

# REVISTA DEL MUSEO DE LA PLATA

2017, Volumen 2, Número 2: 97-118



Type material of Collembola (Hexapoda) housed  
at the Entomological Collection of La Plata Museum,  
Buenos Aires, Argentina

Salazar Martínez, Ana Ernestina<sup>1</sup>, María José Narváez Beinhorn<sup>2</sup> &  
Verónica Bernava Laborde<sup>3</sup>

<sup>1</sup> División Entomología, Facultad de Ciencias Naturales y Museo (FCNyM), Universidad Nacional de La Plata, Paseo del Bosque s/n, 1900 La Plata, Argentina, e-mail: [asalazar@fcnym.unlp.edu.ar](mailto:asalazar@fcnym.unlp.edu.ar).

<sup>2</sup> Ministerio de Agroindustria, Provincia de Buenos Aires.

<sup>3</sup> Administración de Parques Nacionales, Delegación Regional Noreste (APN, DRNEA). Tres Fronteras 183 P, 3370 Puerto Iguazú, Misiones, e-mail: [argentina.vbernava@apn.gov.ar](mailto:argentina.vbernava@apn.gov.ar)



## Type material of Collembola (Hexapoda) housed at the Entomological Collection of La Plata Museum, Buenos Aires, Argentina

A.E. Salazar Martínez<sup>1</sup>, M.J. Narvaez Beinhorn<sup>2</sup> y V. Bernava Laborde<sup>3</sup>

<sup>1</sup> División Entomología, Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, Paseo del Bosque s/n, 1900 La Plata, Argentina; e-mail: asalazar@fcnym.unlp.edu.ar.

<sup>2</sup> Ministerio de Agroindustria, Provincia de Buenos Aires, Argentina.

<sup>3</sup> Administración de Parques Nacionales, Delegación Regional Noreste (APN, DRNEA). Tres Fronteras 183 P, 3370 Puerto Iguazú, Misiones, e-mail: argentina.vbernava@apn.gov.ar

**ABSTRACT.** Springtails are entognathous hexapodous (0.2–10 mm) that inhabit in both, aquatic and terrestrial environments. Eighty one type species of Collembola housed at La Plata Museum (Entomology Division) in Argentina were examined and listed. The species are included in forty four genera and sixteen families. Most of the Type specimens belong to Argentinian locations and were described by Eduardo Rapoport, Judith Najt and Dora Cutini de Izarra. Information about type specimens, collection data, descriptions references, other records in Argentina and valid names were provided. Their general known biogeographical distribution and their belonging to ecoregions were included to show the importance of the collection as reference material in Argentina.

**Key words:** *Springtails, Neotropical Region, Andean Region, ecoregions*

**RESUMEN.** Material tipo de Collembola (Hexapoda) depositado en la Colección Entomológica del Museo de La Plata, Buenos Aires, Argentina. Los colémbolos son hexápodos entognatos (0,2–10 mm) que habitan en ambientes acuáticos y terrestres. Fueron examinados y listados los tipos de 81 especies depositadas en el Museo de La Plata (División Entomología), Argentina. Ellas están distribuidas en cuarenta y seis géneros y diecisésis familias. La mayoría de los ejemplares tipo, pertenecen a localidades argentinas y fueron descritas por Eduardo Rapoport, Judith Najt y Dora Cutini de Izarra. Se brinda información acerca de los ejemplares tipo, datos de recolección, referencias bibliográficas, citas en otras localidades de Argentina y su nombre válido. La distribución biogeográfica y presencia en ecoregiones argentinas de las especies, fue detallada para mostrar la importancia de la colección como material de referencia en el país.

**Palabras clave:** *Colémbolos, Región Neotropical, Región Andina, ecoregión*

## Introduction

Collembola is considered a class within Hexapoda (Kukalová-Peck, 1991; Muzón, 2005) however Collembola collection of the Museo de La Plata belongs to the Entomology Division because these arthropods had traditionally been included among the apterigotan insects by the absence of wings. The collection includes 291 type specimens corresponding to 81 species in 46 genera and 16 families. Eighty-three percent of the types (67 species) belong to Argentinian localities and they represent about twenty five percent of Argentinian species described (Bernava-Laborde & Palacios-Vargas, 2008). Most of them were described by Eduardo Rapoport, Judith Najt and Dora Cutini de Izarra, who conducted an intensive work during 1960s and 1970s, especially in Argentinean subandean forests and Pampa grasslands. The remaining species belong mostly to Chile (8 species) and Venezuela (5 species) and they have been described in co-authorship by local and foreigner researchers. In this work we inform about colembolan collection of Museo de La Plata. Biogeographic and ecoregional distribution of the species are given to bring out their value as scientific reference material to ecological studies.

The present collection misrepresents biogeographical regions of Argentina and also, the records of Chile and Venezuela are isolated, unlike other collections of magnitude, such as the Colembolla Collection of Mexico, Faculty of Sciences of the National Autonomous University of Mexico (Cruz Leal & Palacios-Vargas, 2016). However, after assessing its integrity, it will allow the corroboration of systematic hypotheses and the approach of new prospections that include the scarcely visited regions.

We dedicate this work to the memory of Sr. Dr. Eduardo Rapoport, because this collection is a consequence of his first scientific activities.

## Materials and methods

Information about the type material provided in this paper was not only taken from the labels written by authors, but also supplemented with data from the original descriptions.

The following information is provided for each type specimen:

1. Specific name: the original combination is reported.
2. Bibliographic reference: Author, year, index letter order in literature, pages and figures in the original description.
3. Type Material: Category (holotype, allotype, paratype or syntype, according to the original description and/or labels of the slides); sex (if it was included in the description or has been possible to be observed in this review); most of the type specimens are adults unless in the labels or the original publication the quality of juvenile was specified.

All the studied material is mounted on microscope slides. All the slides in the same series have received the same collection number and have been numerically ordered after a vertical bar. When several specimens were mounted in the same slide only a number was assigned to all of them. The amount of individuals has been indicated in between brackets next to the type category. The first number of the series is the holotype, allotype the second and paratypes the rest. If type category was not assigned by the authors, all the specimens are reported as syntypes.

Four sets of type specimens proposed as carriers of subspecific names have been also included, although Bernava-Laborde & Palacios-Vargas (2008) had listed them as synonyms of the original species.

Nomenclatural changes are reported in Current Status. The nomenclature at the genus and species level, are given according to Bellinger, P.F., Christiansen, K.A. & Janssens, F. 1996–2017. Checklist of the Collembola of the World. <http://www.collembola.org>

Collection data. Country, province, locality, date of collection and collector name are informed according to the labels and original publications. If the type information matches the first unit type described, it is not repeated in the text.

Other localities, Biogeographical Regions and provinces plus ecoregions and some details about samples sites are finally detailed in Notes. Biogeographical region and province names from Morrone (2001) were used. Spanish names of the Argentinian ecoregions (Brown & Pacheco, 2006) are given because they cannot be translated appropriately. Codes of Biogeographical Regions and Provinces used in the text are given in Table 1. Complete name of the Ecoregions are included at the end of each paragraph. When the specimens were associated to human-controlled environments as agroecosystems or urban parks, it is indicated in the text.

The list of specimens was ordered by Orders, Families and Subfamilies; then in each subfamily the species were listed alphabetically by the genre and then by the specific epithet.

**Table 1.** Biogeographical Regions and Provinces codes used in the text.

NR	Neotropical	AR	Andean
Pm	Pampa	Sp	Subandean Patagonia
Ch	Chaco	Sa	Santiago
Mt	Monte	Mf	Bosque Magallánico
Lv	Llanos venezolanos	At	Atacama
Vz	Costa Venezuela	Mp	Páramo Magallánico
Bv	Bosque valdiviano		

## Result and Discussion

Type specimens in the collection of the Museo de La Plata are approximately twenty five per cent of the whole group (274 species) cited to Argentina until now (Bernava & Palacios-Vargas, 2008; Palacios-Vargas & Salazar-Martínez, 2014; Arbea, 2016). Most of them (88 %) have been reported in Argentinian locations, and from a biogeographical point of view 65 % belong to Neotropical Region (Pampa Province) and 35 % to Andean Region (Patagonic Subandean Province).

