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The type specimens of Calyptratae (Diptera) housed in non-traditional institutions in Argentina

LUCIANO DAMIÁN PATITUCCI^{1,2}, PABLO RICARDO MULIERI^{1,2}, M. CECILIA DOMÍNGUEZ^{1,3}
& JUAN CARLOS MARILUIS^{1,2}

¹Consejo Nacional de Investigaciones Científicas y Técnicas, Buenos Aires, Argentina

²Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN), Av. Ángel Gallardo 470, C1405DJR, Buenos Aires, Argentina. E-mail: lpatitu@yahoo.com.ar; mulieri@yahoo.com; jcmariluis@yahoo.com.ar

³Laboratorio de Entomología, Instituto Argentino de Investigaciones de Zonas Áridas (IADIZA), CCT-Mendoza.
E-mail: medomin@mendoza-conicet.gov.ar

Abstract

The type material of species of Calyptratae Diptera belonging to Anthomyiidae, Calliphoridae, Fanniidae, Muscidae, Sarcophagidae, and Tachinidae, housed in the collections of non-traditional institutions in Argentina were examined. These collections were included in the recently created “Sistema Nacional de Datos Biológicos” (National Biological Data System). We examined four collections: “Administración Nacional de Laboratorios e Institutos de Salud ‘Dr. Carlos G. Malbrán’” (ANLIS), “Instituto Nacional de Tecnología Agropecuaria, Castelar, Buenos Aires” (INTA), “Instituto Argentino de Investigaciones de las Zonas Áridas” (IADIZA); and “Fundación Félix de Azara” (CFA). Comparison of the original descriptions of these species with the label information revealed the existence of 24 holotypes, 5 lectotypes, 11 syntypes, and 441 paratypes/paralectotypes. Complete information is given for each type, including reference to the original description, label data, and preservation condition.

Key words: Anthomyiidae, Argentina, Calliphoridae, Fanniidae, Muscidae, Sarcophagidae, Tachinidae

Introduction

Biological collections housed in natural history museums and institutions are huge databases of biodiversity. These collections are used to document the results of scientific researches and as a source of information to generate new data and knowledge (Simmons & Muñoz-Saba 2005). The largest entomological collections of Argentina are housed in three institutions, the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN), and the Museo de La Plata (MLP), from Buenos Aires province; and the Fundación e Instituto “Miguel Lillo” (IFML), from Tucumán province. Such institutions have a continuing and long history of academic development and biological research, which reaches over 200 years for the MACN and over 100 years for the MLP, and for these reasons they are properly considered as “traditional institutions”. On the other hand, there are a wide variety of other institutions in Argentina very different from natural history museums according to their history, policies and objectives, such as institutes oriented to applied entomology, public health, pest control, or younger institutions devoted to biological research. Some of these non-traditional institutions possess small but valuable entomological collections.

In the last years, and in order to bring stability and allow the public access to these wide variety of biological data, the Ministry of Science, Technology and Innovation Production of Argentina, created the “Sistema Nacional de Datos Biológicos” (SNDB) <http://www.sndb.mincyt.gob.ar/> (National Biological Data System). The aim of SNDB is to form a unified database of biological information, from taxonomic, ecological, cartographic, bibliographic, ethnobiological, and natural resources; promote the exchange of information through a national network of data, and consolidate conditions for the maintenance records and collections management.

The compilation of the nominal species of Calyptratae and their types housed in Argentinean institutions has

been recently initiated (Mulieri *et al.* 2010b; Patitucci *et al.* 2011; Mulieri *et al.* 2013). The type specimens housed in institutions are useful for taxonomy and biodiversity research since they represent accurate data on records of a species at a given location on a specific date. The compilation of this information has been recommended by the International Code of Zoological Nomenclature (Recommendation 72F.4, ICZN 1999). In this work, we present the type material of Calypratae Diptera housed in four institutions: Administración Nacional de Laboratorios e Institutos de Salud “Dr. Carlos G. Malbrán” (ANLIS), Buenos Aires City; Instituto Nacional de Tecnología Agropecuaria, Castelar, (INTA), Castelar, Buenos Aires; Instituto Argentino de Investigaciones de las Zonas Áridas (IADIZA), Mendoza province; and Fundación “Félix de Azara” (CFA), Buenos Aires; all included in the SNDB.

Material and methods

The collections of ANLIS, CFA, IADIZA, and INTA were studied to identify and record the primary and secondary types of Calypratae (Diptera) housed therein. Type material was identified by comparing label data with the specimen data given in the published descriptions. It is important to note that type material is not always to be found in the same depositories as cited in the original publications. It was therefore necessary to check label data carefully to ensure that type specimens were properly recognized. In such instances, according to the Article 73.2 of the *Code* (ICZN 1999), Blanchard’s cotypes and paratypes are all syntypes because a holotype was not designated. Allotypes were occasionally designated and have the same status as paratypes under the *Code*. Also, according to the Article 76.2 of the *Code* (ICZN 1999), the place of origin of the lectotype become the type locality of the nominal specie-group taxon.

The list of type series is arranged alphabetically by available species-group name for each institution. For each specific name information is given on the original publication, type locality (or localities) of name-bearing types, number and sex of the type specimens arranged by type category (i.e., holotype, lectotype, syntypes, paratypes, and paralectotypes), label data, and condition of specimens. Labels are quoted verbatim, with lines separated by a slash, different labels separated by a semicolon, and comments given in brackets. No space is included on either side of the slash if a slash appears on a label (e.g., “s/Danais”). We included notes with the composition of the original type series and bibliographic references to nomenclatural changes and current placements, where required. The current combination is included when it differs from the original combination. We summarized the information of the four collections in Table 1. We listed 24 holotypes, 5 lectotypes, 11 syntypes, and 441 paratypes/paralectotypes.

TABLE 1. Type specimens housed in ANLIS, INTA, CFA and IADIZA.

Institution	Family	Species	Holotype/ Lectotype	Paratype/ Paralectotype	Syntype	Slides
ANLIS	Calliphoridae	<i>fontanai</i> , <i>Cochliomyia</i>	H	14		
	Calliphoridae	<i>maurii</i> , <i>Sarconesia</i>		1		
	Calliphoridae	<i>mera</i> , <i>Lucilia</i>	L	1		2
	Calliphoridae	<i>primaveris</i> , <i>Lucilia</i>		8		1
	Calliphoridae	<i>segmentaria pacifiensis</i> , <i>Hemilucilia</i>		1		
	Muscidae	<i>aconquija</i> , <i>Morellia</i>				4
	Muscidae	<i>carbonaria</i> , <i>Ophyra</i>	L	7		
	Muscidae	<i>platensis</i> , <i>Phronota</i>	L			
	Muscidae	<i>portensis</i> , <i>Phronota</i>	L			
	Sarcophagidae	<i>antonioi</i> , <i>Microcerella</i>		2		
INTA	Sarcophagidae	<i>coniceti</i> , <i>Microcerella</i>		2		
	Muscidae	<i>sociabilis</i> , <i>Bithoracochaeta</i>	L	3		
	Sarcophagidae	<i>aleuaphaga</i> , <i>Protodexia</i>	H			
	Sarcophagidae	<i>bosqui</i> , <i>Paraphrissopoda</i>	H			

.....continued on the next page

TABLE 1. (Continued)

