

The type specimens of Anthomyiidae, Muscidae and Sarcophagidae (Diptera: Calyptatae) housed at the Instituto – Fundación Miguel Lillo, Tucumán, Argentina

Patitucci, Luciano Damián; Mulieri, Pablo Ricardo; Mariluis, Juan Carlos

Consejo Nacional de Investigaciones Científicas y Técnicas, Buenos Aires, Argentina. ANLIS Dr. Carlos G. Malbrán, Departamento Vectores – CeNDIE, Av. Vélez Sarsfield 563, (1281) Buenos Aires, Argentina.
E-mail: lpatitu@yahoo.com.ar; mulieri@ yahoo.com; jcmariluis@yahoo.com.ar

► **Resumen** — Se estudiaron los ejemplares tipo de Anthomyiidae, Muscidae y Sarcophagidae depositados en la Colección Instituto - Fundación Miguel Lillo (IFML). Un total de 13 especímenes tipo de Anthomyiidae (cuatro especies nominales), 271 especímenes tipo de Muscidae (36 especies nominales) y seis especímenes tipos de Sarcophagidae (cuatro especies nominales) fueron examinados. Se provee información para cada taxón.

Palabras clave: Anthomyiidae, Muscidae, Sarcophagidae, especímenes tipo, Argentina.

► **Abstract** — The type specimens of Anthomyiidae, Muscidae and Sarcophagidae deposited in the Instituto-Fundación Miguel Lillo (IFML) are revised. A total of 13 type specimens of Anthomyiidae (four nominal species), 271 type specimens of Muscidae (36 nominal species), and six type specimens of Sarcophagidae (four nominal species) were examined. Information for each taxa is provided.

Keywords: Anthomyiidae, Muscidae, Sarcophagidae, type specimens, Argentina.

INTRODUCTION

Calyptatae have long been recognized as a major lineage of higher Diptera, and contain some of the more diverse and successful families including Anthomyiidae, Calliphoridae, Fanniidae, Muscidae, Sarcophagidae and Tachinidae, among others (Yeates *et al.*, 2007). Several type specimens of Calyptatae species are deposited in different institutions in Argentina. The information on type specimens is useful not only in taxonomic research, but also for phylogenetic, ecological and conservation studies. Moreover, the 4th edition of the International Code of Zoological Nomenclature recommends the publication of type material housed in different institutions and museums (Article 72 F 4, IZN, 1999). Recently, a catalogue of the type specimens of Sarcophagidae housed in the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” was presented (Mulieri *et al.*, 2010). Here, as part of a continuous work on listing type

specimens of Calyptatae deposited in argentinean institutions, a list of Anthomyiidae, Muscidae and Sarcophagidae, kept in Instituto - Fundación Miguel Lillo, are presented.

The insect collection housed in the “Instituto - Fundación Miguel Lillo” (IFML) (Tucumán, Argentina) is one of the most important collections of Argentina and South America. Hayward & Golbach (1963) published a list of the “primary types” of Diptera deposited in IFML, with about 1060 type specimens. The entomological collection of the IFML houses 13 type specimens belonging to four nominal species of Anthomyiidae, 271 type specimens belonging to 36 nominal species of Muscidae, and six type specimens belonging to four nominal species of Sarcophagidae.

The types of Anthomyiidae and Muscidae belong to species described by Snyder (1957). The author deposited holotypes and some paratypes in the IFML, whereas the remaining paratypes were deposited at the American Museum of Natural History (AMNH), New York, USA. Most of these specimens were collected at some locations

near the city of Tucumán by Dr. Martin L. Aczel and Dr. Rodolfo Golbach.

The type specimens of Sarcophagidae are species described by Lopes (1969). Weyrauch was a German malacologist who worked for 30 years at the Universidad Nacional Mayor de San Marcos, Perú. Later he moved to Argentina (1962–1970), and worked in the malacological collection from the IFML. Weyrauch had collected several specimens of Sarcophagidae while living in Perú, material which he then sent to Dr. Hugo Souza Lopes from Brazil.

MATERIALS & METHODS

The species are listed within their corresponding genus, by family, in alphabetical order, following their original combination. For each specimen, the following information was provided: species name, type categories, sex and number of specimens are indicated followed by collection data (country, province or state, locality and collector). The code number of the collection of IFML (e.g. “TDIP003”), is given in brackets. Labels with the code number (T = type, DI = diptera, P = project) are present in the holotypes and some paratypes, the rest of the paratypes have no such label.

Labels are cited *verbatim*, lines separated by a slash, different labels by semicolon and comments are given in brackets. The information on the specimens has been taken from labels and compared with the original descriptions. All the specimens are pinned. Notes are included to describe the conditions of the specimens, the valid names of each taxon, and bibliography referred to synonymy or new combination.

RESULTS

ANTHOMYIIDAE

Emmesomyia argentina Snyder,
1957: 443.

HOLOTYPE male [TDIP003].
Argentina: Tucumán, Quebrada La Toma.
R. Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Holotype ♂ / Emmesomyia / argentina / Snyder” handwritten on red paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S. M. Tucuman / Tucuman – Argentina” printed on white paper.

PARATYPE female [TDIP004].

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Allotype ♀ / Emmesomyia / argentina / Snyder” handwritten on red paper.

Notes: The holotype is damaged. Missing parts: head, mid and hind right legs. The paratype is in good condition.

Emmesomyia spadibasis Snyder,
1957: 442.

HOLOTYPE male [TDIP005].

Argentina: Tucumán, Quebrada La Toma.
R. Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Holotype ♂ / Emmesomyia / spadibasis / Snyder” handwritten on red paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina” printed on white paper; “FML” printed on white paper.

PARATYPE female [TDIP006].

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Allotype ♀ / Emmesomyia / spadibasis / Snyder” handwritten on red paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina” printed on white paper; “FML” printed on white paper.

PARATYPE male [TDIP007].

Argentina: Tucumán, Quebrada La Toma.
R. Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Emmesomyia / spadibasis / Snyder [handwritten] / Paratype [printed]” on white paper; “Paratipo” printed on white paper, black frame; “An-

thomyiidae / *Emmesomyia* / *spadibasis*" printed on white paper, black frame.

PARATYPES 1 male, 2 females [TDIP008 - TDIP010].

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "*Emmesomyia* / *spadibasis* / Snyder [handwritten] / Paratype [printed]" on white paper; "Paratipo" printed on white paper, black frame.

PARATYPES 2 males.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "*Emmesomyia* / *spadibasis* / Snyder [handwritten] / Paratype [printed]" on white paper; "Paratipo" printed on white paper, black frame; "Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina" printed on white paper.

Notes: The holotype and paratypes are in good condition.