From an ecological point of view, most of the collembolans species (51 %) have been found in Pampa ecoregion, in Entre Ríos, Buenos Aires and La Pampa. This region includes grassland in a big plain interrupted at the South, by a hill range that not exceeds 1000 m above sea level in Sierra de la Ventana. In this group we included the species from Grünbein saltmarsh which were profusely studied by Rapoport & Najt, (1966). That is a bass area, 9 Km to the South East from Bahía Blanca that changes into wetland forward the coast of the Río de La Plata.

The other large group belongs to the Bosque Patagónico ecoregion (39 %) in subantarctic forests in Isla Victoria in the Lago Nahuel Huapi, Neuquén. It is an island located on the lake and it has an area of 31 km<sup>2</sup>, which has been protected since 1934 by the Nahuel Huapi National Park.

Most of the species at the collection were found in terrestrial environments (67%) associated to litter or soil, however, some of them, are aquatic facultative and are part of the streams epineuston. Fifty per cent of the species in aquatic environments were found in big lakes of glacier origin in the south of Argentina. The rest of them belong to rivers and streams (arroyos pampeanos) particularly Napostá stream (Rapoport & Sánchez, 1963).

## PODUROMORPHA Börner

### NEANURIDAE Börner

#### Frieseinae Massoud

##### ***Friesea mistralae* Rapoport & Rubio, 1963**

*Friesea mistralae* Rapoport & Rubio, 1963: 101, Figs. 14–20.

**Syntype:** MLP nº 5459/1, unsexed specimen, Chile, Santiago, Cerro El Roble, 5–X–1961, Rapoport & Rubio col.

**Notes:** Syntype was collected in litter of *Nothofagus obliqua* var. *macrocarpa* forest at 2,025 m above sea level, E–SE exposition, 25°slope. The species have also been reported in Argentina, Neuquén, Isla Victoria (Izarra, 1972a). AR Sa & Sp, Bosque Patagónico.

##### ***Friesea monteiroi* Rapoport, 1962**

*Friesea monteiroi* Rapoport, 1962a, 10–12, Figs. 67–77.

**Syntypes:** (2) MLP nº 2248/1–2, unsexed specimens, Argentina, Buenos Aires, Bahía Blanca, 6–V–1960, Rapoport col.

**Notes:** Syntypes were collected in Grünbein salt marsh. The species has also been reported in Buenos Aires, Sierra de la Ventana (Izarra, 1965), Córdoba Valle de Punilla, (Izarra, 1973), Entre Ríos, Paraná, (Izarra, 1969; Najt, 1969a), La Pampa, Caleu Caleu (Izarra, 1975), Neuquén, Isla Victoria (Izarra, 1972a; Cassagnau & Rapoport, 1962), and Tucumán, Tafí del Valle (Cassagnau & Rapoport, 1962). NR Ch & Pm; AR Sp. Yungas, Pampa, Espinal, Bosque Patagónico.

##### ***Friesea quadrispina* Cassagneau & Rapoport, 1962**

*Friesea quadrispina* Cassagneau & Rapoport, 1962. 1: 167, Figs. 17–18.

**Paratypes:** (5) MLP nº 5467/1–5, unsexed specimens, Argentina, Río Negro, El Bolsón, 9–III–1959, Rapoport col.

**Current status:** Valid species: *Friesea quadrispina* (Cassagneau & Rapoport, 1962) Rapoport & Rubio, 1963.

**Notes:** Springtails from the epineuston extracted from Chubut, Lago Puelo. The species has also been registered in Buenos Aires, Sierra de la Ventana, (Izarra, 1965) and Neuquén, Isla Victoria (Izarra, 1972a). NR Pm; AR Sp. Pampa, Bosque patagónico.

## Pseudachorutinae Börner

### ***Delamarellina guilleni* Rapoport & Rubio, 1963**

*Delamarellina guilleni*, Rapoport & Rubio, 1963: 113–115, Figs. 62–70.

**Syntype:** MLP nº 5461/1, unsexed specimen, Chile, Santiago, Cerro El Roble, 10–X–1961, Rapoport col.

**Notes:** The specimen was collected from soil samples at 1940 m above sea level. The species has been registered in Argentina, Neuquén, Isla Victoria (Izarra, 1972a). AR Sa and Sp. Bosque patagónico.

### ***Montachorutes gigas* Rapoport & Rubio, 1963**

*Montachorutes gigas* Rapoport & Rubio, 1963: 112–113, Figs. 54–61.

**Syntype:** MLP nº 5451/1, unsexed specimen, Chile: Región Metropolitana, Aculeo, 7–VI–1961, Rapoport col.

**Current status:** Valid species: *Pseudachorutella gigas* (Rapoport & Rubio, 1963) (See Massoud, 1967).

**Notes:** Specimen was collected below a stone. AR Sa. The species has not been reported from Argentina.

#### *Notachorudina patagonica* Cassagneau & Rapoport, 1962

*Notachorudina patagonica* Cassagneau & Rapoport, 1962: 172–174, Figs. 21–22.

**Syntype:** MLP nº 5452/1, ♂, Argentina, Río Negro, Parque Nacional Nahuel Huapi, 6–III–1959, Rapoport col.

**Syntype:** MLP nº 5452/2, ♂, Argentina, Río Negro, Puerto Blest, Parque Nacional Nahuel Huapi, 7–III–1959, Rapoport col.

**Notes:** Specimens were collected from epineuston of Lago Frías and Lago Nahuel Huapi. The species had also been reported in Isla Victoria, Neuquén (Izarra, 1972a), AR Sp. Bosque Patagónico.

### BRACHYSTOMELLIDAE Stach

#### *Brachygasterura cyanea* Rapoport, 1962

*Brachygasterura cyanea* Rapoport, 1962b: 443–444. Figs. 1–8.

**Syntype:** MLP nº 5457/1, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca, 22–IX–1957, Rapoport col.

**Current status:** Valid species: *Brachystomella cyanea* (Rapoport, 1962) (See Massoud, 1967).

**Notes:** Specimen was collected in temporary supraneuston in Napostá brook. The species has been registered in Argentina, Buenos Aires, Sierra de la Ventana (Izarra, 1965), Cuenca del Salado (Hermosilla & Rubio, 1974) La Plata (Weiner & Najt, 2001). NR Pm. Pampa.

#### *Brachystomella ronderosi* Najt, 1973

*Brachystomella ronderosi* Najt, 1973: 244–245, Figs. 11–17.

**Paratypes:** (5) MLP nº 3462/1–5, unsexed specimens, Argentina, Tierra del Fuego, Isla de los Estados. 02–V–1971, Ronderos & Bulla col.

**Notes:** Specimens were collected from humic soil samples in Bahía Capitán Cánepe. AR Mf. Bosque Patagónico.

#### *Brachystomellides micropilosa* Cassagneau & Rapoport, 1962

*Brachystomellides micropilosa* Cassagneau & Rapoport, 1962: 161–163, Figs. 14 A–E.

**Syntypes:** (2) MLP nº 2242/1–2, unsexed specimens, Argentina, Río Negro, Puerto Blest, 6–III–1959, Rapoport col.

**Current status:** Valid species: *Brachystomellides micropilosus* Cassagneau & Rapoport, 1962 (See Mari Mutt & Bellinger, 1990).

**Notes:** Specimens were collected on basidiocarps and mosses from the floor forest. AR Sp. Bosque Patagónico.

#### *Brachystomellides neuquensis* Cassagneau & Rapoport, 1962

*Brachystomellides neuquensis* Cassagneau & Rapoport, 1962: 159–161, Fig. 13 A–J.

**Syntype:** MLP 2243/1, unsexed specimen, Argentina, Neuquén, Puerto Blest, 6–III–1959, Rapoport col.

**Syntypes:** (6), MLP nº 2243/2, unsexed specimens, Argentina, Neuquén, Lago Lacar, 20–III–1959, Rapoport col.

**Notes:** There are six specimens on the slide MLP nº 2243/2. The specimens were collected on basidiocarps of rotten bark and in lakes from supraneuston samples also. AR Sp and Mf. Bosque Patagónico.

### ***Probrachystomella rhodosoma* Rapoport, 1962**

*Probrachystomella rhodosoma* Rapoport, 1962a: 9–10, Figs. 51–59.

**Syntypes:** (2) MLP nº 2249/1, ♂♂, Argentina, Buenos Aires, Bahía Blanca, 4– IV–1960, Rapoport col.

**Syntype:** MLP nº 2249/2, ♂, same locality, date and collector syntype 1.

**Current status:** Valid species: *Rapoportella bonariensis* (Rapoport, 1962) (See Ellis & Bellinger, 1973; Najt & Palacios–Vargas, 1987).