Institution	Family	Species	Holotype/ Lectotype	Paratype/ Paralectotype	Syntype	Slides
	Sarcophagidae	<i>chacoana, Oxyhelicobia</i>	H			
	Sarcophagidae	<i>chubutina, Neotephromyiella</i>	H	1		
	Sarcophagidae	<i>delpontei, Sarcophaga</i>		1		
	Sarcophagidae	<i>deaurata, Neosarcodexia</i>			1	
	Sarcophagidae	<i>salavini, Hypopelta</i>	H			
	Sarcophagidae	<i>dangeloi, Pattonella</i>			1	
	Tachinidae	<i>argentinensis, Trichopodopsis</i>	H			
	Tachinidae	<i>aurea, Eutritochaeta</i>	H			
	Tachinidae	<i>bosqi, Trichopodopsis</i>	H			
	Tachinidae	<i>christensenii, Trichopodopsis</i>	H			
	Tachinidae	<i>cingulipes, Ptilodexia</i>	H			
	Tachinidae	<i>crouzelae, Perua</i>	H	2		
	Tachinidae	<i>crouzeli, Pleosiodesilla</i>	H			
	Tachinidae	<i>limbata, Trichopodopsis</i>	H			
	Tachinidae	<i>loxostegei, Frontiniella</i>			2	
	Tachinidae	<i>mendocina, Euthyprosopilla</i>	H			
	Tachinidae	<i>ruficornis, Okeopsis</i>	H			
	Tachinidae	<i>subandina, Ceracia</i>	H			
	Tachinidae	<i>williamsoni, Zygopriontinopsis</i>	H			
	Tachinidae	<i>ypsiloniformis, Ptilodexia</i>	H			
CFA	Anthomyiidae	<i>bruchi, Hylemyia</i>			1	
	Anthomyiidae	<i>punctipennis, Hylemyia</i>			2	
	Muscidae	<i>carbonaria, Ophyra</i>		3		
	Muscidae	<i>portensis, Phironota</i>		2		
IADIZA	Fanniidae	<i>hermani, Fannia</i>	H	62		
	Fanniidae	<i>losgateados, Fannia</i>	H	5		
	Fanniidae	<i>roigi, Fannia</i>	H	23		
	Fanniidae	<i>sanihue, Fannia</i>	H	300		
	Fanniidae	<i>yunguensis, Fannia</i>		3		
	Sarcophagidae	<i>antofagastensis, Microcerella</i>	H			

Catalogue of types

Type specimens housed in ANLIS

The ANLIS is the main public health institution of Argentina, and its entomological collection is mainly directed to sanitary and medical studies. This entomological collection includes part of the historic collections of two older institutions: Instituto Regional de Entomología Sanitaria “Juana Petrocchi” and Instituto Argentino de Artropodología Sanitaria. Throughout the last 50 years, the collection suffered different state politics, and has been historically less studied by researchers. Specimens deposited in these collections belong principally to disease-vector insects (e.g., Culicidae, Psychodidae, Siphonaptera). More specifically, the Diptera type specimens of Calyptratae housed in ANLIS collection were deposited by Eduardo Del Ponte, Miguel Garcia, and Juan Carlos Mariluis, all of whom worked at this institution.

Calliphoridae

***fontanai* [Cochliomyia].** Garcia, 1952a: 71–77. Argentina: Buenos Aires, Capital Federal.

HOLOTYPE: male, glued on pin, damaged, without abdomen, “314” handwritten on white paper, red frame; red circle; “Cochliomyia / fontanai [handwritten] / Holotytus [sic!] [printed] / M.Garcia 1952 [handwritten]” on red paper. **PARATYPES:** one female, glued on card, “577” handwritten on white paper; “Cochliomyia / fontanai / Allotipo / M Garcia 1952” handwritten on white paper. **One** male, glued on card, red circle; “578” handwritten on white paper; “Cochliomyia / fontanai [handwritten] / Paratypus [printed] / M.Garcia 1952 [handwritten]” on white paper. **One** male, glued on card, without abdomen; red circle; “692” handwritten on white paper; “C. fontanai / Cap. Fed.” handwritten on white paper; “ex-larvae / s-carne” handwritten on white paper; “Fontana leg / 2-944” handwritten on white paper; “fontan” handwritten on white paper. **One** female, glued on pin, “ex. larvae sobre / carne. Bel- / grano.C.F. / 1-II-44 / leg. Fontana” handwritten on white paper; “registro n° [printed] / Cochliomyia / fontanai [handwritten]” on white paper, black frame. **One** female, pinned, in good condition, “Cap Fed. Belgrano / 1-II-44 s/carne” handwritten on white paper; “macell.” handwritten on white paper. **Four** females, pinned, in four pins, in good condition, “Cap Fed. Belgrano / 1-II-44 s/carne” handwritten on white paper. **One** female, glued on card, in good condition, “ex. larvae / s/carne / C. F. 1.II.44 / leg. Fontanai” handwritten on white paper. **One** female, glued on card, in good condition, “ex. larvae / s/carne / C. F. 1.II.44 / leg. Font.” handwritten on white paper. **One** male, glued on pin, in good condition, red circle; “ex. larvae / sobre carne / Belgrano C F / 1.II.44 / leg. Font.” handwritten on white paper. **One** male, glued on card, in good condition, red circle; “ex. larvae / s/carne / C. F. 1.II.44 / leg. Fontana” handwritten on white paper. **One** male, glued on card, in good condition, red circle; “ex. larvae / s/carne / C. F. 1.II.44 / leg. Font.” handwritten on white paper.

Note. The original type series consisted of the holotype, allotype and 13 paratypes from Belgrano, Capital Federal. This species was synonymized with *Cochliomyia macellaria* (Fabricius) by Mariluis (1982).

***maurii* [Sarconesia].** Mariluis, 1981: 104–105. Ecuador: Cotopaxi, Tigua.

PARATYPE: **one** female, pinned, in good condition, “Ecuador / Cotopaxi-Tigua / 4/76 3.800 m. / Mariluis col.” handwritten on white paper; “Par [handwritten] atypus [printed]” on white paper; “Sarconesia maurii / Mariluis, 1981” printed on white paper; “Paratype” printed on red paper.

Note. The original type series consisted of the holotype and 17 paratypes (1 male and 16 females) from Tigua, Cotopaxi, Ecuador, and 6 female paratypes from Pijuli, Cotopaxi, Ecuador. Only one paratype is housed in ANLIS, the remaining 22 paratypes and the holotype are housed in MACN. Currently treated as a valid species of *Chlorobrachycoma* Townsend (Kosmann *et al.* 2013).

***mera* [Lucilia].** Shannon & Del Ponte, 1926: 586 (Figs. 1–3). Argentina: Jujuy, San Pedro de Jujuy.

LECTOTYPE: male, pinned, damaged, without abdomen, legs and wings, “San Pedro de / Jujuy [printed] 4.28.26 [handwritten]” on white paper; “Shannon & / Shannon” printed on white paper; “477” handwritten on white paper, red frame; “Tipo / 7.IX.46 / CDP” handwritten on white paper, red frame; “Lucilia / mera / S.& Del P.” handwritten on white paper. One slide, wing, “3108 / 477 / L.mera / Holotipo” handwritten; “Lucilia mera / Sh y D. P. / Holotipo” handwritten. One slide, genitalia, “P. mera / tipo ♂” handwritten on white paper; “3109 / 477 / Holotipo” handwritten; “3109 / ad.477 / Holotipo / Lucilia mera / Sh. y D. P. / S. Pedro de Jujuy / 28-IV-26” handwritten on white paper. **PARALECTOTYPE:** **one** male, pinned, in good condition, “San Pedro de / Jujuy [printed] 4.28.26 [handwritten]” on white paper; “Shannon & / Shannon” printed on white paper; “Lucilia / mera / S & D.P.” handwritten on white paper; “mus, B.R.” handwritten on white paper, with red ink.

