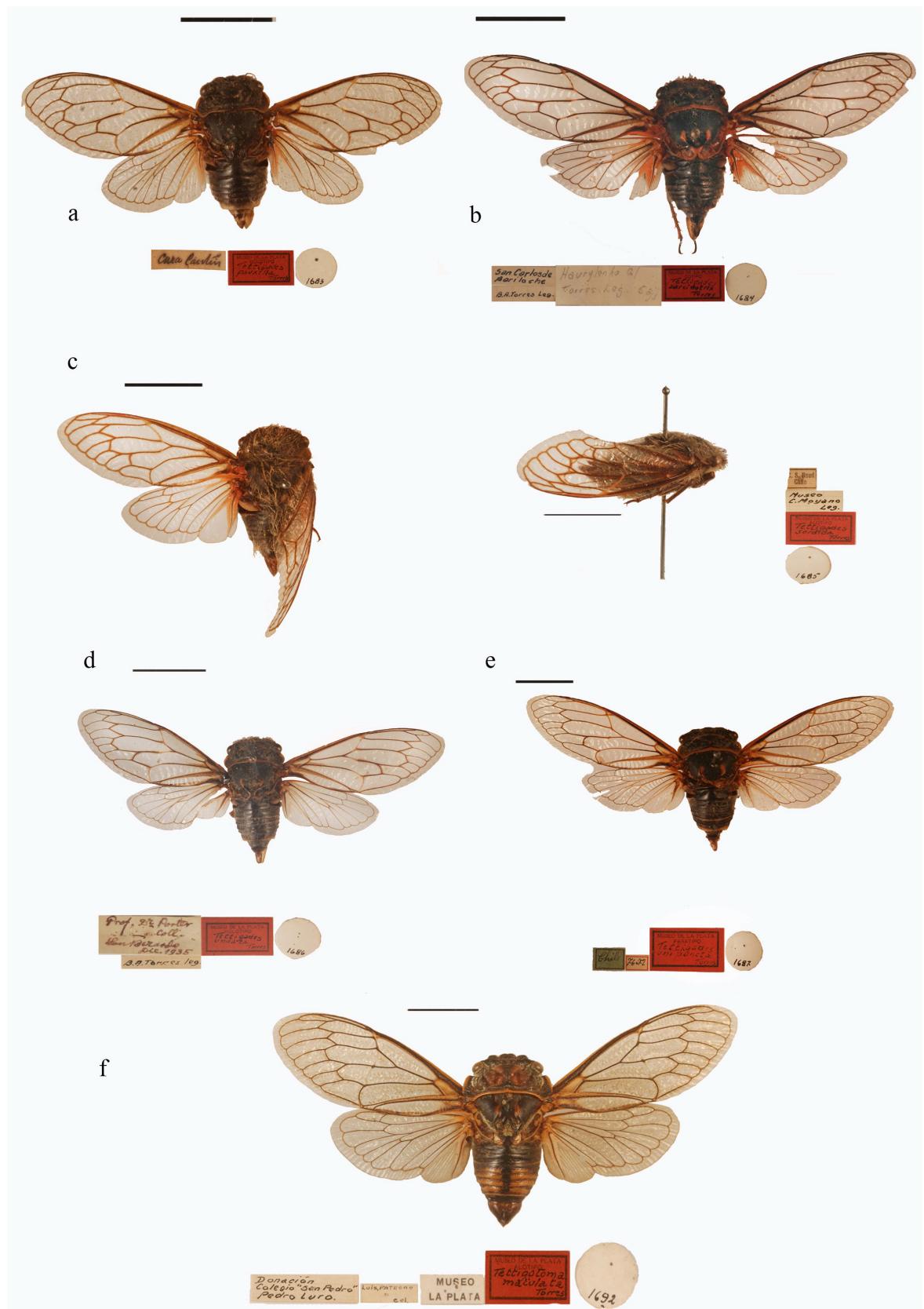


FIGURE 8. TIBICININAE. (a) *Tettigades pauxilla* Torres, Holotype male, dorsal view. (b) *T. sarcinatrix* Torres, Syntype male, dorsal view (c) *T. sordida* Torres, Holotype male, dorsal and lateral view. (d) *T. undata* Torres, Holotype male, dorsal view. (e) *T. unipuncta* Torres, Paratype male, dorsal view. (f) *Tettigotoma maculata* Torres, Allotype female, dorsal view. Scale = 1 cm.