**Notes:** There are two specimens on the first slide. Specimens were found in a half–bog. The species has also been reported in Sierra de la Ventana, Buenos Aires (Izarra, 1965), and Caleu Caleu, La Pampa (Izarra, 1975). NR Pm. Pampa.

### ***Probrachystomella sergtoi* Najt, 1973**

*Probrachystomella sergtoi* Najt, 1973: 243–244, Figs. 6–10.

**Paratypes:** (2) MLP nº 3461/1–2, unsexed specimens, Argentina, Tierra del Fuego, 02–V–1971, Ronderos & Bulla col.

**Current status:** Valid species: *Cassagnella sergtoi* (Najt, 1973) (See Najt & Massoud, 1974).

**Note:** Specimens were collected in soil samples from Bahía Capitán Cánepe. AR Mf. Bosque Patagónico.

### ***Setanodosa fueguensis* Najt, 1973**

*Setanodosa fueguensis* Najt, 1973: 241–243, Figs. 1–5.

**Holotype:** MLP nº 3504/1, ♀, Argentina, Tierra del Fuego, 03–IV–1971, Ronderos & Bulla col.

**Allotype:** MLP nº 3504/2, ♂, same data holotype.

**Paratypes:** (25) MLP nº 3504/3–26, ♀♀, same locality, date and collector holotype.

**Paratypes:** (13) MLP nº 3504/27–39, ♂♂, same data holotype.

**Paratype:** MLP nº 3504/40, juvenile, same data holotype.

**Paratypes:** (3) MLP nº 3504/41–43, unsexed specimens, same data holotype.

**Notes:** Specimens were collected in soil samples from Bahía Buen Suceso. AR Mf. Bosque Patagónico.

## **HYPOGASTRURIDAE Börner**

### ***Choreutinula edaphica* Rapoport, 1962**

*Choreutinula edaphica* Rapoport, 1962a: 8–9, Figs. 43–50.

**Syntypes:** (2) MLP nº 2250/1–2, unsexed specimen, Argentina: Buenos Aires, Bahía Blanca, 6–V–1960, Rapoport col.

**Current status:** Valid species: *Austrogastrura travassosi* (Arlé, 1939) (See Rapoport, 1962a, Najt, 1969a; Thibaud & Palacios–Vargas, 1999; Fernandes *et al.*, 2010).

**Notes:** Specimens were collected in Grünbein salt marsh. The species was found also in Buenos Aires, Sierra de la Ventana (Izarra, 1965) and in Entre Ríos, Paraná, (Izarra, 1969), NR Pm. Pampa, Espinal.

### ***Parawillemia pampeana* Izarra, 1975**

*Parawillemia pampeana* Izarra, 1975: 92–95, Figs. 1–5.

**Holotype:** MLP nº 3554/1, ♀, Argentina, La Pampa, Caleu–Caleu, 05–VII–1973, Izarra col.

**Paratypes:** (3) MLP nº 3554/2–4, ♀♀, same data holotype.

**Notes:** Specific characters can be observed among all of the specimens. They were collected in arid soils from steppes and agroecosystems from Buenos Aires province (Izarra, 1981). NR Pm. Pampa.

***Triacanthella massoudi* Najt, 1972**

*Triacanthella massoudi* Najt, 1972a: 116–117, Figs. 6–12

**Holotype:** MLP nº 3507/1, ♂, Argentina, Tierra del Fuego, Isla de Los Estados, 12–V–1971, Ronderos & Bulla col.

**Paratype:** MLP nº 3507/2, ♂, same data holotype.

**Paratypes:** (8) MLP nº 3507/3–9, juvenile, same data holotype.

**Notes:** Specimens were extracted from soil samples from Bahía San Juan del Salvamento. AR Mf. Bosque Patagónico.

***Triacanthella najtae* Izarra, 1971**

*Triacanthella najtae* Izarra, 1971a: 347–349, Figs. 1–5.

**Holotype:** MLP nº 3442/1, ♂, Argentina, Tierra del Fuego. 21–XI–1963, Rapoport col.

**Allotype:** MLP nº 3442/2, ♀, same data holotype.

**Note:** Specimens were collected in riverside soil samples from Río Olivia. AR Mf. Bosque Patagónico.

***Willemia australis* Rapoport, 1962**

*Willemia australis* Rapoport, 1962a: 6–8, Figs. 32–42.

**Syntype:** MLP nº 5464/1, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca. 04–IV–1960, Rapoport col.

**Current status:** Valid species: *Willemia buddenbrocki* Hüther, 1959 (See Rapoport & Rubio, 1963).

**Note:** Specimen was collected in a Grünbein salt marsh. NR Pm. Pampa.

**ONYCHIURIDAE Lubbock****Onychiurinae Börner*****Onychiurus yolanda* Izarra, 1971**

*Onychiurus yolanda* Izarra, 1971b: 373–377, Figs. 1–8.

**Holotype:** MLP nº 3436/1, ♀, Venezuela: Caracas, Caracas, 1–VIII–1967, Yolanda de Rapoport col.

**Paratypes:** (2) MLP nº 3436/2–3, ♀, same data holotype.

**Current status:** Valid species: *Protaphorura yolanda* (Izarra, 1971) (see Mari Mutt & Bellinger, 1990).

**Notes:** Specimens were collected in urban soil at the Ciudad Universitaria, Universidad Central from Venezuela. Species hasn't been recorded in Argentina. NR Vz.

**TULLBERGIIDAE Bagnall*****Dinaphorura americana* Rapoport, 1962**

*Dinaphorura americana* Rapoport, 1962a: 17, Figs. 114–123.

**Syntype:** MLP nº 2240/1, ♀, Argentina, Buenos Aires, Sierra de la Ventana, 10–V–1958, André col.

**Syntype:** MLP nº 2240/2–10, unsexed specimens, Argentina, Buenos Aires, Sierra de la Ventana, 10–V–1958, André col.

**Syntype:** MLP nº 2240/11–14, unsexed specimens, Argentina, Buenos Aires, Bahía Blanca, 6/VIII/1959.

**Notes:** Specimens were collected in Cerro Pillahuincó at 440 m above sea level and in an urban soil in Bahía Blanca. The species has been mentioned from Neuquén, Parque Nacional Lanín (Izarra, 1982). NR Pm. AR Sp. Pampa y Bosque Patagónico.

***Tullbergia alcirae* Palacios–Vargas & Salazar–Martínez, 2014**

*Tullbergia alcirae* Palacios–Vargas & Salazar Martínez, 2014: 23 – 30. Figs. 1–8.

**Holotype:** MLP nº 5404/1, ♀, Argentina, Buenos Aires, Punta Lara, 22–V–2010, Salazar Martínez col.

**Paratypes:** MLP nº 5404/2–3, ♀♀, same data holotype.

**Paratypes:** MLP nº 5404/4–5, ♂♂, same data holotype.

**Notes:** six ♀, four ♂ and eleven juveniles paratypes, same data holotype were stored in the Laboratorio de Ecología y Sistemática de Microartrópodos collection, Universidad Nacional Autónoma de México, with the number 2436. The specimens were collected on mosses and litter in a riparian forest of the Reserva Integral Punta Lara. The species has also been registered in soil samples from grassland in the same locality. NR Pm. Pampa.

**ODONTELLIDAE Massoud**

***Odontella contrerasi* Izarra, 1972**

*Odontella contrerasi* Izarra, 1972a: 88–90, Figs. 1–6.

**Holotype:** MLP nº 3453/1, ♂, Argentina, Neuquén, Isla Victoria, 30–VIII–1970, Izarra col.

**Paratype:** MLP nº 3453/2, ♂, same data holotype.

**Notes:** The specimens were collected in litter from *Nothofagus dombeyi* forest. AR Sp. Bosque Patagónico.

**ENTOMOBRYOMORPHA**

**ISOTOMIDAE Schäffer**

**Proisotominae Stach, 1947**

***Mucrotoma leuca* Rapoport & Rubio, 1963**

*Mucrotoma leuca* Rapoport & Rubio, 1963: 122, Figs. 81–85.

**Syntype:** MLP nº 5469/1, unsexed specimen, Chile, Santiago, 2–XI–1961, Rapoport & Rubio col.

**Notes:** Specimens were collected at 1350 m above sea level in humic soil from *Nothofagus obliqua* forest in Cerro El Roble. AR Sa. Species has not been found in Argentina.