Note. The original type series consisted of three males and two females from San Pedro de Jujuy, Jujuy province and Concepción de Tucumán, Tucumán province. We found only the lectotype and one paralectotype in ANLIS. Mello (1961: 274) mentioned the existence of a male holotype when he commented: “... duas láminas con asa e genitália de *Lucilia mera*, *San Pedro de Jujuy*, 28.IV.26, *Holotipo* (macho) (nº3109 e 3108) ...” and this is regarded as a lectotype fixation. This nominal species was synonymized with *Lucilia ochricornis* (Wiedemann) by Whitworth (2014). The United States National Museum (USNM) has two males and two females from San Pedro de Jujuy, Argentina, and one male from Concepción, Tucumán, Argentina (Whitworth 2014: 36). Whitworth (2014) did not examine the type specimens housed in ANLIS and overlooked the lectotype fixation made by Mello (1961).



FIGURES 1–3. *Lucilia mera* Shannon & Del Ponte, 1926. Holotype. **1.** Type labels. **2–3.** Slides examined by Mello (1961). **2.** Wing. **3.** Genitalia.

primaveris [as “*prima veris*”] [*Lucilia*]. Shannon & Del Ponte, 1926: 586. Argentina: Buenos Aires, San Isidro.

PARALECTOTYPES: one male, pinned, damaged, without abdomen and legs, “San Isidro (B.A.) [printed] / 9-16-26 [handwritten]” on white paper, black frame; “R. C. Shannon / coll.” printed on white paper; “475” handwritten on white paper, red frame; “Tipo / 7.IX.46 / C.D.P.” handwritten on white paper, red frame; red circle; “Lucilia / primaveris / S.& D P.” handwritten on white paper; “Lucilia / eximia (Wied) / sin. s/D.P X-946” handwritten on white paper. One female, pinned, in good condition, “San Isidro (B.A.) [printed] / 9-16-26 [handwritten]” on white paper, black frame; “R. C. Shannon / coll.” printed on white paper; “Lucilia / primaveris / S.& D P.” handwritten on white paper; “mus B. R.” handwritten on white paper, with red ink. One male, pinned, damaged, “San Isidro (B.A.) [printed] / 9-16-26 [handwritten]” on white paper, black frame; red circle; “R. C. Shannon / coll.” printed on white paper. One male, pinned, damaged, “San Isidro (B.A.) [printed] / 9-16-26 [handwritten]” on white paper, black frame; “R. C. Shannon / coll.” printed on white paper; red circle; “ibis?” handwritten on white paper, with blue ink. One male, pinned, without head and abdomen, “San Isidro (B.A.) [printed] / 9-16-26 [handwritten]” on white paper, black frame; “R. C. Shannon / coll.” printed on white paper; “E. Del Ponte Coll [printed] / ♂ 1 [handwritten]” on white paper, black frame; red circle. One male, pinned, damaged, without abdomen, “San Isidro (B.A.) [printed] / 9-16-26 [handwritten]” on white paper, black frame; “R. C. Shannon / coll.” printed on white paper; red circle; “664” handwritten on white paper. One slide, genitalia, “3037 / ad 464” handwritten; “3037 / 664 4 / San Isidro / L. primaveris / genitalia ♂” handwritten on white paper. One male pinned, damaged, without legs and left wing, “San Isidro (B.A.) [printed] / 9-16-26 [handwritten]” on white paper, black frame; “R. C. Shannon / coll.” printed on white paper; “626” handwritten on white paper; red circle. One male pinned, damaged, “San Isidro (B.A.) [printed] / 9-16-26 [handwritten]” on white paper, black frame; “R. C. Shannon / coll.” printed on white paper; “476” handwritten on white paper, red frame; red circle.

Note. The original type series consisted of seven males and nine females from San Isidro, Buenos Aires province. We found only six males and two females in ANLIS. Whitworth (2014) studied one male and one female from USNM, designated the male as lectotype, and synonymized this nominal species with *Lucilia ochricornis* (Wiedemann).

segmentaria pacifiensis [*Hemilucilia*]. Mariluis, 1980: 85. Ecuador: Quevedo, Pichilingue.

PARATYPE: one male, pinned, specimen in good condition, “Ecuador / Quevedo-Pichilingue / 4/76 / Mariluis col.” handwritten on white paper; “Paratypus” printed on red paper, black frame; “H. seg. Pac. 80” handwritten on white paper; “*Hemilucilia semidiaphana* / (Rond.) Mariluis det 88” printed on white paper; “*Hemilucilia* [sic!] *segmentaria* / *paciensis* Mariluis, 1980” printed on white paper.

Note. This species was synonymized with *Hemilucilia semidiaphana* (Rondani) by Dear (1985).

Muscidae

aconquija [*Morellia*]. Shannon & Del Ponte, 1926: 581–582. Argentina: Tucumán, Tucumán, and Jujuy, San Pedro de Jujuy.

SYNTYPES: one female, pinned, without left wing, “Tucumán / Tuc [printed] 3.7.26 [handwritten]” on white paper; “Shannon & / Shannon” printed on white paper; “*Morellia* / *aconquija* / S&DP.” handwritten on white paper. Two females, pinned in two pins, in good condition, “Tucumán / Tuc [printed] 3.7.26 [handwritten]” on white paper; “Shannon & / Shannon” printed on white paper. One female, pinned, in good condition, “San Pedro de / Jujuy [printed] 4.27.26 [handwritten]” on white paper; “Shannon & / Shannon” printed on white paper.

Note. The original type series consisted of two males and nine females from Parque Aconquija, Tucumán City, Tucumán province, and San Pedro de Jujuy, Jujuy province. We found only four females in ANLIS. Currently synonymized with *Morellia* (*Morellia*) *violacea* (Robineau-Desvoidy) (Carvalho *et al.* 2005).

carbonaria [*Ophyra*]. Shannon & Del Ponte, 1926: 576–577. Argentina: Tucumán, Tucumán City.

LECTOTYPE: one male, pinned, “Tucumán / Tuc [printed] 6.21.26 [handwritten]” on white paper; “R.C. Shannon / Coll.” printed on white paper; “*Ophyra* / *carbonaria* / S.& DP.” handwritten on white paper; “Lectotype / *Ophyra carbonaria* / Shannon & Del Ponte, 1926 / L. D. Patitucci det. 2012” printed on red label.