Pegomya neopalposa Snyder,
1957: 444.

HOLOTYPE male [TDIP011].

Argentina: Tucumán, Quebrada La Toma. R. Golbach leg.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "Holotype ♂ / *Pegomya* / *neopalposa* / Snyder" handwritten on red paper; "Mucidae[sic!]" printed on white paper.

Notes: The holotype is in good condition.

Pegomya trifumosa Snyder,
1957: 445.

HOLOTYPE male [TDIP012].

Argentina: Jujuy, Termas de Reyes. M. L. Aczel leg.

Labels: "R. A. Jujuy / Terma de Reyes / 17/18-II-949 / coll. M.L. Aczel" handwritten on white paper, black frame; "Holotype ♂ / *Pegomya* / *trifusosa*[sic!] / Snyder" handwritten on red paper; "Muscidae" printed on white paper.

PARATYPE female [TDIP013].

Argentina: Tucumán, Burruyacú, Villa Padre Monti. R. Golbach leg.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Allotype / *Pegomya* / *trifumosa* / Snyder" handwritten on red paper; "Muscidae" printed on white paper.

Notes: Head missing in holotype. Snyder (1957) described the holotype as teneral. The paratype is in good condition.

MUSCIDAE

Angolia albibarba Snyder, 1957: 446.

HOLOTYPE male [TDIP134].

Argentina: Tucumán, Burruyacú, Villa Padre Monti. R. Golbach leg.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Holotype ♂ / *Angolia* / *albibarbra* [sic] / Snyder" handwritten on red paper; "Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina" printed on white paper.

Notes: Head missing in holotype. The terminalia is in a plastic vial pinned with holotype. Synonymized with *Stomopogon albisepta* (Stein) by Couri (2002).

Angolia argentina Snyder,
1957: 447.

HOLOTYPE male [TDIP135].

Argentina: Neuquén, San Martín de los Andes.

Labels: "San Martín / de los Andes / Neuquén, R. A. / [label damaged, unreadable]" printed on white paper; "Holotype ♂ / *Angolia* / *argentina* / Snyder" handwritten on red paper; "Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina" printed on white paper.

PARATYPE female [TDIP136].

Labels: "San Martín / de los Andes / Neuquén, R. A. / 11-XII-1946" printed on white paper; "Allotype ♀ / *Angolia* / *argentina* / Snyder" handwritten on red paper; "Colección / Inst. – Fund. M. Lillo / (4000) – S.M.

Tucuman / Tucuman – Argentina” printed on white paper.

Notes: The terminalia is in a plastic vial pinned with holotype. Missing parts: middle and hind left legs. The paratype is in good condition. The valid name, *Stomopogon argentina* (Snyder, 1957), was proposed by Couri & Pont (2000) as a new combination.

Azelia neotropica Snyder,
1957: 466.

HOLOTYPE male [TDIP137].

Argentina: Tucumán, Quebrada Cainzo. Golbach leg.

Labels: “R. A. Tucuman / Queb. Cainzo / 18-19-XI-951 / coll. R. Golbach” handwritten on white paper, black frame; “Holotype ♂ / Azelia / neotropica / Snyder” handwritten on red paper.

PARATYPE female [TDIP138].

Labels: “R. A. Tucuman / Queb. Cainzo / 18-19-XI-951 / coll. R. Golbach” handwritten on white paper, black frame; “Allotype ♀ / Azelia / neotropica / Snyder” handwritten on red paper.

PARATYPE male.

Labels: “R. A. Tucuman / Queb. Cainzo / 18-19-XI-951 / coll. R. Golbach” handwritten on white paper, black frame; “Azelia / neotropica / Snyder [handwritten] / Paratype [printed]” on white paper.

PARATYPE unrecognized sex.

Argentina: Tucumán, Burruyacú, Villa Padre Monti. R. Golbach leg.

Labels: “V. Padre Monti (R.A. / Tucuman – Burruyacu / 17.I – 7.II.1948 / coll. R. Golbach” printed on white paper; “Azelia / neotropica / Snyder [handwritten] / Paratype [printed]” on white paper.

Notes: Head and abdomen are missing in holotype. Two paratypes are in good condition and the paratype “unrecognized sex” is without head and abdomen.

Bigotomyia praedatoria Snyder,
1957: 485.

HOLOTYPE male [TDIP210].

Argentina: Tucumán, Quebrada LaToma. Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Holotype ♂ / Bigotomyia / praedatoria / Snyder” handwritten on red paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina” printed on white paper; “Phaonia praedatoria / Snyder, 1957 / S.M.P. Coelho det. 94” printed on white paper.

PARATYPE female [TDIP211].

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Allotype ♀ / Bigotomyia / praedatoria / Snyder” handwritten on red paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina” printed on white paper; “Phaonia latinervis / (Stein, 1904) / S.M.P. Coelho det. 94” printed on white paper.

PARATYPES 2 males [TDIP206- TDIP207].

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach” handwritten on white paper, black frame; “Paratype [printed] / Bigotomyia / praedatoria / Snyder [handwritten]” on yellow paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina” printed on white paper; “Phaonia latinervis / (Stein, 1904) / S.M.P. Coelho det. 94” printed on white paper.

Notes: The terminalia is in a plastic vial pinned with holotype and paratype (TDIP211). The paratypes (TDIP206-TDIP207) have their legs broken. The date of collection on label of the holotype and allotype (21-XII-950), does not match with the date of collection published in the original description (23/26-XII-23/28-XI-1950). This species was synonymized with *Phaonia latinervis* (Stein) by Coelho (2000).

Bucephalomyia aczeli Snyder,
1957: 468.

HOLOTYPE male [TDIP139].
Argentina: Tucumán, San Javier. Aczel leg.

Labels: "R. A. Tucuman / San Javier / 21.X.950 / coll: Aczel" handwritten on white paper, black frame; "Holotype ♂ / Bucephalomyia / aczeli / Snyder" handwritten on red paper.

PARATYPE male.
Argentina: Tucumán, Quebrada La Toma. Golbach leg.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "Bucephalomyia / aczeli / Snyder [handwritten] / Paratype [printed]" on white paper.

Notes: Abdomen missing in holotype. Head and abdomen missing in the paratype. The year of collection on the label of the holotype (1950), does not match with the year of collection published in the original description (1905). The valid name is *Limnophora aczeli* (Snyder, 1957), according to the synonym of *Bucephalomyia* with *Limnophora* established by Carvalho *et al.* (1993).

Helina aczeli Snyder,
1957: 477.