***Proisotoma andina* Rapoport & Rubio, 1968**

*Proisotoma andina* Rapoport & Rubio, 1968: 53–54, Figs. 11–17.

**Syntypes:** (4), MLP nº 5478/1–2, unsexed specimens, Chile: Antofagasta, 20–VIII–1963, Rapoport col.

**Notes:** Specimens were extracted from soil samples from steppe in Cerro del Pajonal. AR At. Species has not been found in Argentina.

***Proisotoma biseta* Rapoport, 1963**

*Proisotoma biseta* Rapoport, 1963: 37, Figs. 7–10.

**Syntype:** MLP nº 5455/1, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca, 22–IX–1957, Napostá, Rapoport col.

**Syntype:** MLP nº 5455/2, unsexed specimen, Argentina, Río Negro, Lago Frías, Parque Nahuel Huapi, 06–III–1959, Rapoport col.

**Notes:** Specimens at the collection belonged to the supraneuston of aquatic systems but in the original description gley soil, litter, mosses, decaying wood and half-bog are mentioned as their habitat too. Furthermore, Tucuman is added as other type locality. The species was also found in soil from Buenos

Aires, Sierra de la Ventana, (Izarra, 1965), Córdoba, Valle de Punilla (Izarra, 1973) and Neuquén, Isla Victoria, Parque Nacional Lanín, (Izarra, 1972b, 1982). NR Ch and Pm. AR Sp. Yungas Pampa, Espinal, Bosque Patagónico.

### ***Proisotoma fatonei* Rapoport, 1959**

*Proisotoma fatonei* Rapoport, 1959: 80–82, Figs. 6–15.

**Syntypes:** MLP nº 2245/1–4, unsexed specimen, Argentina: Buenos Aires, Bahía Blanca, 22–XII–1956, Rapoport col.

**Current status:** Valid species: *Clavisotoma fatonei* (Rapoport, 1959)

**Notes:** Specimens belonged to the temporary supraneuston in Naposta brook. The species has also been reported in Paraná, Entre Ríos (Izarra, 1969). NR Ch and PM. Pampa and Espinal.

### ***Proisotoma minuta rhopalotricha* Massoud & Rapoport, 1968**

*Proisotoma minuta rhopalotricha* Massoud & Rapoport, 1968

**Syntypes:** (3) MLP nº 5456/1, unsexed specimens, Argentina, Tucumán, 19–IV–1959, Rapoport col.

**Syntypes:** (2) MLP nº 5456/2, same data syntype 1.

**Current status:** Valid species: *Proisotoma minuta* (Tullberg, 1871) (See Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** The specimens have been found in sugarcane agroecosystem soiland in rotten wood, NR Ch. Agroecosystem. Some specimens were found by the authors in tomatoes cultures in La Plata, Buenos Aires.

### ***Proisotoma troglobia* Rapoport & Maño, 1969**

*Proisotoma troglobia* Rapoport & Maño, 1969: 123–125, Figs. 48–53.

**Paratypes:** (8) MLP nº 5474/1–8, unsexed specimens, Venezuela, Miranda, Araira.10–VII–1967, Bordón col.

**Notes:** Specimens were found in caves. NR Vz. The species have not been registered in Argentina.

### ***Proisotoma woodgeri* Rapoport & Maño, 1969**

*Proisotoma woodgeri* Rapoport y Maño, 1969: 123, Figs. 38–47.

**Paratype:** MLP nº 5470/1, unsexed specimen, Venezuela, Guárico, Villa de Todos los Santos de Calabozo, 11–V–1967.

**Current status:** Valid species: *Folsomides centralis* (Denis, 1931) (See Gruia, 1983; Fjellberg, 1992).

**Notes:** Specimen was found in sabana soil from Estación Biológica de Los Llanos. NR Lv. The species have not recorded in Argentina.

## **Anuroporinae Börner**

### ***Cryptopigus araucanus* Massoud & Rapoport, 1968**

*Cryptopigus araucanus* Massoud & Rapoport, 1968: 317–319, Fig. 3, A–I.

**Syntype:** MLP nº 5453/1–2, unsexed specimen, Argentina, Río Negro, Puerto Blest, 07–III–1959, Rapoport col.

**Syntypes:** (3) MLP nº 5453/3–5, unsexed specimens, Argentina, Neuquén, Lago Curruhé 19–III–1959, Rapoport col.

**Note:** Specimens have been collected in supraneuston or flooded soil samples. AR Sp. Bosque Patagónico.

***Cryptopigus indecisus* Massoud & Rapoport, 1968**

*Cryptopigus indecisus* Massoud & Rapoport, 1968: 322, Fig. 5 A–D.

**Syntypes:** (5) MLP n° 2247/1–3, unsexed specimens, Argentina, Río Negro, Puerto Blest, 07–III–1959, Rapoport col.

**Notes:** Specimens were collected from epineuston of Nahuel Huapi Lake. Species has been also registered in Isla Victoria and Parque Nacional Lanín, Neuquén (Izarra, 1972b, 1982), AR Sp. Bosque Patagónico.

***Cryptopigus insignis* Massoud & Rapoport, 1968**

*Cryptopigus insignis* Massoud & Rapoport, 1968: 319–321, Fig. 4, A–G.

**Syntype:** MLP n° 5458/1–2, unsexed specimens, Argentina, Chubut, 16–III–1959, Delamare Debouteville and Rapoport col.

**Notes:** Specimens were collected from supra neuston from lago Menendez. Species has also been found in Isla Victoria, Neuquén (Izarra, 1972b), AR Sp. Bosque patagónico.

***Cryptopigus patagonicus* Izarra, 1972**

*Cryptopigus patagonicus* Izarra, 1972b: 375, Figs. 6–12.

**Holotype:** MLP n° 3455/1, ♀, Argentina: Neuquén, Isla Victoria, 29–VIII–1970.

**Paratypes:** (3) MLP n° 3455/2–4, ♀♀, same data holotype.

**Note:** Specimens were collected in mosses, litter and rotten wood from *Pilgerodendron uviferum* (Ciprés de las Guaitecas). AR Sp. Bosque Patagónico.

***Cryptopigus quinqueoculatus* Izarra, 1970**

*Cryptopigus quinqueoculatus* Izarra, 1970: 395, Figs. 5–9.

**Syntype:** MLP n° 5466/1, unsexed specimen, Argentina, Buenos Aires, Sierra de la Ventana, 27–VII–1964, Izarra col.

**Notes:** Specimens were found in soil from Cerro Ventana, 1000 m above sea level and in Grünbein salt marsh. Species has also been registered in Valle de Punilla, Cordoba (Izarra, 1973), NR Pm, Mt. Pampa, Espinal.

***Cryptopigus trioculatus* Izarra, 1972**

*Cryptopigus trioculatus* Izarra, 1972b: 374, Figs. 1–4.

**Holotype:** MLP n° 3458/1, ♂, Argentina, Neuquén, Isla Victoria, 29–VIII–1970.

**Allotype:** MLP n° 3458/2, ♀, same data holotype.

**Notes:** Specimens were collected in lichens on rocks. According the original description other type specimens were found in litter and on cane from *Chusquea culeou* (colihue) at 1.5 m above the floor. AR Sp.

***Cryptopigus yosii* Izarra, 1965**

*Cryptopigus yosii* Izarra, 1965: 269, Figs. 17–24.

**Syntypes:** (4) MLP n° 5454/1–3, unsexed specimen, Argentina, Buenos Aires, Sierra de la Ventana, 3–IX–1961, Rapoport col.

**Notes:** Specimens were extracted from soil and mosses samples at the edge of Naposta brook. NR Pm. Pampa.

***Isotomina elegans* Rapoport & Izarra, 1962**

*Isotomina elegans* Rapoport & Izarra, 1962: 252, Figs. 21–30.

**Syntypes:** (2) MLP nº 5468/1–2, unsexed specimen, Argentina: Buenos Aires, Bahía Blanca, 19–X–1961, Rapoport col.

**Current status:** Valid species: *Cryptopygus elegans* (Rapoport & Izarra, 1962) (See Mari Mutt & Bellinger, 1990).

**Notes:** Specimens were collected from samples of a garden. NR Pm. Urban soil.

### ***Isotomina nerudai* Rapoport & Rubio, 1963**

*Isotomina nerudai* Rapoport & Rubio, 1963: 120–121, Figs. 75–80.