PARALECTOTYPES: One female, pinned, “San Isidro (Bs. As.) [printed] / 8:25:26 [handwritten]” on white paper, black frame; “Shannon & / Shannon” printed on white paper; “*Ophyra* / *carbonaria*” handwritten on white paper; “Paralectotype / *Ophyra carbonaria* / Shannon & Del Ponte, 1926 / L. D. Patitucci det. 2012” printed on red label. Four females and two males, pinned, labels: “San Isidro (Bs. As.) [printed] / 8:25:26 [handwritten]” on white paper, black frame; “Shannon & / Shannon” printed on white paper; “Paralectotype / *Ophyra carbonaria* / Shannon & Del Ponte, 1926 / L. D. Patitucci det. 2012” printed on red label.

Note. Described from 11 males and three females as syntypes from Buenos Aires and Tucumán. As noted by Patitucci *et al.* (2013), the number of female specimens belonging to the type series exceeds the original number of three females. The lectotype and seven paralectotypes (five females and two males) from Buenos Aires are housed in ANLIS (Patitucci *et al.* 2013). The date of collection of the syntypes in ANLIS differs from the published date of “21 de julio de 1926”. We consider the published date to be in error and the specimens in ANLIS to be the original syntypes because they bear the usual labels used by R.C. Shannon for his types. Synonymized with *Ophyra aenescens* by Aldrich (1928) and Shannon & Del Ponte (1928). (Additional specimens, see entry of *O. carbonaria* from CFA.)

platensis [*Phyronota*]. Shannon & Del Ponte, 1926: 578. Argentina: Buenos Aires, Capital Federal.

LECTOTYPE: one female, pinned, in good condition, “Cap. Federal / Buenos Aires / 15.9.26 / R.C. Shannon” handwritten on white paper; “*Phyronota* / *platensis* / S & D P.” handwritten on white paper, “Lectotype / *Phyronota platensis* / Shannon & Del Ponte, 1926 / L. D. Patitucci det. 2012” printed on red paper.

Note. Described from one male and one female as syntypes from Buenos Aires Province, Argentina. The lectotype was designated by Patitucci *et al.* (2013). Currently synonymized with *Psilocheata chlorogaster* (Wiedemann) (Carvalho *et al.* 2005).

portensis [*Phyronota*]. Shannon & Del Ponte, 1926: 577. Argentina: Buenos Aires, Adrogue.

LECTOTYPE: one male, pinned, in good condition, “E. Del Ponte Coll [printed] / ♂ En copula [handwritten]” on white paper, black frame; “Adrogue (B A) [printed] / 12.9.26 [handwritten]” on white paper, black frame; “Lectotype / *Phyronota portensis* / Shannon & Del Ponte, 1926 / L. D. Patitucci det. 2012” printed on red paper.

Note. Described from seven males and four females as syntypes from Buenos Aires province, Argentina. The lectotype was designated by Patitucci *et al.* (2013), and three male paralectotypes are housed in USNM. Synonymized with *Psilochaeta chalybea* (Wiedemann) by Shannon & Del Ponte (1928). (Additional specimens, see entry of *P. portensis* from CFA.)

Note on Garcia's *Philornis* type specimens

Garcia (1952b) described three new species of the genus *Philornis*: *P. blanchardi*, *P. seguyi*, and *P. umanai*; all based on female specimens from several locations of Argentina. Garcia deposited the type specimens in the original collection of the Instituto Argentino de Arthropodología Sanitaria. The type series of the three nominal species were not recovered during the examination of the ANLIS collection and are currently considered misplaced or presumed lost. The only information regarding the possible location of these specimens is a single note found in an entomological box in ANLIS: "Holotipos DE-II-1971- / niq / *Philornis umanai* / Ph. *seguyi* y / Ph. *blanchardi* se / enviaron a H. Rodney / Dodge. – Bradenton Trailer / park; Bradenton, Fla.33505 / U.S.A." (Fig. 4). The note indicated that the three type specimens were sent to Harold Rodney Dodge (1913–1973) in 1971.

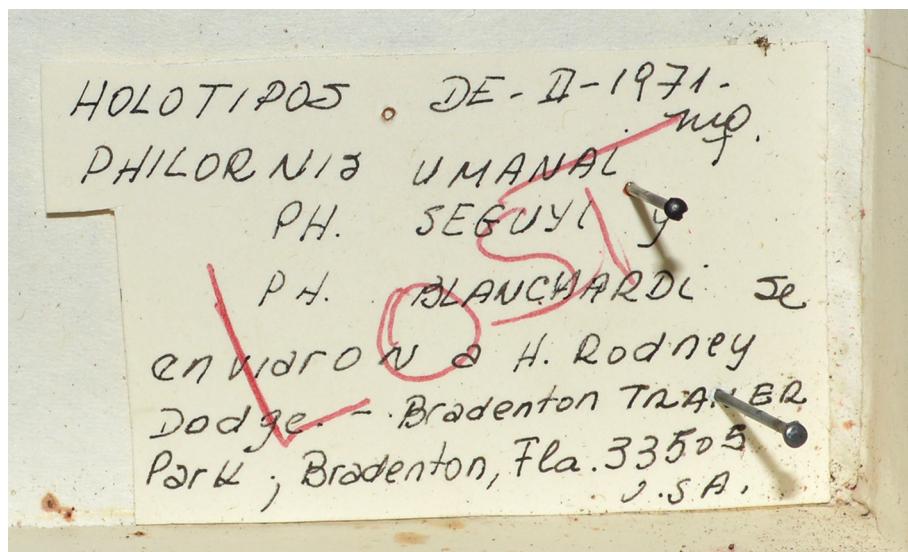


FIGURE 4. Note located in an entomological box about Garcia's *Philornis* type specimens.

Sarcophagidae

antonioi [*Microcerella*]. Mariluis, 2002: 91–94. Argentina: Santa Cruz, Puerto Santa Cruz.

PARATYPES: Two males, pinned, "Arg. Santa Cruz / Pto. Santa Cruz / II-1998 / Mariluis col." printed on white paper; a red circle of paper; "Microcerella antonioi / Mariluis det. 1999 / Paratipo" printed on white paper; "Paratype" printed on red paper.

coniceti [*Microcerella*]. Mariluis, 2006: 48–52. Argentina: Santa Cruz, Puerto San Julián.

PARATYPES: one male, glued on card, head damaged, "Paso Cordova / 31-XII-1961" handwritten on white paper; "Microcerella coniceti / Mariluis, 2006 / Paratype" printed on yellow paper; "Paratype" printed on red paper. One male, glued on card, abdomen dissected with genitalia partially exposed glued on card, "Paso Cordova / 31-XII-1961" handwritten on white paper; "Microcerella coniceti / Mariluis, 2006 / Paratype" printed on yellow paper; "Paratype" printed on red paper.

Type specimens housed in INTA

The entomological collection housed at INTA was devoted to veterinary and agricultural pest control. The Calypratae deposited in this collection were part of Everard Eells Blanchard's personal collection. After Blanchard's death, the most significant portion of his collection was sent to MACN, and few specimens were retained at INTA (Mulieri *et al.* 2013).

Muscidae

sociabilis [*Bithoracochaeta*]. Blanchard, 1937: 41–43. Argentina, Misiones, Loreto.