HOLOTYPE male [TDIP140].
Argentina: Salta, San Lorenzo. Aczel leg.
Labels: "R. A. Salta / (San Lorenzo) / 20-I-949 / coll: Aczel"; "Holotype ♂ / Helina / aczeli / Snyder" handwritten on red paper.

Notes: The holotype is in good condition.

Helina argentina Snyder,
1957: 476.

HOLOTYPE male [TDIP141].
Argentina: Tucumán, Burruyacú, Villa Padre Monti. Golbach leg.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacú / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Holotype / Helina ♂ / argentina / Snyder" handwritten on red paper.

PARATYPE female [TDIP142].

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacú) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Allotype ♀ / Helina / argentina / Snyder" handwritten on red paper.

PARATYPES 3 males, 7 females [TDIP143 - TDIP152].

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacú) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Paratipo" printed on pink paper; "Helina / argentina / Snyder" handwritten on white paper, black frame.

PARATYPES 16 males, 28 females, 1 unrecognized sex.

Argentina: Tucumán, Burruyacú, Villa Padre Monti. Golbach leg.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacú) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Paratipo" printed on pink paper; "Helina / argentina / Snyder" handwritten on white paper, black frame.

PARATYPE male.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacú) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "66[handwritten]Paratype[printed]s [handwritten] / of / Helina / argentina / Snyder [handwritten] on white paper".

PARATYPES 4 males, 4 females.

Argentina: Tucumán, Quebrada LaToma. Golbach leg.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "Paratipo" printed on pink paper; "Helina / argentina / Snyder" handwritten on white paper, black frame.

PARATYPE male.

Argentina: Tucumán, San Javier. Aczel leg.

Labels: "R. A. Tucuman / San Javier / 21.X.950 / coll: Aczel" handwritten on white paper, black frame; "Paratipo" printed on pink paper; "Helina / argentina / Snyder" handwritten on white paper, black frame.

Notes: The holotype and paratypes are in good condition.

Helina neosimplex Snyder,
1957: 478.

HOLOTYPE female [TDIP153].
Argentina: Santa Cruz, Lago Argentino.
Willink leg.
Labels: “Santa Cruz / Lago Argentino / 13-I-953 / coll: Dr. Willink” handwritten on white paper, black frame; “Holotype ♀ / Helina / neosimplex / Snyder” handwritten on red paper.

Notes: The holotype is in good condition.

Limosia tarsata Snyder,
1957: 465.

HOLOTYPE male [TDIP155].
Argentina. Santa Cruz, Lago Argentino.
Willink leg.
Labels: “Santa Cruz / Lago Argentino / 13-I-953 / coll: Dr. Willink” handwritten on white paper, black frame; “Holotype / Limosia / tarsata / Snyder” handwritten on red paper.

PARATYPE female [TDIP156].

Labels: “Santa Cruz / Lago Argentino / 13-I-953 / coll: Dr. Willink” handwritten on white paper, black frame; “Allotype ♀ / Limosia / tarsata / Snyder” handwritten on red paper.

Notes: The specimens are in good condition. The valid name, *Coenosia tarsata* (Snyder) was proposed as a new combination by Pont (1972).

Lispoides latifrons Snyder,
1957: 475.

HOLOTYPE female [TDIP154].
Argentina: Santa Cruz, Lago Argentino.
Willink leg.
Labels: “Santa Cruz / Lago Argentino / La Cristina / 21-I-953 / coll: Willink” handwritten on white paper, black frame; “Holotype ♀ / Lispoides / latifrons / Snyder” handwritten on red paper.

Notes: The holotype is in good condition.

Mydaea latomensis Snyder,
1957: 479.

(Figure 1)
HOLOTYPE male [TDIP157].
Argentina: Tucumán, Quebrada LaToma.
Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach” handwritten on white paper, black frame; “Holotype ♂ / Mydaea / latomensis / Snyder” handwritten on red paper.

Notes: The holotype is in good condition.

Neodexiopsis cacumina Snyder,
1957: 457.

HOLOTYPE male [TDIP158].
Argentina. Tucumán, Lacavera. Aczel & Golbach leg.

Labels: “Lacavera Dept. Tafi Tuc. / 23-28 XI 51 / M. Aczel R. Golbach” printed on white paper; “Holotype ♂ / Neodexiopsis / cacumina / Snyder” handwritten on red paper.

PARATYPE female [TDIP159].

Argentina: Tucumán, Tafí del Valle. Golbach leg.

Labels: “R. A. Tucuman / Tafí del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Allotype ♀ / Neodexiopsis / cacumina / Snyder” handwritten on red paper.

PARATYPE female [TDIP160].

Labels: “R. A. Tucuman / Tafí del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Neodexiopsis / cacumina / Snyder [handwritten] / Paratype [printed]” on white paper; “Paratipo” printed on white paper, black frame.

PARATYPE male.

Labels: “R. A. Tucuman / Tafí del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Neodexiopsis / cacumina / Snyder [handwritten] / Paratype [printed]” on white paper.

Notes. The holotype and paratypes are in good condition.

Neodexiopsis cirratipila Snyder,
1957: 463.

HOLOTYPE male [TDIP161].
Argentina. Tucumán, Burruyacú, Villa Padre Monti. Golbach leg.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll.: R. Golbach" printed on white paper; "Holotype ♂ / Neodexiopsis / cirratipila / Snyder" handwritten on red paper.

PARATYPE female [TDIP162].
Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll.: R.

Golbach" printed on white paper; "Holotype ♀ / Neodexiopsis / cirratipila / Snyder" handwritten on red paper.

Notes: Abdomen glued on label in holotype. Abdomen missing in paratype.

Neodexiopsis clavacula Snyder,
1957: 461.

HOLOTYPE female [TDIP163].
Argentina. Tucumán, Burruyacú, Villa Padre Monti. Golbach leg.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll.: R.

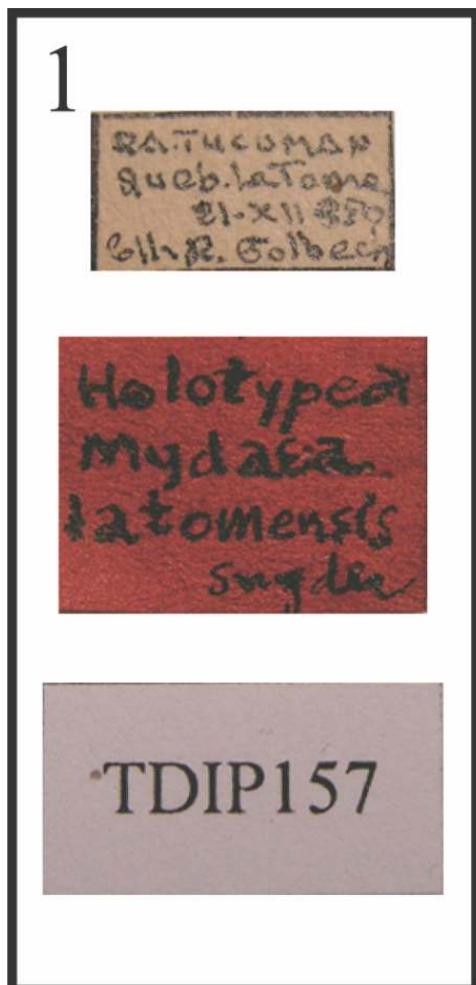


Figure 1. Labels of *Mydaea latomensis* (Muscidae). Figure 2. Labels of *Weyrauchi myia bicoloricauda* (Sarcophagidae).