**Syntype:** MLP nº 5477/1–3, unsexed specimens, Chile, Santiago, Cerro El Roble, 18–VIII–1961, Rapoport col.

**Current status:** Valid species: *Mucrosomia caeca* (Wahlberg, E., 1906) (See Potapov, 2001).

**Notes:** Specimens were collected at 2050 m above sea level, in litter from *Nothofagus obliqua var macrocarpa*. In Argentina the species has been found in Bahía Blanca, Salado river basin and Buenos Aires, Sierra de la Ventana, (Rapoport, 1963; Hermosilla & Rubio, 1974; Izarra, 1965), Entre Ríos, Paraná, (Izarra, 1969), Mendoza (Juberthie *et al.*, 1994), and Neuquén, Isla Victoria, (Izarra, 1972b; Juberthie *et al.*, 1994). RN Pm and Mt, AR Sp. Pampa, Espinal and Monte Patagónico.

### ***Isotomina quadrioculata* Rapoport, 1963**

*Isotomina quadrioculata* Rapoport, 1963: 35–39, Figs. 11–17.

**Holotype:** MLP nº 5465/1, unsexed specimen, Argentina, Buenos Aires, 8–VI–1961, Rapoport col.

**Current status:** Valid species: *Cryptopygus quadrioculatus* (Rapoport, 1963) (see Mari Mutt & Bellinger, 1990)

**Notes:** Specimen was collected in Grünbein salt marsh. NR Pm. Pampa.

### ***Isotomodes bahiensis* Rapoport, 1962**

*Isotomodes bahiensis* Rapoport, 1962a: 3–5, Figs. 1–10.

**Syntype:** MLP nº 5479/1, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca, 4–IV–1960, Rapoport col.

**Notes:** An specimen of *Willemia australis* Rapoport, 1962 and one of *Folsomina onychiurina* Denis, 1931 are in the same slide. Specimen was collected in Grünbein salt marsh. Species has also been found in different soils (gley, solonchak, litosols) from Bahía Blanca, Buenos Aires, (Rapoport & Najt, 1966), and in Caleu Caleu, La Pampa (Izarra, 1975), NR Pm. Pampa.

### ***Isotomodes venezuelensis* Rapoport & Maño, 1969**

*Isotomodes venezuelensis* Rapoport & Maño, 1969: 121, Figs. 31–37.

**Paratypes:** (3) MLP nº 5462/1–3, unsexed specimens, Venezuela, Guárico, Villa de Todos los Santos de Calabozo, 10–V–1967.

**Notes:** Specimens were collected in soil of sabana. Species has not been registered in Argentina. NR Vz.

## **Isotominae Schäffer**

### ***Isotoma fideli* Rapoport & Izarra, 1962**

*Isotoma fideli* Rapoport & Izarra, 1962: 250–252, Figs. 12–20.

**Syntype:** MLP nº 5473/1, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca, 2–XI–1960, Rapoport col.

**Current status:** Valid species: *Desoria fideli* (Rapoport & Izarra, 1962)

**Notes:** Specimens were collected in pasture and urban soil. NR Pm. Agroecosistema y Ecosistemas urbanos.

#### ***Isotoma nahuelensis* Rapoport & Rubio, 1968**

*Isotoma nahuelensis* Rapoport & Rubio, 1968: 55, Figs. 18–25.

**Syntype:** MLP nº 5476/1, unsexed specimen, Chile, Malleco, Parque Nacional Nahuelbuta, 22–IV–1962, Rapoport col.

**Notes:** Specimen was collected in soil of *Araucaria araucana* forest. Species has been registered in Argentina from Parque Nacional Lanín, Neuquén (Izarra, 1982). AR Bv and Sp.

#### ***Isotoma subantarctica* Izarra, 1972**

*Isotoma subantarctica* Izarra, 1972b: 377–378, Figs. 13–24.

**Holotype:** MLP nº 3457/1, ♂, Argentina, Neuquén, Isla Victoria, 01–IX–1970.

**Paratype:** MLP nº 3457/2, ♂, 13–III–1970, same locality holotype.

**Notes:** Specimens were found in soil under fallen tree bark and next to Laguna Larga. AR Sp.

#### ***Pseudosorensia fueguensis* Izarra, 1972**

*Pseudosorensia fueguensis* Izarra, 1972c: 77–79, Figs. 1–9.

**Holotype:** MLP nº 3446/1, ♀, Argentina, Tierra del Fuego, Río Grande, 20–XI–1963, Rapoport col.

**Allotype:** MLP nº 3446/2, ♂, same data holotype.

**Notes:** Specimens were collected from soil samples of grassland. AR Pm. Estepa patagónica.

### **ACTALETIDAE Börner**

#### ***Actaletes venezuelensis* Najt & Rapoport, 1972**

*Actaletes venezuelensis* Najt & Rapoport, 1972: 219 221, Figs. 1–12.

**Holotype:** MLP nº 3447/1, unsexed specimen, Venezuela, Estado Falcón, Chichiriviche, 31–V–1969, Rapoport col.

**Paratypes:** (2) MLP nº 3447/2–3, same data holotype.

**Current status:** Valid species: *Spinactaletes venezuelensis* (Najt & Rapoport, 1972) (See Soto-Adames, 1988).

**Notes:** Specimens were collected from *Rhizophora mangle* roots. The species have not been registered in Argentina. NR Vz.

### **ENTOMOBRYIDAE Schäffer**

#### **Orchesellinae Börner**

#### ***Alloscopus platensis* Izarra, 1972**

*Alloscopus platensis* (Izarra, 1972d): 537–539, Figs. 1–6.

**Syntype:** MLP nº 3460/1, unsexed specimen, Argentina, Buenos Aires, La Plata, 24–IX–1970, Najt col.

**Current status:** Valid species: *Dicranocentrus platensis* (Izarra, 1972) (See Mari Mutt, 1977, 1981).

**Notes:** Specimen has been collected in leaf litter from the urban forest Paseo del Bosque. Three individuals were necessary to define the species but only one is preserved at the museum. NR Pm. Uban Soil.

### Subfamily Entomobryinae Schäffer

#### ***Entomobrya lanuginosa olivacea* Rapoport, 1962**

*Entomobrya lanuginosa olivacea* Rapoport, 1962b: 454–455, Figs. 53–58.

**Syntypes:** (2) MLP nº 2244/1–2, unsexed specimens, Argentina, Buenos Aires, Bahía Blanca, 11–IX–1958, Rapoport col.

**Syntype:** MLP nº 2244/3, unsexed specimen, same locality syntype 1, 30–IV–1960, García col.

**Current status:** Valid species: *Entomobrya lanuginosa* (Nicolet, 1842) (See Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** Specimens were collected in pasture soil and urban soil from Bahía Blanca. Species has also been registered in Sierra de la Ventana, Buenos Aires (Izarra, 1965). NR Pm. Pampa. Uban Soil.

#### ***Entomobrya xanthoderma* Rapoport & Izarra, 1962**

*Entomobrya xanthoderma* Rapoport & Izarra, 1962: 255, Figs. 41–46.

**Syntype:** MLP nº 5471/1, ♂, Argentina, Buenos Aires, González Chávez, 8–I–1962, Rapoport col.

**Notes:** Specimen was collected from soil samples. NR Pm. Pampa.

#### ***Sinella hexophthalma* Rapoport & Rubio, 1968**

*Sinella hexophthalma* Rapoport & Rubio, 1968: 53–54, Figs. 11–17.

**Syntype:** MLP nº 5475/1, unsexed specimen, Chile, Santiago, Cerro El Roble, 17–XI–1961, Rapoport col.

**Notes:** Specimen was collected from soil samples. Species has not been reported in Argentina. AR Sa.

#### **Lepidocyrtinae Whalen**

#### ***Lepidocyrtus gisini* Izarra, 1972**

*Lepidocyrtus gisini* Izarra, 1972b: 380–382, Figs. 25–28.

**Paratypes:** (3) MLP nº 3456/1–3, ♂♂, Argentina Neuquén, Isla Victoria, 1–IX–1970.

**Notes:** Specimens were collected from lichens, mosses on a tree bark, in soil, litter and organic matter on the forest floor. AR Sp. Bosque Patagónico.

#### ***Pseudosinella gleycola* Rappoport, 1962**

*Pseudosinella gleycola*, Rappoport, 1962a: 19–20, Figs. 131–132

**Syntypes:** (3) MLP nº 5679/1, unsexed specimens, Argentina, Buenos Aires, Bahía Blanca, 08–III–1961, Rapoport col.

**Notes:** Syntypes are in the same slide. Specimens were collected from gley soil in Grünbein. NR Pm. Pampa.

#### ***Pseudosinella rapoporti* Izarra, 1965**

*Pseudosinella rapoporti* Izarra, 1965: 272–273, Figs. 32–36.