LECTOTYPE: male, glued on card, and legs, wing & genitalia on plastic cards pinned with the specimen; “Loreto / 26/XII/1935 / Ogloblin” handwritten on white paper, black frame; “S/ guavita / Eugenia / sp.” handwritten on white paper, black frame; “Bithoracochaeta / sociabilis / Blnchd. [handwritten] / det. E.E. Blanchard [printed]” on white paper, black frame; “251” handwritten with blue ink, on white paper, black frame; “Holotypus [printed] / ♂ [handwritten]” on red paper; “Lectotype / Bithoracochaeta sociabilis / Blanchard 1937 / L. D. Patitucci det. 2012” printed on red paper. **PARALECTOTYPES:** One female glued on card, “Est. Exp. Loreto / 193 [printed] 5-12-26 [handwritten] / Dr. A. Ogloblin [printed]” on white paper; “S/ guavita / (Eugenia sp.)” handwritten on white paper, black frame; “Bithoracochaeta / sociabilis / Blnchd. [handwritten] / det. E.E. Blanchard [printed]” on white paper, black frame; “250” handwritten with blue ink, on white paper, black frame; “Paratypus [printed] / ♀ [handwritten]” on red paper; “Paralectotype / Bithoracochaeta sociabilis / Blanchard 1937 / L. D. Patitucci det. 2012” printed on red paper. One male, in good condition, glued on card, “S/ guavita / Eugenia / sp.” handwritten on white paper, black frame; “Loreto / 26/XII/35 / Ogloblin” handwritten on white paper, black frame; “253” handwritten with blue ink, on white paper, black frame; “Paratypus [printed] / ♂ [handwritten]” on red paper; “Paralectotype / Bithoracochaeta sociabilis / Blanchard 1937 / L. D. Patitucci det. 2012” printed on red paper. One female, glued on card, legs on plastic cards pinned with the specimen; “S/ guavita / Eugenia / sp.” handwritten on white paper, black frame; “Loreto / 26/XII/35 / Ogloblin” handwritten on white paper, black frame; “252” handwritten with blue ink, on white paper, black frame; “Paratypus [printed] / ♀ [handwritten]” on red paper; “Paralectotype / Bithoracochaeta sociabilis / Blanchard 1937 / L. D. Patitucci det. 2012” printed on red paper.

Note. *Bithoracochaeta sociabilis* was described on an unspecified number of males and females collected from Loreto, Misiones province, and from Chaco province, Argentina. The lectotype and paralectotypes were designated and synonymized with *Atherigona orientalis* Schiner by Patitucci *et al.* (2012).

Sarcophagidae

aleuaphaga [*Protodexia*]. Blanchard, 1942b: 343–344. Argentina: Buenos Aires.

HOLOTYPE: male, damaged, glued on card, abdomen dissected; genitalia on a slide, on one pin, “En Aleuas / 12-19-I-940 [handwritten] / Instit. Invest. Langosta [printed]” on white paper, black frame; “aleuaphaga” handwritten on slide; “Protodexia / aleuaphaga / sp. nov. [handwritten] / det. E.E. Blanchard [printed]” on white paper, black frame.

Note. Currently treated as a junior synonym of *Blaesoxiphia* (*Tephromyia*) *quaesita* (Hall) (Pape 1994, 1996).

bosqi [*Paraphrissopoda*]. Blanchard, 1939: 828–831. Argentina: Misiones

HOLOTYPE: one slide with genitalia, “Misiones / Bosq. / 1936” handwritten on white paper red frame; “n° 708 / Typus” handwritten with blue ink on pink paper; “Paraphrissopoda / bosqui, / Blnchd / tipo [side]” handwritten on white paper, black frame.

Note. The holotype was found without genitalia in MACN (Mulieri *et al.* 2010b). The slide recognized in INTA indubitably belongs to the holotype because it contains structures drawn by Blanchard (1939: 829, fig. 10). Currently treated as a valid species of *Engelmyia* Lopes (Pape 1996).

chacoana [*Oxyhelicobia*]. Blanchard, 1942a: 63, 94–95. Argentina: Chaco, Charata.

HOLOTYPE: male, glued on card, damaged, abdomen dissected, “S/A. argillacea / Charata / leg. Parker III/ 40” handwritten on white paper, black frame; “Oxyhelicobia / chacoana / gen.et sp. nov [handwritten] / det. E.E. Blanchard [printed]” on white paper, black frame; “213” handwritten with blue ink on white paper, black frame; “Holotypus” printed on red paper.

Note. Currently treated as a junior synonym of *Helicobia morionella* (Aldrich) (Lopes 1969, Pape 1996).

chubutina [*Neotephromyiella*]. Blanchard, 1955: 28–30. Argentina: Chubut, Cushamen.

HOLOTYPE male and **PARATYPE** female: one pin, glued on cards, 2 puparia glued on card, male with abdomen dissected, “Chubut / I-1956 / Daguerre” handwritten on white paper; “ex / Bufonacris” handwritten on white paper; “ex / Papipappus / darazianus / Saussure” handwritten on white paper; “Neotephromyiella / chubutina / n. sp [handwritten] / det E.E. Blanchard [printed] / Holotipo” on white paper, black frame; “243” handwritten with blue ink, on white paper, black frame; “Holotypus” printed on red paper.

Note. Currently treated as a valid species of *Blaesoxiphia* (*Tephromyia*) (Pape 1994, 1996).

delpontei [*Oxysarcodexia*]. Blanchard, 1939: 809–811. Argentina: Buenos Aires.

PARALECTOTYPE: slide with male genitalia, “Los Cocos / Cordoba / III-1933 / prep. W” handwritten on white paper, red frame; “n° 701 / Cotypus” handwritten with blue ink on pink paper; “Sarcophaga / delpontei / Cotype Blanchard” handwritten on white paper, red frame.

Note. Blanchard (1939) cited his examined material as consisting of an unspecified number of “Cotipos”. The specimen in INTA matches the data published for the “Cotipos”. Mulieri *et al.* (2010a; 2010b) revised one male and 11 female syntypes (from Buenos Aires and Delta) found in MACN, and designated the male specimen as lectotype. Currently treated as a junior synonym of *Oxysarcodexia paulistanensis* (Mattos) (Pape 1996).

deaurata [*Neosarcodexia*]. Blanchard, 1942a: 60–62. Argentina: San Luis, Beazley.

SYNTYPE: One female pinned, in good condition, “Beazley / VIII-‘30” handwritten on white paper; “Neosarcodexia / deaurata, / Blnchd. [handwritten] / det. E. E. Blanchard [printed] / G. et sp. nov. [handwritten]” on white paper, black frame.

Note. Blanchard (1942a) cited his examined material as consisting of two female syntypes. Only one syntype was recognized in INTA. Blanchard (1942a: 62) incorrectly cited the date of syntypes as “VII, 1930”. Currently treated as a junior synonym of *Peckia* (*Sarcodexia*) *florencioi* (Prado & Fonseca) (Buenaventura & Pape 2013).

salavini [*Parahypopelta*]. Blanchard, 1955: 30–32. Argentina: Neuquén, El Bolsón.

HOLOTYPE: male, head, thorax and a leg glued on card, abdomen and genitalia glued on card, on one pin, “El Bolsón / G. Neuquén / 10.XII.1944.” handwritten on white paper black frame; “Sobre D. Arrogans. S./ Material de Salavin / -1945- / -20.IX.1945- [handwritten, reverse]” handwritten on white paper, folded; “Hypopelta / salavini, / Blnchd [handwritten] / det. E.E. Blanchard [printed] / 1 de cotipo [handwritten, side]” on white paper, black frame; “211” handwritten with blue ink on white paper, black frame; “Holotypus” printed on red paper, black frame.