Golbach” printed on white paper; “Holotype ♀ / Neodexiopsis / clavacula / Snyder” handwritten on red paper.

Notes: The holotype is in good condition.

Neodexiopsis croceafrons Snyder,
1957: 460.

PARATYPE female [TDIP164].

Argentina. Tucumán, Tafí del Valle. Golbach leg.

Labels: “R. A. Tucuman / Tafí del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Neodexiopsis / croceafrons / Snyder[handwritten] / Paratype [printed]” on white paper.

Notes. The paratype is in good condition. The holotype is deposited in AMNH (Snyder, 1957).

Neodexiopsis intoniclunis Snyder,
1957: 454.

HOLOTYPE male [TDIP165].

Argentina. Tucumán, Quebrada La Toma. Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach” handwritten on white paper, black frame; “Holotype ♂ / Neodexiopsis / itoniclunis / Snyder” handwritten on red paper.

PARATYPE female [TDIP166].

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach” handwritten on white paper, black frame; “Allotype ♀ / Neodexiopsis / itoniclunis / Snyder” handwritten on red paper.

Notes: Head and abdomen are missing in holotype. The paratype is in good condition.

Neodexiopsis lunatisigna Snyder,
1957: 454.

HOLOTYPE male [TDIP167].

Argentina. Tucumán, Quebrada La Toma. Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach” handwritten on white paper, black frame; “Holotype ♂ /

Neodexiopsis / lunatasigna [sic!] / Snyder” handwritten on red paper.

PARATYPE male [TDIP168].

Argentina: Tucumán, Quebrada Caínzo. Golbach leg.

Labels. “R. A. Tucuman / Queb. Cainzo / 18-19-XI-951 / coll: R. Golbach” handwritten on white paper, black frame; “Neodexiopsis / lunatasigna / Snyder [handwritten] / Paratype [printed]”. on white paper; “Paratipo” printed on white paper, black frame.

Notes: Head and abdomen are missing in holotype. The paratype is in good condition.

Neodexiopsis neoaustralis Snyder,
1957: 458.

PARATYPE female [TDIP169].

Argentina. Tucumán, Lacavera. Aczel & Golbach leg.

Labels: “R. A. Tucuman / Lacavera / 23/ 28 XI 951 / Aczel-Golbach” printed on white paper, black frame; “Paratipo” printed on white paper, black frame; “N. neoaustralis” handwritten on white paper, folded.

PARATYPE female [TDIP170].

Argentina: Tucumán, San Javier. Aczel leg.

Labels. “R. A. Tucuman / San Javier / 21-XI- 950 / coll: Dr. Aczel” handwritten on white paper, black frame; “Paratipo” printed on white paper, black frame; “N. neoaustralis” handwritten on white paper, folded.

PARATYPE male [TDIP171].

Argentina: Tucumán, Río Colorado. Golbach leg.

Labels: “R. A. Tucuman / Rio Colorado / 22-X- 953 / coll: R. Golbach” handwritten on white paper, black frame; “Paratipo” printed on white paper, black frame; “N. neoaustralis” handwritten on white paper, folded.

PARATYPES 2 females, 1 unrecognized sex.

Argentina. Tucumán, Burruyacú, Villa Padre Monti. Golbach leg.

Labels. “V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll.: R. Golbach” printed on white paper; “Paratipo” printed on white paper, black frame; “N.

"neoaustralis" handwritten on white paper, folded;

PARATYPE male.

Argentina. Tucumán, Quebrada La Toma. Golbach leg.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "10 specimens / all Paratypes / Neodexiopsis / neoaustralis / Snyder" handwritten on white paper; "Paratipo" printed on white paper, black frame; "N. neoaustralis" handwritten on white paper, folded.

PARATYPES 1 male, 1 unrecognized sex.

Labels "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "Paratipo" printed on white paper, black frame; "N. neoaustralis" handwritten on white paper, folded.

Notes: Seven paratypes are in good condition and two are without head and abdomen. The holotype is deposited in AMNH (Snyder, 1957).

Neodexiopsis neomacrocera Snyder,
1957: 459.

HOLOTYPE male [TDIP174].

Argentina. Tucumán, Lacavera. Aczel & Golbach leg.

Labels: "R. A. Tucuman / Lacavera / 23/28 XI 951 / Aczel-Golbach" printed on white paper, black frame; "Holotype ♂ / Neodexiopsis / neomacrocera / Snyder" handwritten on red paper.

PARATYPE female [TDIP175].

Argentina: Tucumán, Quebrada La Toma. Golbach leg.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "Allotype ♀ / Neodexiopsis / neomacrocera / Snyder" handwritten on red paper.

PARATYPE female [TDIP172].

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "Neodexiopsis / neomacrocera / Snyder [handwritten] / Paratype [printed]" on white paper.

PARATYPES 2 females [TDIP173 and without number].

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Neodexiopsis / neomacrocera / Snyder [handwritten] / Paratype [printed]" on white paper.

Notes: The holotype is in good condition. Only the paratype [TDIP173] is in good condition, the remaining specimens are without abdomen.

Neodexiopsis quintivena Snyder,
1957: 453.

HOLOTYPE male [TDIP176].

Argentina. Tucumán, Quebrada Cainzo. Golbach leg.

Labels: "R. A. Tucuman / Queb. Cainzo / 18-19-XI-951 / coll. R. Golbach" handwritten on white paper, black frame; "Holotype / Neodexiopsis / quintivena / Snyder" handwritten on red paper.

Notes: The holotype is in good condition.

Neodexiopsis rava Snyder,
1957: 462.

HOLOTYPE female [TDIP177].

Argentina. Tucumán, Tafí del Valle. Golbach leg.

Labels: "R. A. Tucuman / Tafí del Valle / 6-12-XII-947 / coll: Golbach" handwritten on white paper, black frame; "Holotype ♀ / Neodexiopsis / rava [with erasure] / rava / Snyder" handwritten on red paper; "Holotype ♀ / Neodexiopsis / rava / Snyder" handwritten on red paper.