**Syntype:** MLP nº 5460/1, unsexed specimen, Argentina, Buenos Aires, Sierra de la Ventana, 03–IX–1961, Rapoport col.

**Notes:** Specimens were collected in soil beneath rocks. NR Pm. Pampa.

#### **Seirinae Yosii**

#### ***Seira ferruginea* Rappoport & Izarra, 1962**

*Seira ferruginea* Rappoport & Izarra, 1962: 252–253, Figs. 31–35.

**Syntype:** MLP nº 5472/1, unsexed specimen, Argentina: Buenos Aires, Bahía Blanca, 09–IX–1960, Rapoport col.

**Notes:** Specimen was collected in soil of a Grünbein salt marsh. Species has also been reported in Sierra de la Ventana, Buenos Aires. (Izarra, 1965), NR Pm. Pampa.

### PARONELLIDAE Börner

#### Cyphoderinae Börner

##### *Cyphoderus limboxiphius nitricola* Rapoport & Izarra, 1962

*Cyphoderus limboxiphius nitricola* Rapoport & Izarra, 1962: 253–255, Figs. 36–40.

**Syntypes:** (2) MLP nº 2241/1–2, unsexed specimens, Argentina, Buenos Aires, Bahía Blanca, 08–II–1961, Rapoport col.

**Current status.** Valid species: *Cyphoderus limboxiphius* Börner, 1913 (See Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** Specimens were collected in soil at Grünbein salt marsh associated to ants from the genera *Elasmopheidole*, *Brachymyrnex* and *Solenopsis*. Species has been reported from agroecosystems in Villarino, Buenos Aires (Izarra, 1981), and in Paraná, Entre Ríos (Izarra, 1969). NR Pm. Espinal, Urban soil.

### NEELIPLEONA Massoud

#### NEELIDAE Folsom

##### *Megalothorax bonetella* Najt & Rapoport, 1965

*Megalothorax bonetella* Najt & Rapoport, 1965: 33.

**Syntype:** (1) MLP nº 2232/1 unsexed specimen, Najt & Rapoport. Argentina, Buenos Aires, Bahía Blanca, 30–07–1960, Rapoport col.

**Current status:** Valid species: *Megalothorax rapoporti* Salmon 1964 (See Najt, 1969b). *M. boneti* Rapoport (1962a) is primary homonymous of *M. boneti* Stach. To correct this, in 1964, Salmon proposed *rapoporti* as specific epithet. Unknowing that change in 1965 Najt & Rapoport proposed *bonetella*. Respecting the priority order the valid name of the specie is *M. rapoporti*.

**Notes:** Specimens were collected on lichens and urban soils from Bahía Blanca. Species has also been detected in Sierra de la Ventana, Buenos Aires (Izarra, 1965; Najt, 1969b), and Tucumán (Najt & Rapoport, 1965). NR Pm and Ch. Pampa, Yungas, urban soils.

##### *Megalothorax boneti*, Rapoport, 1962

*Megalothorax boneti* Rapoport, 1962a: 13–15, Figs. 86–101

**Syntype:** (1) MLP nº 2231/1, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca, 06–V–1960, Rapoport col.

**Current status:** Valid species: *Megalothorax rapoporti* Salmon, 1964 (See Najt, 1969b).

**Notes:** Specimen was collected in a Grünbein salt marsh and Paseo del Bosque urban forest in La Plata. NR Pm. Pampa, Urban soil. More information see *Megalothorax bonetella*.

##### *Neelus desantisi* Najt, 1971

*Neelus desantisi* Najt, 1971a: 121–123, Figs. 1–13.

**Holotype:** MLP nº 3444/1, unsexed specimen, Argentina, Buenos Aires, La Plata, 14–VIII–1968, Najt col.

**Paratype:** MLP nº 3444/2, same data holotype.

**Paratypes:** (3) MLP nº 3444/3–5, unsexed specimen, 23–VIII–1968, same locality and collector holotype.

**Paratype:** MLP nº 3444/6, unsexed specimen, 18–X–1968, same locality and collector holotype.

**Paratype:** MLP nº 3444/7, unsexed specimen, 14–V–1969, same locality and collector holotype.

**Paratype:** MLP nº 3444/8, unsexed specimen, Argentina, Buenos Aires, Berazategui, Parque Pereyra. 18–XI–1968, same collector holotype.

**Notes:** Specimens were collected in soils of urban forests. NR Pm. Urban soil.

### SYMPHYPLEONA Börner SMINTHURIDIDAE Börner

#### *Sminthurides napostaensis* Najt & Rapoport, 1965

*Sminthurides napostaensis* Najt & Rapoport, 1965: 34–36, Figs. 1–11.

**Syntype:** MLP nº 2227/1, ♂, Argentina, Buenos Aires, Bahía Blanca, 22–V–1960, Rapoport col.

**Syntype:** MLP nº 2227/2, ♀, same data syntype 1.

**Syntypes:** (9) MLP nº 2227/3–9, ♀♀, Argentina, Buenos Aires, Bahía Blanca, 19–II–1962, same collector syntype 1.

**Syntype:** MLP nº 2227/10, ♂, same data syntypes 3–9.

**Notes:** Specimens were collected in Grünbein salt marsh, and in epineuston samples from Napostá brook. NR Pm. Pampa.

#### *Sminthurides rupium* Najt, 1967

*Sminthurides rupium* Najt, 1967: 71–73, Figs. 1–6.

**Holotype:** MLP nº 2225/1, ♀, Argentina, Buenos Aires, Sierra de la Ventana, 26–VII–1964, Rapoport & Izarra col.

**Notes:** Specimen was extracted from grassland soil samples. NR Pm. Pampa.

#### *Sminthurides ventanae* Najt, 1969

*Sminthurides ventanae* Najt, 1969 b: 49–51, Figs. 1–8.

**Holotype:** MLP nº 2226/1, ♀, Argentina, Buenos Aires, Sierra de la Ventana, 18–VI–1963, Rapoport col.

**Paratypes:** (2) MLP nº 2226/1, ♀♀, same data holotype.

**Notes:** Holotype and paratypes are in the same slide. Specimens were collected in soil, 1000 m above sea level. NR Pm. Pampa.

### KATIANNIDAE Börner

#### *Katianna richardsi* Najt, 1967

*Katianna richardsi* Najt, 1967: 75–76, Figs. 10–19.

**Holotype:** MLP nº 2228/1, ♀, Argentina, Buenos Aires, Bahía Blanca, 11–X–1960, Rapoport col.

**Notes:** Specimen was collected in Grünbein salt marsh. NR Pm. Pampa.

#### *Katianna serrae* Najt, 1967

*Katianna serrae* Najt, 1967: 76–78, Figs. 20–28.

**Holotype:** MLP nº 2229/1, ♂, Argentina, Buenos Aires, Sierra de la Ventana. 26–VII–1964, Rapoport & Izarra col.

**Notes:** Specimen was collected in grassland soil. NR Pm. Pampa.

### *Katianna viretorum* Najt, 1967

*Katianna viretorum* Najt, 1967:79, Figs. 29–40.

**Holotype:** MLP nº 2230/1, ♂, Argentina, Buenos Aires, Bahía Blanca, 16–X–1962, S. A. de Tagliabúe col.

**Notes:** Specimen was collected in an urban soil. NR Pm. Urban soil.

### *Metakatianna antennalis* Rapoport, 1962

*Metakatianna antennalis* Rapoport, 1962a: 15–17, Figs. 108–113.

**Syntypes:** (2) MLP nº 2233/1–2, ♀♀, Argentina, Buenos Aires, Bahía Blanca, 4–IV–1960.

**Current status:** Valid species: *Sminthurinus antennalis* (Rapoport, 1962) (See Delamare Debouteville & Massoud, 1963; Betsch, 1980; Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** In 1980, Betsch suppressed genre *Metakatianna* because it was established with juvenile specimens of *Katianna* or *Sminthurinus*. However, one of the specimens in MLP is a female according to the label. Specimens were collected in Grünbein salt marsh. The species has also been reported in Sierra de la Ventana and in Salado river basin, Buenos Aires (Izarra, 1965; Hermosilla & Rubio, 1974). NR Pm. Pampa.