Note. Currently treated as a valid species of *Microcerella* Macquart (Pape 1996).

Specimens that are doubtful consider as types

Sarcophagidae

dangeloi [*Patonella*] [as “*Patonella*”]. Blanchard, 1938: 375–377. Argentina: Corrientes.

SYNTYPE: slide with male genitalia??, “Lab. Zoologia Agricola [printed] / ex [printed] Corrientes [handwritten] / leg [printed] / 26 / X/19 [printed] 38 / Dangelo [handwritten]” on white paper, black frame; “n° 704 / Cotypus” handwritten with blue ink on pink paper; “Lab. Zoologia Agricola [printed] / Patonella / dangeloi / Blnchd [handwritten] / det [printed] [unreadable] / cotipo [side] [handwritten]”.

Note. Described from an unspecified number of male and female specimens (which have the status of

syntypes). Mulieri *et al.* (2010b) recognized 2 males and 4 females in MACN, and stated: “The specimen used by Blanchard to obtain the original illustrations was not found.” The slide found in INTA contains unrecognizable parts of dissected structures, probably the genitalia of a male, and this could be a syntype. Currently treated as a junior synonym of *Peckia (Pattonella) resonata* (Lopes) (Lopes 1958, Pape 1996).

Tachinidae

argentinensis [*Trichopodopsis*]. Blanchard, 1966b: 65–67. Argentina: Córdoba.

HOLOTYPE: male, pinned, in poor condition, genitalia dissected and stored in glass vial on a different pin, “Holotipo” handwritten on red paper, black frame; “Trichopodopsis / argentinensis, / Blnchd. [handwritten] / det E.E. Blanchard [printed]” on white paper, black frame; “232” handwritten with blue ink, on white paper, black frame; “Córdoba / II-1920” handwritten on white paper, black frame; “Holotypus” printed on red paper.

Note. Currently treated as a valid species of *Trichopoda* Berthold (Guimarães 1971).

aurea [*Eutritochaeta*]. Blanchard, 1942a: 99–101. Argentina: Chaco.

HOLOTYPE: male, glued on card, abdomen dissected and glued on card, “S/A. argillacea / Chaco” handwritten on white paper, black frame; “Eutritochaeta ? / aurea / Blnchrd [handwritten] / det E.E. Blanchard [printed] / tipo [handwritten]” on white paper, black frame; “209” handwritten on white paper, with blue ink; “Typus” printed on red paper, black frame.

Note. Although this specimen does not bear a label with the original date, the type label and dissected abdomen identifies it as the holotype. Currently treated as a valid species of *Nilea* Robineau-Desvoidy (Guimarães 1971).

bosqi [*Trichopodopsis*]. Blanchard, 1966b: 73–75. Argentina: Buenos Aires, Cañuelas.

HOLOTYPE: male, pinned, without left wing, genitalia dissected and stored in glass vial on a different pin, “Holotipo” handwritten on red paper, black frame; “Prov. de Bs. As. / Cañuelas / 12-XII-1918” handwritten on white paper; “233” handwritten with blue ink, on white paper, black frame; “Trichopodopsis / bosqi, / Blnchd. [handwritten] / det E.E. Blanchard [printed]” on white paper, black frame; “Holotypus” printed on red paper.

Note. Currently treated as a junior synonym of *Trichopoda giacomellii* (Blanchard) (Liljesthröm 1992).

christensenii [*Trichopodopsis*]. Blanchard, 1966b: 78–81. Argentina: Buenos Aires, José C. Paz.

HOLOTYPE: male, glued on card, without right wing, genitalia dissected and stored in glass vial on a different pin, “Holotipo” handwritten on red paper, black frame; “J. C. Paz / III-1939 / Christensen” handwritten on white paper, black frame; “s/ Athaumas- / tus” handwritten on white paper, black frame; “Trichopodopsis / christensenii, / Blnchd. [handwritten] / det E.E. Blanchard [printed] / Holotipo [handwritten]” on white paper, black frame; “234” handwritten with blue ink, on white paper, black frame; “Holotypus” printed on red paper.

Note. Currently treated as a junior synonym of *Trichopoda argentinensis* (Blanchard) (Liljesthröm 1992).

cingulipes [*Ptilodexia*]. Blanchard, 1966a: 202–205. Argentina: Buenos Aires, Castelar.

HOLOTYPE: male pinned, without fore legs, otherwise in good condition, “S/larva / Scarabaeidae / XII-20-1963 / Castelar. [reverse] / N°1 [reverse]” handwritten on white paper folded; “Ptilodexia / cingulipes / Blnchd. / ♂ Holotipo” handwritten with blue ink on white paper; “245” handwritten with blue ink, on white paper, black frame; “Holotypus [printed] / ♂ [handwritten]” on red paper, black frame.

crouzeli [*Perua*]. Blanchard, 1966a: 189–192. Argentina: Buenos Aires, Norberto de la Riestra.

HOLOTYPE: female pinned, without three legs, but in good condition, “Col. Zoologia Agricola [printed] / ex. g. blancos / chicos / N. de la Riestra / 16-III-62 61p1-61a [handwritten]” on white paper, black frame; “Dexillini” handwritten on white paper folded with blue ink; “Perua ♀ / crouzeli / sp. nov / holotipo [reverse] / Perua / crouzeli [reverse]” handwritten on white paper with blue ink; “247” handwritten with blue ink, on white paper, black frame; “Holotypus [printed] / ♀ [handwritten]” on red paper. **PARATYPE:** female pinned, with head and one leg glued on card, “Col. Zoologia Agricola [printed] / ex. g. blancos / chicos / N. de la Riestra / 16-III-62.

61e1 6Ta [handwritten]" on white paper, black frame; "paratipo / Perua / crouzeli ♀ / sp. nov." handwritten on white paper, blue ink; "248" handwritten with blue ink, on white paper, black frame; "Paratypus" printed on red paper. **PARATYPE**: male pinned, in poor condition, "Col. Zoologia Agricola [printed] / ex. g. blancos / chicos / N. de la Riestra / 16-III-62. 61e1 6Ta [handwritten]" on white paper, black frame; "Allotipo / Perua / crouzeli ♂ / sp. nov." handwritten on white paper, blue ink; "249" handwritten with blue ink, on white paper, black frame; "Allotypus" printed on red paper.

Note. Described from a female holotype and two paratypes (one male and one female). Currently treated as a valid species of *Microphthalma* Macquart (Guimarães 1971).

crouzeli [*Pleosiodesilla*]. Blanchard, 1966a: 192–195. Argentina.

HOLOTYPE: male pinned, darkened, "Pupa encontrada en tierra / de experiencia con gusanos / blancos 11-1-62 / nace mosca 19-2-62" handwritten on white paper folded; "Pleosiodesilla / crouzeli / gen y sp. nov." handwritten on white paper with blue ink.

limbata [*Trichopodopsis*]. Blanchard, 1966b: 67–69. Argentina: Buenos Aires, Puente Alsina.

HOLOTYPE: male, pinned, without right wing, genitalia dissected and stored in a glass vial on a different pin, "Holotipo" handwritten on red paper, black frame; "Bs. Aires / Puente Alsina / 17-III-1914 [reverse] / Bosq / P 14 [reverse]" handwritten on white paper; "Trichopodopsis / limbata, / Blnchd. [handwritten] / det E.E. Blanchard [printed] / Holotipo" on white paper, black frame; "231" handwritten with blue ink, on white paper, black frame; "Holotypus" printed on red paper.