Notes: The holotype is in good condition.

Neodexiopsis setipuncta Snyder,
1957: 455.

HOLOTYPE female [TDIP178].

Argentina. Tucumán, Quebrada la Toma. Golbach leg.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "Holotype ♂ /

Neodexiopsis / setipuncta / Snyder" handwritten on red paper.

PARATYPE female [TDIP179].

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "Allotype ♀ / *Neodexiopsis / setipuncta / Snyder*" handwritten on red paper.

PARATYPES 6 females [TDIP180 – TDIP185].

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPES 23 males, 27 females, 11 unrecognized sex.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPE unrecognized sex.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "Paratype [printed] s / 100 spms of / *Neodexiopsis / setipuncta / Snyder* [handwritten]" on white paper.

PARATYPE female.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "Paratypes de / *Neodexiopsis / setipuncta / Snyder / snyd*" handwritten on white paper.

PARATYPES 2 males [TDIP186 and without number].

Argentina. Tucumán, Quebrada La Toma, Tafí Viejo. Golbach leg.

Labels: "Quebrada La Toma / de Tafí Viejo / Tucuman Argentina / 21-XII- '50-Golbach" printed on white paper; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPE male.

Labels: "Quebrada La / Toma Tafí / Tucuman / 21 XII 950 / coll R. Golbach" hand-

written on white paper; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPES 2 females.

Argentina. Tucumán, Lacavera. Aczel & Golbach leg.

Labels: "R. A. Tucuman / Lacavera / 23/26 XII-951 / Aczel-Golbach" printed on white paper; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPE female.

Labels: "R. A. Tucuman / Lacavera / 23/28 XI-951 / Aczel-Golbach" printed on white paper; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPES 1 male, 1 female.

Argentina. Tucumán, Quebrada Cainzo. Golbach leg.

Labels: "R. A. Tucuman / Queb. Cainzo / 18-19-XI-951 / coll. R. Golbach" handwritten on white paper, black frame; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPES 2 females [TDIP192 – TDIP193].

Argentina. Tucumán, Burruyacú, Villa Padre Monti. Golbach leg.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPES 3 males, 3 females, 4 unrecognized sex.

Labels: "V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll. R. Golbach" printed on white paper; "Paratipo" printed on red paper; "*Neodexiopsis / setipuncta / Snyder*" handwritten on white paper, black frame.

PARATYPES 1 male, 1 female [TDIP187 – TDIP188].

Argentina. Tucumán, Tafí del Valle. Golbach leg.

Labels: "R. A. Tucuman / Tafí del Valle /

6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Paratipo” printed on red paper; “Neodexiopsis / setipuncta / Snyder” handwritten on white paper, black frame.

PARATYPE male.

Labels: “R. A. Tucuman / Tafi del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Paratipo” printed on red paper; “Neodexiopsis / setipuncta / Snyder” handwritten on white paper, black frame.

PARATYPES 1 male, 2 females [TDIP189 – TDIP191].

Argentina. Tucumán, Aconquija. Golbach leg.

Labels: “R. A. Tucuman / Aconquija / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Paratipo” printed on red paper; “Neodexiopsis / setipuncta / Snyder” handwritten on white paper, black frame.

PARATYPE female.

Labels: “R. A. Tucuman / Aconquija / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Paratipo” printed on red paper; “Neodexiopsis / setipuncta / Snyder” handwritten on white paper, black frame.

PARATYPES 1 male, 1 female.

Argentina. Tucumán, Siambon. Willink leg.

Labels: “Siambon, R. A. / Tucuman [printed] 21-X-45 / coll: Willink [handwritten]” on white paper; “Paratipo” printed on red paper; “Neodexiopsis / setipuncta / Snyder” handwritten on white paper, black frame.

Notes: Abdomen missing in holotype. Several paratypes are damaged without head and abdomen: TDIP179, 12 from “Quebrada La Toma”, 2 from “Tafí Viejo”, 1 from “Lacavera”, 1 from “Quebrada Cainzo”, and 4 from “Villa Padre Montí”.

Neodexiopsis sima Snyder,
1957: 462.

HOLOTYPE male [TDIP194].

Argentina. Tucumán, San Javier. Aczel leg.

Labels: “R. A. Tucuman / San Javier / 21.X.950 / coll: Aczel” handwritten on white paper, black frame; “Holotype ♂ / Neodexiopsis / sima / Snyder” handwritten on red paper.

PARATYPE female [TDIP195].

Argentina. Entre Ríos, La Paz. Aczel leg.

Labels: “R. A. Entre Ríos / La Paz / 14-XI-949 / coll: Dr. Aczel” handwritten on white paper, black frame; “Allotype ♀ / Neodexiopsis / sima / Snyder” handwritten on red paper.

Notes: The specimens are in good condition.

Neodexiopsis uspallata Snyder,
1957: 456.

HOLOTYPE male [TDIP196].

Argentina. Mendoza, Uspallata. Hayward leg.

Labels: “Uspallata / Mendoza, R. A. / 14-I-1947” printed on white paper; “Hayward / collector” printed on white paper; “Holotype ♂ / Neodexiopsis / uspallata / Snyder” handwritten on red paper.

Notes: Abdomen missing in holotype.

Notoschoenomyza costata Snyder,
1957: 450.

HOLOTYPE male [TDIP197].

Argentina. Tucumán, Tafí del Valle. Golbach leg.

Labels: “R. A. Tucuman / Tafí del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Holotype ♂ / Notoschoenomyza / costata / Snyder” handwritten on red paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucumán – Argentina” printed on white paper.

PARATYPE female [TDIP198].

Labels: “R. A. Tucuman / Tafí del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Allotype ♀ / Notoschoenomyza / costata / Snyder” handwritten on red paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucumán – Argentina” printed on white paper.

PARATYPES 1 male, 2 females, 1 unrecognized sex [TDIP199 – TDIP202].

Labels: “R. A. Tucuman / Tafi del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Notoschoenomyza / costata / Snyder [handwritten] / Paratipe [printed]” on white paper; “Paratipo” printed, on white paper, black frame.

PARATYPES 2 males, 1 female, 1 unrecognized sex.

Labels: “R. A. Tucuman / Tafi del Valle / 6-12-XII-947 / coll: Golbach” handwritten on white paper, black frame; “Notoschoenomyza / costata / Snyder [handwritten] / Paratipe [printed]” on white paper; “Paratipo” printed, on white paper, black frame.

Notes: The holotype and paratypes are in good condition. Two paratypes are damaged, one has the abdomen pinned below the specimen in a plastic vial and the other has no head.