### *Metakatianna nunezi* Najt, 1967

*Metakatianna nunezi* Najt, 1967: 83, Figs. 62–64.

**Holotype:** MLP nº 2234/1, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca, 12–VIII–1964, Sánchez col.

**Current status:** Valid species: *Katianna nunezi* (Najt, 1967) (See Betsch, 1980; Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** Specimen was extracted from soil samples. NR Pm. Pampa.

### *Metakatianna steparia* Najt, 1967

*Metakatianna steparia* Najt, 1967: 84–86, Figs. 65–73.

**Syntype:** MLP nº 2235/1, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca, 9–VIII–1960, Rapoport col.

**Syntypes:** (3) MLP nº 2235/2, unsexed specimen, Argentina, Buenos Aires, Sierra de la Ventana, 18–VI–1963, Rapoport col.

**Syntype:** MLP nº 2235/3, unsexed specimen, Argentina, Buenos Aires, Bahía Blanca, 9–IX–1963, Tagliabúe col.

**Current status:** Valid species: *Katianna steparia* (Najt, 1967) (See Betsch, 1980; Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** Specimens were collected in grasslands soil sample sand in Grünbein salt marsh. NR Pm. Pampa.

### *Sminthurinus australis* Najt, 1972

*Sminthurinus australis* Najt, 1972b: 47–49, Figs. 1–7.

**Holotype:** MLP nº 3510/1, ♀, Argentina, Tierra del Fuego, Isla de los Estados, 07–V–1971, Ronderos & Bulla col.

**Allotype:** MLP nº 3510/2, ♂, same data holotype.

**Paratype:** MLP nº 3510/3, ♀, same data holotype.

**Paratypes:** (2) MLP nº 3510/4–5, ♂♂, same data holotype.

**Notes:** Specimens were collected from epigeic fauna on soil in Bahía Vancouver. AR Sp. Bosque Patagónico.

***Sminthurinus bullai* Najt, 1972**

*Sminthurinus bullai* Najt, 1972b: 50, Figs. 13–17.

**Holotype:** MLP nº 3508/1, ♀, Argentina, Tierra del Fuego, Isla de los Estados, 3–IV–1971, Ronderos & Bulla col.

**Notes:** Specimens were collected as epigeic fauna on soil in Bahía Vancouver. AR Sp. Bosque Patagónico.

***Sminthurinus castagninoi* Najt, 1969**

*Sminthurinus castagninoi* Najt, 1969b: 51–53, Figs. 9–16.

**Holotype:** MLP nº 2223/1, ♀, Argentina, Buenos Aires, Sierra de la Ventana, 18–06–1963, Rapoport col.

**Paratypes:** (3) MLP nº 2223/2–4, ♀♀, same data holotype.

**Notes:** Specimens were collected from soil samples at 1000 m above sea level. NR Pm. Pampa.

***Sminthurinus inexcussus* Najt & Rapoport, 1965**

*Sminthurinus inexcussus* Najt & Rapoport, 1965: 39–41, Figs. 24–33.

**Syntype:** MLP nº 2220/1, ♀, 08–V–1961, Argentina, Buenos Aires, Bahía Blanca, Rapoport col.

**Syntype:** MLP nº 2220/2, ♂, same data syntype 1.

**Notes:** Specimens were collected in Grünbein salt marsh. NR Pm. Pampa.

***Sminthurinus insularis* Najt, 1972**

*Sminthurinus insularis* Najt, 1972b: 49–50, Figs. 8–12.

**Holotype:** MLP nº 3509/1, ♂, Argentina, Tierra del Fuego, Isla de los Estados, 02–V–1971, Ronderos & Bulla col.

**Allotype:** MLP nº 3509/2, ♀, same data holotype.

**Notes:** Specimens were collected as epigeic fauna on soil in Bahía Vancouver. AR Sp. Bosque Patagónico.

***Sminthurinus nunezi* Rapoport, 1963**

*Sminthurinus nunezi* Dellamare Deboutteville & Massoud, 1963: 210–212.

**Syntypes:** (4) MLP nº 2253/1–2, ♂♂, Argentina, Buenos Aires, Bahía Blanca, 20–X–1960, Núñez col.

**Syntypes:** (4) MLP nº 2253/1–2, unsexed specimens, Argentina, Buenos Aires, Bahía Blanca, 20–X–1960, Núñez col.

**Notes:** Specimens were collected as part of samples from epineuston in Napostá brook. The species was reported in Sierra de la Ventana, Buenos Aires (Izarra, 1965). NR Pm. Pampa.

***Sminthurinus operosus* Najt & Rapoport, 1965**

*Sminthurinus operosus* Najt & Rapoport, 1965: 41–43, Figs. 34–39.

**Syntypes:** (3) MLP nº 2222/1–3, ♂♂, Argentina, Buenos Aires, Bahía Blanca, 9–VII–1960, Rapoport col.

**Syntype:** MLP nº 2222/4, ♂, Argentina, Buenos Aires, Bahía Blanca, 28–IX–1962, Tagliabué col.

**Notes:** Specimens were collected in urban soils and in Grünbein salt marsh. NR Pm. Pampa. Urban soil.

***Sminthurinus patagonicus* Najt, 1971**

*Sminthurinus patagonicus* Najt, 1971b: 44, Figs. 1–8.

**Holotype:** MLP nº 3451/1, ♀, Argentina, Neuquén, Isla Victoria, 30–VIII–1970, Izarra col.

Notes: Specimen was collected beneath mosses. AR Sp. Bosque Patagónico.

### ***Sminthurinus stenognathus similis* Najt & Rapoport, 1965**

*Sminthurinus stenognathus similis* Najt & Rapoport, 1965: 43, Figs. 50–56.

**Syntype:** MLP nº 2224/1, ♀, Argentina, Buenos Aires, Bahía Blanca, 4–IV–1960, Rapoport col.

**Syntype:** MLP nº 2224/2, ♂, same data syntype 1.

**Syntype:** MLP nº 2224/3, ♂, Argentina, Buenos Aires, Bahía Blanca, 10–VI–1960, Rapoport col.

**Current status:** Valid species: *Stenognathellus stenognathus* (Börner, 1907) (See Betsch, 1980; Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** Specimens were collected in Grünbein salt marsh. NR Pm. Pampa.

### **SPINOTHECIDAE Dellamare Deboutteville**

#### ***Spinotheca cyanea* Najt, 1971**

*Spinotheca cyanea* Najt, 1971b: 44–47, Figs. 9–19.

**Holotype:** MLP nº 3452/1, ♀, Argentina, Neuquén, Isla Victoria, 29–VIII–1970, Izarra col.

**Notes:** Specimen was collected beneath mosses. AR Sp. Bosque Patagónico.

### **SMINTHURIDAE Lubbock**

#### **Sminthurinae Lubbock**

#### ***Temeritas rapoporti* Najt, 1968**

*Temeritas rapoporti* Najt, 1968: 632–635, Figs. 2–14.

**Holotype:** MLP nº 2219/1, ♂, Argentina, Buenos Aires, Tigre, XII–1959, Wygodzinsky col.

**Allotype:** MLP nº 2219/2, ♀, same data holotype.

**Syntype:** MLP nº 2219/3, ♂, same data holotype.

**Syntypes:** (5) MLP nº 2219/4–8, ♀♀, same data holotype.

**Notes:** Specimens were collected from floating vegetation at Río Paraná. NR Pm. Pampa.

### **BOURLETIELLIDAE Börner**

#### ***Andiella izaruae* Najt, 1967**

*Andiella izaruae* Najt, 1967: 79–82; Figs. 44–50.

**Holotype:** MLP nº 2237/1, ♂, Argentina, Buenos Aires, Sierra de la Ventana, 20–I–1960, Rapoport col.

**Allotype:** MLP nº 2237/2, ♀, 17–12–1964, same locality and collector holotype.

**Paratype:** MLP nº 2237/3, ♂, same locality and collector holotype.

**Paratypes:** MLP nº 2237/4–5, ♂♂, same date, locality and collector allotype.

**Current status:** Valid species: *Prorastriopes izaruae* (Najt, 1967) (See Betsch, 1980; Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** Specimens were collected from grassland soils. NR Pm. Pampa.

#### ***Bourletiella guevarai* Rapoport, 1970**

*Bourletiella guevarai* Rapoport, 1970: 27–30, Figs. 17–32.