Note. Described from a male holotype and one male paratype. Only the holotype was recognized in INTA. Currently treated as a junior synonym of *Trichopoda giacomellii* (Blanchard) (Liljesthröm 1992).

loxostegei [as "loxotesgei"] [*Frontiniella*]. Blanchard, 1962: 249–252. Argentina: Tucumán.

SYNTYPES: one female pinned, in good condition, "Argentina / Tucumán" printed on white paper; "Ex. Lep. / Loxostege / bifidalis" handwritten on white paper, black frame; "3731" handwritten on white paper, black frame; "Frontiniella / loxotesgei / Blnchd. [handwritten] / det E.E. Blanchard [printed] / Cotipo [handwritten]" on white paper, black frame; "Sintipo" handwritten on white paper, black frame. One female pinned, in good condition, "Ex. Lep. / Loxostege / bifidalis" handwritten on white paper, black frame; "3731." handwritten on white paper, black frame; "Argentina / Tucumán" printed on white paper; "Frontiniella / loxotesgei" handwritten with blue ink, on white paper; "Sintipo" handwritten on white paper, black frame.

Note. Guimarães (1971: 208) considered "loxotesgei" as an incorrect original spelling according to Article 32.5 of the *Code* (ICZN 1999).

mendocina [*Euthyprosopiella*]. Blanchard, 1963: 186–188. Argentina: Mendoza, Uspallata.

HOLOTYPE: female, glued on card, in bad condition, "S/Orugas. de Noctuido / Papa y Alfalfa / Uspallata / 2.2.38." handwritten on green paper, black frame; "Euthyprosopiella / mendocina / Blnchd. [handwritten] / det E.E. Blanchard [printed]" on white paper, black frame; "Possible [handwritten] / Holotypus [printed] / (No Rotul./s/Autor) [handwritten]" on red paper.

ruficornis [*Okeopsis*]. Blanchard, 1942a: 101–104. Argentina: Tucumán.

HOLOTYPE: female, glued on card, in good condition, "S/Alabama / argillacea" handwritten on white paper, black frame; "Tucumán / IV-1939 ♂/ 1-2 [reverse]" handwritten on white paper, black frame; "Okeopsis / ruficornis / sp.n. [handwritten] / det E.E. Blanchard [printed]" on white paper, black frame.

Note. Currently treated as a valid species of *Winthemia* Robineau-Desvoidy (Guimarães 1971).

subandina [*Ceracia*]. Blanchard, 1943: 19–21. Argentina: Río Negro, Comallo.

HOLOTYPE: male, glued on card, leg glued on the same card, "Comallo / R. Negro / 4-III-40" handwritten on white paper, black frame; "Ceracia / subandina, / Blnchd. [handwritten] / det E.E. Blanchard [printed] / Holotipo [handwritten]" on white paper, black frame; "237" handwritten with blue ink, on white paper, black frame; "x T. / arrogans" handwritten on white paper, black frame; "Holotypus" printed on red paper.

williamsoni [*Zygofrontinopsis*]. Blanchard, 1959: 173–176. Argentina: La Pampa, General Pico.

HOLOTYPE: male, glued on pin, in good condition, “Holotipo” handwritten on red paper, black frame; “s/ Arctiidae / Williamson” handwritten on white paper, black frame; “G. Pico / Pampa / 28-I-1935” handwritten on white paper, black frame.

Note. The labels of the specimen match the data published by the author, although this specimen does not bear a species name label (Fig. 5). Currently treated as a valid species of *Lespesia* Robineau-Desvoidy (Guimarães 1983).



FIGURE 5. Labels of the holotype of *Zygofrontinopsis williamsoni* Blanchard, 1959.

ypsiliformis [*Ptilodexia*]. Blanchard, 1966a: 205–208. Argentina: Buenos Aires, Norberto de la Riestra.

HOLOTYPE: male, pinned, legs damaged, “S/larva de / gusano blanco / N de la Riestra / 30-XI-61 / Crouzel leg. [reverse] / Ptilodexia / ypsiliformis / ♂ [reverse]” handwritten with blue ink on white paper folded; “Ptilodexia / ypsiliformis / Blnchd.” handwritten with blue ink on white paper; “Holotypus [printed] / ♂ [handwritten]” on red paper; “Holotipo / ♂” handwritten on white paper with blue ink; “244” handwritten with blue ink, on white paper, black frame.

Type specimens housed in IADIZA

The IADIZA is an institute devoted to basic and applied research on arid environments, and its entomological collection began with the personal collection of Andres Giai. Afterwards in 1992, entomological material belonging to Sergio A. Roig, Horacio Molinari, Armando Crimi, and Mario Gentili were added. Currently, the IADIZA collection includes approximately 190,000 specimens, mostly Coleoptera, which comprises about 70–80% of the collection; but it also includes an important type collection with 500 types, 40 of which are primary types; and an arachnid collection.

Fanniidae

hermani [*Fannia*]. Domínguez, 2007: 315–317. Argentina: San Luis, El Trapiche.

HOLOTYPE: male, pinned, wings damaged, “Argentina, San Luis, / El Trapiche, 6 dic. 2000 / C. Domínguez, S. Roig cols. / 33°06,18 S; 66°04,47 W” printed on white paper, black frame; “Fannia hermani ♂ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Holotipo” printed on red paper, black frame.

PARATYPES: 30 males, pinned, 6 with genitalia dissected and pinned below in a plastic vial, “Argentina, San Luis, / El Trapiche, 6 dic. 2000 / C. Domínguez, S. Roig cols. / 33°06,18 S; 66°04,47 W” printed on white paper, black frame; “Fannia hermani ♂ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame. 31 females, pinned, 6 with genitalia dissected and pinned below in a plastic vial, “Argentina, San Luis, / El Trapiche, 6 dic. 2000 / C. Domínguez, S. Roig cols. / 33°06,18 S; 66°04,47 W” printed on white paper, black frame; “Fannia hermani ♀ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame. One male, pinned, “Argentina, San Luis, 9 km N / El Trapiche, 6 dic. 2000 / C. Domínguez, S. Roig cols. / 31°01,14 S; 66°03,15 W” printed on white paper, black frame; “Fannia hermani ♂ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame.

Note. The date of collection of the type series in IADIZA differs from the published date of “16.XII.2000”. We consider the published date to be in error and the specimens in IADIZA to belong to the type series.

losgateados [*Fannia*]. Dominguez, 2007: 323–326. Argentina: Mendoza, Potrerillos.

HOLOTYPE: male, pinned, with genitalia dissected and pinned below in a plastic vial, “Argentina, Mendoza, / Qda. Los Gateados, nov.2001 / C. Domínguez col. 1422msnm / 32°54'56'' S; 73°59'2'' W” printed on white paper, black frame; “*Fannia losgateados* ♂ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Holutipo” printed on red paper, black frame. **PARATYPES:** Four females, pinned, “Argentina, Mendoza, / Qda. Los Gateados, nov.2001 / C. Domínguez col. 1422msnm / 32°54'56'' S; 73°59'2'' W” printed on white paper, black frame; “*Fannia losgateados* ♀ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame. **One** male, pinned, “Arg. San Luis / Aguas Claras / 8-XII-00 / Domínguez-Roig” printed on white paper; “32° 35.12'S / 64° 57.01' W / 1133 msnm” printed on white paper; “*Fannia losgateados* ♂ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame.