Phaonia advena Snyder,
1957: 482.

HOLOTYPE male [TDIP203].

Argentina: Tucumán, Burruyacú, Villa Padre Monti. Golbach leg.

Labels: “V. Padre Monti (R.A. / Tucuman – Burruyacu / 17.I – 7.II.1948 / coll. R. Golbach” printed on white paper; “Holotype ♂ / Phaonia / advena / Snyder” handwritten on red paper; “Bigotomyia / advena (Snyder, 1957) [handwritten] / C.J.B. Carvalho det. 198 [printed] 2 [handwritten]” on white paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina” printed on white paper; “Phaonia advena / Snyder, 1957 / S.M.P. Coelho det. 1994” printed on white paper.

Notes: The head is glued to the specimen and the fore right leg glued on label. Missing parts: postpedicel, fore left leg, middle and hind left tarsi and hind right tibia.

Phaonia cacheuta Snyder,
1957: 482.

HOLOTYPE male [TDIP204].

Argentina: Mendoza, Cachueta. Aczel & Moyano leg.

Labels: “R. A. Mendoza / Cacheuta / 23-X-953 / Aczel y A. Moyano” handwritten on white paper, black frame; “Holotype ♂ / Phaonia / cacheuta / Snyder” handwritten on red paper; “Muscidae” printed on white paper.

Notes: Head missing in holotype. The terminalia is in a plastic vial pinned with holotype, label inside plastic vial: “Phaonia / cacheuta Snyder / Holotipo”. The valid name, *Dolichophaonia cacheuta* (Snyder), was proposed by Carvalho (1993) as a new combination.

Phaonia catamacla Snyder,
1957: 483.

HOLOTYPE male [TDIP204].

Argentina: Catamarca, Hualfín. Villolou leg.

Labels: “R. A. Catamarca / Hualfín / I-953 / coll: Villolou” handwritten on white paper, black frame; “Holotype ♂ / Phaonia / catamacla / Snyder” handwritten on red paper.

Notes: Mid legs and head glued on the locality label. The terminalia is in a plastic vial pinned with holotype, label inside plastic vial: “Phaonia / catamacla Snyder / Holotipo”. The valid name, *Dolichophaonia catamacla* (Snyder), was proposed by Carvalho (1993) as a new combination.

Phaonia monochaeta Snyder,
1957: 481.

HOLOTYPE male [TDIP208].

Argentina: Tucumán, Quebrada LaToma. Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XI-950 / coll. R. Golbach” handwritten on white paper, black frame; “Holotype ♂ / Phaonia / monochaeta / Snyder” handwritten on red paper; “Bigotomyia / monochaeta (Snyder, / 1957) [handwritten] / C.J.B. Carvalho det. 198 [printed] 2 [handwritten]” on white paper; “Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina” printed on white paper; “Phaonia monochaeta / Snyder, 1957 / S.M.P. Coelho det. 94” printed on white paper.

PARATYPE female [TDIP209].

Argentina: Tucumán, Quebrada Cainzo. Golbach leg.

Labels: "R. A. Tucuman / Queb. Cainzo / 18-19-XII-950 / coll: Golbach" handwritten on white paper, black frame; "Allotype ♀ / Phaonia / monochaeta / Snyder." handwritten on red paper; "Bigotomyia / monochaeta (Snyder, 1957) [handwritten] / C.J.B. Carvalho det. 198 [printed] 2 [handwritten]" on white paper; "Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina" printed on white paper; "Phaonia monochaeta / Snyder, 1957 / S.M.P.Coelho det. 94" printed on white paper.

PARATYPES 2 males.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll. R. Golbach" handwritten on white paper, black frame; "Phaonia / monochaeta [handwritten] / N° [printed] Snyder [handwritten] / Paratype [printed]" on white paper; "Colección / Inst. – Fund. M. Lillo / (4000) – S.M. Tucuman / Tucuman – Argentina" printed on white paper; "Phaonia monochaeta / Snyder, 1957 / S.M.P.Coelho det. 94" printed on white paper.

Notes: The terminalia is in a plastic vial pinned with holotype. Fore left leg glued on label. Missing parts: mid and hind left legs. The paratype [TDIP209] has its abdomen pinned below in a glass vial. The collection site on the label of the allotype (Quebrada Caínzo), does not match with the collection site published in the original description (Quebrada La Toma).

Schoenomyza neobiseriata Snyder,
1957: 448.

HOLOTYPE male [TDIP212].

Argentina. Santa Cruz, Lago Argentino. Willink leg.

Labels: "Santa Cruz / Lago Argentino / 26.II.953 / coll: Dr. Willink" handwritten on white paper, black frame; "Holotype ♂ / Schoenomyza / neobiseriata / Snyder" handwritten on red paper.

PARATYPE female [TDIP213].

Labels: "Santa Cruz / Lago Argentino / 26.II.953 / coll: Dr. Willink" handwritten on

white paper, black frame; "Allotype ♀ / Schoenomyza / neobiseriata / Snyder" handwritten on red paper.

PARATYPE female.

Labels: "Santa Cruz / Lago Argentino / 26.II.953 / coll: Dr. Willink" handwritten on white paper, black frame; "Schoenomyza / neobiseriata / Snyder [handwritten] / Paratype [printed]" on white paper; "Paratipto" printed on white paper, black frame.

Notes: The holotype and paratypes are in good condition.

Schoenomyza willinki Snyder,
1957: 449.

HOLOTYPE female [TDIP214].

Argentina. Santa Cruz, Lago Argentino. Willink leg.

Labels: "R. A. Santa Cruz / Lago Argentino / La Cristina / 21.I.953 / coll: Willink" handwritten on white paper, black frame; "Holotype / Schoenomyza / willinki / Snyder" handwritten on red paper.

PARATYPE female [TDIP215].

Labels: "R. A. Santa Cruz / Lago Argentino / La Cristina / 21.I.953 / coll: Willink" handwritten on white paper, black frame; "Schoenomyza / willinki / Snyder [handwritten] / Paratype [printed]" on white paper; "Paratipto" printed on white paper, black frame.

Notes: The holotype is in good condition. Head missing in paratype.

Spilogona argentifrontata Snyder,
1957: 470.

HOLOTYPE male [TDIP216].

Argentina: Río Negro, Isla de Choele Choe. Willink leg.

Labels: "R. A. Rio Negro / Isla Choe Choe [sic!] / 21-II-946 / Hayward-Willink" handwritten on white paper, black frame; "Holotype ♂ / Spilogona / argentifron- / tata Snyder" handwritten on red paper.

Notes: Abdomen missing in holotype.

Spilogona golbachi Snyder,
1957: 469.

HOLOTYPE male [TDIP217].
Argentina. Tucumán, Quebrada La Toma.
Golbach leg.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Holotype ♂ / Spilogona / golbachi / Snyder” handwritten on red paper.

PARATYPES 1 male, 1 female [TDIP218 – TDIP219].

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Paratipo” printed on red paper; “Spilogona / golbachi / Snyder” handwritten on white paper, black frame.

PARATYPES 3 females.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Paratipo” printed on red paper; “Spilogona / golbachi / Snyder” handwritten on white paper, black frame.

PARATYPE female.

Labels: “R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach” handwritten on white paper, black frame; “Spilogona / golbachi / Snyder / Paratype series / Endo-” handwritten on white paper; “Paratipo” printed on red paper.

PARATYPES 1 male, 3 females [TDIP220 – TDIP223].

Argentina: Tucumán, Burruyacú, Villa Padre Monti. Golbach leg.

Labels: “V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll.: R. Golbach” printed on white paper; “Paratipo” printed on red paper; “Spilogona / golbachi / Snyder” handwritten on white paper, black frame.

PARATYPES 1 female, 2 unrecognized sex.

Labels: “V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll.: R. Golbach” printed on white paper; “Paratipo” printed on red paper; “Spilogona / golbachi / Snyder” handwritten on white paper, black frame.

PARATYPES 3 females, 2 unrecognized sex.

Labels: “V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll.: R. Golbach” printed on white paper; “Paratipo” printed on white paper, black frame; “Spilogona / golbachi / Snyder” handwritten on white paper, black frame.

PARATYPE female.

Labels: “V. Padre Monti (R.A. / Tucuman – Burruyacu) / 17.I – 7.II.1948 / coll.: R. Golbach” printed on white paper; “Spilogona / golbachi Snyder / Paratype series / starts [an arrow drawn]” handwritten on white paper.

PARATYPES 2 unrecognized sex.

Labels: “R. A. Tucuman / Queb. Cainzo / 18-19-XI-951 / coll: R. Golbach” handwritten on white paper, black frame; “Paratipo” printed on red paper; “Spilogona / golbachi / Snyder” handwritten on white paper, black frame.

Notes: The holotype is in good condition. The paratypes of “Villa Padre Monti” included one male with abdomen glued on label and 5 specimens damaged without abdomen, the remaining specimens are in good condition.

Syllimnophora flavigalpis Snyder,
1957: 471.

HOLOTYPE male [TDIP224].

Argentina. Neuquén, Zapala. Hayward & Willink leg.

Labels: “R. A. Neuquén / Zapala / 18-XII-946 / Hayward.Willink” handwritten on white paper, black frame; “Holotype ♂ / Syllimnophora / flavigalpis / Snyder” handwritten on red paper.

PARATYPE female [TDIP225].

Labels: “R. A. Neuquén / Zapala / 18-XII-946 / Hayward.Willink” handwritten on white paper, black frame; “Allotype ♀ / Syllimnophora / flavigalpis / Snyder” handwritten on red paper.

PARATYPES 2 females [TDIP226 – TDIP227].

Labels: “R. A. Neuquén / Zapala / 18-XII-946 / Hayward.Willink” handwritten on white paper, black frame; “Paratype [printed] / Syllimnophora [handwritten] / No.

[printed] *flavipalpis* / Snyder [handwritten]" on yellow paper.

PARATYPE male.

Labels: "R. A. Neuquen / Zapala / 18-XII-946 / Hayward.Willink" handwritten on white paper, black frame; "Paratype [printed] / *Syllimnophora* [handwritten] / No. [printed] *flavipalpis* / Snyder [handwritten]" on yellow paper.

Notes: The holotype and paratypes (females) are in good condition. Abdomen glued on label in male paratype. The date of collection on the label of the holotype (18-XII-1946) does not match with the date of collection published in the original description (19-XII-1946).

Syllimnophora latimanoides Snyder,
1957: 473.

HOLOTYPE male [TDIP228].

Argentina. Tucumán, Tafi del Valle. Golbach leg.

Labels: "R. A. Tucuman / Tafi del Valle / 6-12-XII-947 / coll: Golbach" handwritten on white paper, black frame; "Holotype ♂ / *Syllimnophora / latimanoides / Snyder*" handwritten on red paper.

PARATYPE female [TDIP229].

Labels: "R. A. Tucuman / Tafi del Valle / 6-12-XII-947 / coll: Golbach" handwritten on white paper, black frame; "Allotype ♀ / *Syllimnophora / latimanoides / Snyder*" handwritten on red paper.

Notes: The holotype and paratype are in good condition.

Xenothoracochaeta golbachi Snyder,
1957: 479.

HOLOTYPE male [TDIP230].

Argentina: Tucumán, Quebrada LaToma. Golbach leg.

Labels: "R. A. Tucuman / Queb. La Toma / 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "Holotype ♂ / *Xenothoracochaeta / golbachi / Snyder*" handwritten on red paper.

PARATYPE female [TDIP231].

Labels: "R. A. Tucuman / Queb. La Toma

/ 21-XII-950 / coll: R. Golbach" handwritten on white paper, black frame; "Allotype ♀ / *Xenothoraco- / chaeta / golbachi / Snyder*" handwritten on red paper.

Notes: The type material is in good condition. The valid name, *Helina golbachi* (Snyder), was proposed by Carvalho *et al.* (2005) as a new combination.

SARCOPHAGIDAE

Encelimyia aurigena Lopes,
1969: 149.

PARATYPE male [TDIP374].

Perú: Lima, La Tablada. Weyrauch col.

Labels: "La Tablada / near Lima. / Perú. 200m. / 8.X.51" handwritten on white paper; "coll. Weyrauch" printed on white paper; "wkw / 7052" handwritten on white paper; "ex - col / Weyrauch" printed on white paper, black frame; "Encelimyia / aurigena, n sp / Paratypus [undeline in red ink] [handwritten] / Det. H. S. Lopes [printed]" on white paper, black frame.

Notes: Head missing in paratype. The valid name, *Rafaelia aurigena* (Lopes), was proposed by Pape (1996) as a new combination.

Udamopyga weyrauchi Lopes,
1969: 143.

PARATYPE female [TDIP376].

Perú: Alis, Valle Cañete. Weyrauch col.

Labels: "Peru: / Alis, 3300m, / Valle Cañete, / 29.III.1960" handwritten on white paper; "coll. Weyrauch" printed on white paper; "gesch. aus / Bulimulidae" handwritten on white paper; "wkw / 8595" handwritten on white paper; "ex - col / Weyrauch" printed on white paper, black frame; "Udamopyga / weyrauchi n. sp. / Paratypus [undeline in red ink] [handwritten] / Det. H. S. Lopes [printed]" on white paper, black frame.