Note. The date of collection of the specimens from Mendoza province differs from the published date of “16.XII.2000”. We consider the published date to be an error. Also, the male paratype published as “1 ♂, Quebrada Aguas Buenas, XII-2000, cols. Domínguez & Roig (IADIZA)” (Dominguez 2007: 324) was published in error, the correct information belongs to the paratype from San Luis province as mentioned above.

roigi [*Fannia*]. Dominguez, 2007: 333–334. Argentina: Córdoba, San Javier.

HOLOTYPE: male, pinned, “Argentina, Córdoba. San / Javier 10-XII-00 / Domínguez-Roig” printed on white paper; “32°01.58' S / 65°00.79' W / 900 msnm” printed on white paper; “*Fannia roigi* ♂ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Holutipo” printed on red paper, black frame. **PARATYPES:** 23 males, pinned, 6 with genitalia dissected and pinned below in a plastic vial, “Argentina, Córdoba. San / Javier 10-XII-00 / Domínguez-Roig” printed on white paper; “32°01.58' S / 65°00.79' W / 900 msnm” printed on white paper; “*Fannia roigi* ♂ / Domínguez, 2007 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame.

Note. The date of collection of the type series in IADIZA differs from the published date of “3-XII-2000”. We consider the published date to be in error. Specimens belonging to the locality Tucumán are housed in the “Fundación e Instituto ‘Miguel Lillo’” (Dominguez 2007).

sanihue [*Fannia*]. Domínguez & Aballay, 2008: 819–824. Argentina: Mendoza, Mendoza City.

HOLOTYPE: male, pinned, “Argentina: Mendoza / Capital CRICYT / Sustrato cerdo 845 m / 32°53'56,58'' S / 68°52'30,82'' W / -III a VIII-2007 Coll.: F. Aballay” printed on white paper; “M8 Ch3 / 03/04/08 / Sombra” printed on white paper, black frame; “*Fannia sanihue* ♂ / Domínguez & Aballay, 2008 / Det. M.C. Domínguez” printed on white paper, black frame; “Holutipo” printed on red paper, black frame. **PARATYPES:** 300 males and females, pinned, 3 males with genitalia dissected and pinned below in a plastic vial, “Argentina: Mendoza / Capital CRICYT / Sustrato cerdo 845 m / 32°53'56,58'' S / 68°52'30,82'' W / -III a VIII-2007 Coll.: F. Aballay” printed on white paper; “*Fannia sanihue* ♂ [females with ♀] / Domínguez & Aballay, 2008 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame.

yunguensis [*Fannia*]. Quiroga & Domínguez, 2010: 95–100: Argentina: Jujuy.

PARATYPE: one male, pinned, with genitalia dissected and pinned below in a plastic vial; “Argentina, Jujuy, Santa / Barbara, Reserva Municipal / Carlos M. Schuel. 1-05-2006. / Col. Nancy Quiroga” printed on white paper, black frame; “*Fannia yunguensis* ♂ / Quiroga & Domínguez, 2010 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame. **Two** females, pinned, one with genitalia dissected and pinned below in a plastic vial; “Argentina, Jujuy, Santa / Barbara, Reserva Municipal / Carlos M. Schuel. 5-05-2006. / Col. Nancy Quiroga” printed on white paper, black frame; “*Fannia yunguensis* ♀ / Quiroga & Domínguez, 2010 / Det. M.C. Domínguez” printed on white paper, black frame; “Paratipo” printed on red paper, black frame.

Note. The male holotype is housed in INBIAL (Instituto de Biología de la Altura), Universidad Nacional de Jujuy. This institution is not included in this study because is not part of the SNDB.

Sarcophagidae

antofagastensis [*Microcerella*]. Mulieri, Mariluis & Aballay, 2012: 184–187. Argentina, Catamarca, 8 km NE

Antofagasta de la Sierra.

HOLOTYPE: male, pinned, circle of red paper; “Argentina, Catamarca, 8 Km / NE Antofagasta de la Sierra / S 20° 01' 32,3" W 67° 20' 36,5" 3578 msnm 25-XI-2009 / Sustr. Cerdo sombra Muestra L9A1 / col: F. Aballay” printed on white paper; “Microcerella antofagastensis / Mulieri, Mariluis & Aballay / Holotype” printed on red paper, black frame.

Note. The holotype has its genitalia exposed. In addition to the holotype, the type series includes four paratypes (one male and three females) deposited in MACN.

Type specimens housed in CFA

The CFA, established in 2000, is a private institution dedicated to the human and natural sciences. The entomological collection housed at CFA was part of the personal collection of Diego Carpintero, who worked in the “Departamento de Artropodología Sanitaria del Instituto Malbrán”, where the type specimens of Shannon and Del Ponte were originally housed. The collection was donated to CFA by Diego Carpintero (Jr.) (Giacchino & Bogan 2012).

Anthomyiidae

bruchi [*Hylemyia*]. Shannon & Del Ponte, 1926: 571. Argentina: Buenos Aires.

SYNTYPE: one female, pinned, in good condition, “E. Del Ponte Coll” printed on white paper, “Adrogue (B A) [printed] / 12.9.26 [handwritten]” on white paper, black frame.

Note. This species was described from two males and one female as syntypes from Buenos Aires province. Only the female was recognized in CFA. Malloch (1934) examined a “type-specimen” in the USNM. Currently treated as a valid species of *Pegomya* Robineau-Desvoidy (Pont 1974).

punctipennis [*Hylemyia*]. Shannon & Del Ponte, 1926: 570. Argentina: Buenos Aires.

SYNTYPES: one male, pinned, in good condition, “E. Del Ponte Coll” printed on white paper, “Adrogue (B A) [printed] / 7.926 [handwritten]” on white paper. One female, glued on card, in good condition, “E. Del Ponte Coll” printed on white paper, “Adrogue (B A) [printed] / 7.926 [handwritten]” on white paper.

Note. This species was described from ten males and five females as syntypes from Buenos Aires province. We found one male and one female in CFA. Currently treated as a junior synonym of *Anthomyia punctipennis* Wiedemann (Pont 1974, Michelsen 1997).

Muscidae

carbonaria [*Ophyra*]. Shannon & Del Ponte, 1926: 576–577. Argentina: Tucumán, Tucumán City.

PARALECTOTYPES: Three females, pinned on three pins, one specimen without head, “San Isidro (Bs. As.) [printed] / 8:25:26 [handwritten]” on white paper, black frame: “Shannon & / Shannon” printed on white paper.

portensis [*Phyronota*]. Shannon & Del Ponte, 1926: 577. Argentina: Buenos Aires, Adrogue.

PARALECTOTYPE: one male, pinned, in good condition, “E. Del Ponte Coll” printed on white paper; “Adrogue (B A) [printed] / 12.9.26 [handwritten]” on white paper, black frame. One female, pinned, in good condition, “E. Del Ponte Coll” printed on white paper; “Adrogue (B A) [printed] / 12.9.26 [handwritten]” on white paper, black frame.

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