PARATYPE female [TDIP375].

Labels: "Peru: / Alis 3300m, / Valle Cañete, / 29.III.1960" handwritten on white paper; "coll. Weyrauch" printed on white paper; "ex larvae / en Bostryx [undeline] / (Bulimulidae)" handwritten on white paper; "wkw / 8595" handwritten on white paper;

"Allotypus" handwritten on red paper; "N°[printed] 11.454[handwritten] / Diptera / Inst. Oswaldo Cruz [printed]" on white paper; "ex - col / Weyrauch" printed on white paper, black frame; "Udamopyga / weyrauchi, n sp / Allotypus [undeline in red ink] [handwritten] / Det. H. S. Lopes [printed]" on white paper, black frame.

Notes: The paratypes are in good condition.

Weyrauchimyia bicoloricauda Lopes,
1969: 136.

(Figure 2)

PARATYPE male [TDIP377].

Perú: Lima. Weyrauch col.

Labels: "im Haus" handwritten on white paper; "Lima (Peru) / 1.II.[handwritten]19 [printed]60[handwritten] / leg. Weyrauch" on white paper; "ex - col / Weyrauch" printed on white paper, black frame; "Weyrauchimyia / bicoloricauda n sp / Paratypus [undeline in red ink] ♂ [handwritten] / Det. H. S. Lopes [printed]" on white paper, black frame.

Notes: Paratype in good condition. Terminalia glued on triangular card. The valid name, *Malacophagula bicoloricauda* (Lopes), was proposed by Pape (1996) as a new combination.

Weyrauchimyia peruviana Lopes,
1969: 134.

PARATYPE female [TDIP378].

Perú: Acolla. Weyrauch col.

Labels: "C-Peru [Central Peru]: / Obj half [?] / Acolla, 3700 m, / 28.II.57" handwritten on white paper; "geschl. / aus / schnecken" handwritten on white paper; "ex - col / Weyrauch" printed on white paper, black frame; "Weyrauchimyia / peruviana n sp. / Paratypus [undeline in red ink] ♀ [handwritten] / Det. H. S. Lopes [printed]" on white paper, black frame.

PARATYPE male.

Perú: El Infiernillo. Weyrauch col.

Labels: "5.XII.59" handwritten on white paper; "C-Peru [Central Peru]: / El Infiernil-

lo, / río Rimac 3360 m, / leg. W.Weyrauch" printed on white paper; "reared / from / landshell" handwritten on white paper; "ex - col / Weyrauch" printed on white paper, black frame; "Weyrauchimyia / peruviana n.sp. / Paratypus [undeline in red ink] ♂ [handwritten] / Det. H. S. Lopes [printed]" on white paper, black frame.

Notes: Paratype female in good condition. Paratype male, without genitalia. The valid name, *Malacophagula peruviana* (Lopes), was proposed by Pape (1996) as a new combination.

AKNOWLEDGEMENTS

We thank Dr. Guillermo Claps, Mg. Cecilia Gramajo, and Dino Rojas for their kindness and invaluable help during the study of specimens in IFML. We wish to thank Dr. María Virginia Colomo and Lic. Ana María Frías de Fernández who authorized the study at the IFML. We thank Dr. Claudio José Barros de Carvalho and André César Lopes da Silva for providing the infomation about the Anthomyiidae specimens. We wish to thank anonymous reviewers for their critical comments.

LITERATURE CITED

- Carvalho, C. J. B. de. 1993. *Dolichophaonia*, gen. n. (Diptera, Muscidae, Phaoniinae): descrições, novas combinações, sinônimos e chave para as espécies. Revista Brasileira de Entomologia, 37: 19-34.
- Carvalho, C. J. B. de, Couri, M. S., Pont, A. C., Pamplona, D. & Lopes, S. M. 1993. Part II. Muscidae. In: C. J. B. Carvalho, de (ed.), A catalogue of the Fanniidae and Muscidae (Diptera) of the Neotropical region. Sociedade Brasileira de Entomologia, São Paulo, 201 pp.
- Carvalho, C. J. B. de, Couri, M. S., Pont, A. C., Pamplona, D. & Lopes, S. M. 2005. A Catalogue of the Muscidae (Diptera) of the Neotropical Region. Zootaxa, 860: 1-282.
- Coelho, S. M. P. 2000. *Phaonia Robineau-Desvoidy*, 1830 (Diptera, Muscidae, Phaoniinae) II. Revisão das espécies neotropicais. Revista Brasileira de Zoologia, 17: 795-875.
- Couri, M. S. 2002. A review of the genus *Stomopogon* Malloch (Diptera, Muscidae, Coenosinae, Coenosini). Studia dipterologica, 9: 327-333.

- Couri, M. S. & Pont, A.C. 2000. Cladistic analysis of Coenosiiini (Diptera: Muscidae: Coenosiiinae). *Systematic Entomology*, 25: 373-392.
- Hayward, K. J. & Golbach, R. 1963. Lista de los tipos de Diptera conservados en el Instituto Miguel Lillo [Type material of Diptera in the Miguel Lillo Institute]. *Acta Zoológica Lillona*, 19: 391-406.
- International Commission on Zoological Nomenclature (ICZN). 1999. International Code of Zoological Nomenclature, Fourth Edition. Adopted by the International Union of Biological Sciences. International trust for Zoological Nomenclature, London.
- Lopes, H. d. S. 1969. Neotropical Sarcophagidae reared from Gastropoda by Dr. Weyrauch (Diptera). *Studia Entomologica*, 12: 133-160.
- Mulieri, P. R., Patitucci, L. D. & Mariluis, J. C. 2010. The type specimens of Sarcophagidae (Diptera) housed at the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia. *Revista de la Sociedad Entomológica Argentina*, 69: 157-166.
- Pape, T. 1996. Catalogue of Sarcophagidae of the world (Insecta: Diptera). *Memoirs on Entomology, International*, 8: 1-558.
- Pont, A. C. 1972. Family Muscidae. In: N. Papavero (ed.), *A Catalogue of the Diptera of the Americas South of the United States*. Museu de Zoologia, Universidade de São Paulo, Brazil, 97: 1-111.
- Snyder, F. M. 1957. Notes and descriptions of some Neotropical Muscidae (Diptera). *Bulletin of the American Museum of Natural History*, 113: 437-490.
- Yeates, D. K., Wiegmann, B. M., Courtney, G. W., Meier, R., Lambkin C. & Pape, T. 2007. Phylogeny and systematics of Diptera: Two decades of progress and prospects. *Zootaxa*, 1668: 565-590.