**Holotype:** MLP nº 2232/1, ♂, Gran Bretaña, Tristan da Cunha, 21/01/1938, Y. Hagen col.

**Notes:** Specimen was extracted from grassland soil at 20 m above sea level. Species have not found in Argentina. PR.

***Deuterostinthus carrerensis* Rapoport & Bianco, 1962**

*Deuterostinthus carrerensis* Rapoport & Bianco, 1962: 247, Figs. I, 13–18.

**Syntype:** MLP nº 2239/1, ♀, Argentina, Santa Fe, Carreras, 11–I–1960, Rapoport col.

**Syntype:** MLP nº 2239/2, ♂, same date syntype 1.

**Syntype:** MLP nº 2239/3, ♂, Argentina, Buenos Aires, Napostá brook, 29–II–1960, Rapoport col.

**Syntype:** MLP nº 2239/4, ♂, 20–X–1960, same locality and collector syntype 3.

**Current status:** Valid species: *Prorastriopes carrerensis* (Rapoport & Bianco, 1962) (See Betsch 1980).

**Notes:** Specimens were collected in agroecosystems, and in samples from epineuston of the Napostá brook. NR Pm. Pampa. Agroecosystems.

***Rastriopes pampeanus* Rapoport & Bianco, 1962**

*Rastriopes pampeanus* Rapoport & Bianco, 1962: 245–247, Figs. I, 1–12.

**Syntype:** MLP nº 2238/1, ♀, Argentina, Buenos Aires, Bahía Blanca, epineuston, 15–II–1960, Sánchez col.

**Syntypes:** (3) MLP nº 2238/2–4, ♂♂, 26–II–1960, same locality and collector syntype 1.

**Syntypes:** (3) MLP nº 2238/5–7, ♀♀, same locality and collector syntype 1, same collection date to syntypes 2–4.

**Syntype:** MLP nº 2238/8, ♀, 27–III–1960, same locality and collector syntype 1.

**Syntype:** MLP nº 2238/9, ♀, 26–I–1962, same locality and collector syntype 1.

**Current status:** Valid species: *Prorastriopes pampeanus* (Rapoport & Bianco, 1962) (See Betsch, 1980; Bernava–Laborde & Palacios–Vargas, 2008).

**Notes:** Specimens were collected in grassland and urban soils and as part from the epineuston of a stream. NR Pm. Pampa. Urban soils.

**Acknowledgements**

This work was funded by UNLP N–638 grant. M.J. Narvaez Beinhorn participated thanks to the agreement “Convenio de colaboración, Decreto 1535/9. Ministerio de Agroindustria. Provincia de Buenos Aires”. Also, we specially thanks the two reviewers and the editors who improved the early version of the ms.

**References**

- Arbea, J.I. 2016 Three new species and one new record of Tullbergiidae (Collembola: Onychiuroidea) from Tierra del Fuego. *Zootaxa*, 4093, 64–84.
- Bernava, V. & Palacios–Vargas, J. 2000 Collembola. In: Claps, L., Debandi, G. & Roig,S. (Eds.), *Biodiversidad de Artrópodos Argentinos* Vol. 2. Sociedad Entomológica Argentina, Mendoza, pp. 151–166.
- Betsch, J.M. 1980 Éléments pour une monographie des Collemboles Symphypléones (Hexapodes, Aptérygotes). *Mémoire du Muséum National d'Histoire Naturelle*, 116: 1–227.
- Brown, A. & Pacheco, S. 2006 Propuesta de actualización del mapa ecorregional de la Argentina. In: Brown, A., Martínez Ortiz, U., Acerbi, M. & Corcuera, J. (Eds.), *La Situación Ambiental Argentina 2005*. Fundación Vida Silvestre Argentina, Buenos Aires, pp. 28–31.
- Cassagnau, P. & Rapoport, E.H. 1962 Collemboles d'Amérique du Sud. I. Poduromorphes. *Biologie de l'Amérique Australe* 1: 139–184.

- Cruz-Leal, J.I., J.G. Palacios-Vargas & M. Montejo-Cruz. 2016 Importancia nacional e internacional de la colección de Collembola (Hexapoda) de la Facultad de Ciencias, UNAM. *Boletín de la Sociedad Mexicana de Entomología (nueva serie)*. Número especial 2: 75–80.
- Dellamare Debouteville, C. & Massoud, Z. 1963 Collemboles Symphyleones. *Biologie de l'Amérique Australe* 2: 169–289.
- Ellis, W.N. & Bellinger, P.F. 1973 An annotated list of the generic names of Collembola (Insecta) and their Tipos species. *Monografieën van de Nederlandse Entomologische Vereniging* 7: 1–74.
- Fernandes, L.H., Bellini, B. C. & Mendonça, M.C. 2010 Revision of the genus *Austrogastrura* Thibaud & Palacios-Vargas, 1999 (Collembola: Poduromorpha: Hypogastruridae). *Zootaxa*, 2542: 61–68.
- Fjellberg, A. 1992 Revision of European and North African Folsomides Stach with special emphasis on the Canarian fauna (Collembola: Isotomidae). *Entomologica Scandinavica* 23(4) 1992(1993): 453–473.
- Gruia, M. 1983 Collemboles arthropleones de Cuba recoltes par les expéditions cubano–roumaines en 1969–1973. II, *Resultats Des Expéditions Biospéleologiques Cubano–roumaines A Cuba* 4: 191–205.
- Hermosilla, W. & Rubio, I. 1974 Prospección preliminar de la fauna edáfica de la Estancia El Vecino (Cuenca del Salado, Prov. de Buenos Aires, Argentina). *Physis*, 33(87): 259–265.
- Izarra, D.C. de. 1965 Fauna colembólica de Sierra de la Ventana (Provincia de Buenos Aires) Argentina. *Physis* 25 (70): 263–276.
- Izarra, D. C. de 1969 Sobre algunos colémbolos de Paraná (Provincia de Entre Ríos, Argentina). *Physis*, 29 (78): 145–150.
- Izarra, D.C. de. 1970 Tres nuevas especies de colémbolos de Sierra de la Ventana (Provincia de Buenos Aires), Argentina. *Physis* 79: 393–397.
- Izarra, D.C. de 1971a Sobre el género *Triacanthella* Schäffer con descripción de una nueva especie: *T. najtae* (Insecta, Collembola). *Physis* 30 (81): 345–354.
- Izarra, D.C. de 1971b *Onychiurus (Protaphorura) yolandae*, nueva especie de colémbolo (Insecta: Collembola) de Venezuela. *Acta Biológica Venezolana* 7 (3): 373–377.
- Izarra, D.C. de 1972a Fauna colembólica de Isla Victoria (Prov. Neuquén Argentina) II. Familia Neanuridae. *Physis* 31 (82): 88–98.
- Izarra, D.C. de 1972b Fauna Colembólica de la Isla Victoria (Prov. de Neuquén, Argentina) III. Familias Isotomidae y Entomobryidae. *Physis* 31 (83): 373–382.
- Izarra, D.C. de 1972c *Pseudosorensia*, nuevo género de la familia Isotomidae (Insecta, Collembola). *Physis* 31 (82): 77–79.
- Izarra, D.C. de 1972d *Alloscopus platensis*, una nueva especie de La Plata, Provincia de Buenos Aires (Collembola, Entomobryidae). *Physis* 31 (83): 537–539.
- Izarra, D.C. de 1973 Sobre algunos colémbolos del Valle de Punilla Provincia de Córdoba. *Physis* 32 (85): 475–481.
- Izarra, D.C. de 1975 Los colémbolos del Departamento de Caleu Caleu, Provincia de La Pampa, Argentina. *Physis* 34 (88): 91–96.
- Izarra, D.C. de 1981 Las prácticas agrícolas y sus efectos sobre la fauna de los colémbolos en un suelo de la región semiárida. *Anal. Edafol. Agrobiol.*, 40 (7–8): 1193–1203.
- Izarra, D.C. de 1982 Contribución al conocimiento de los colémbolos del Parque Nacional Lanín (Prov. de Neuquén, Argentina). *Physis* 40 (99): 71–74.

- Juberthie, C.; Trajano, E. & Lipps, E. 1994 Argentina. In: Juberthie, C. & V. Decu (eds.). *Encyclopedia Biospeologica*. Société de Bioespéologie, Moulis: pp 517–522.
- Kukalová-Peck, J. 1991 Fossil history and the evolution on hexapod structures The Insects of Australia In: C.S.I.R.O. (Ed.), *Insects of Australia. A Text book for Students and Research Workers*. Vol 1, Melbourne University Press, Carlton pp. 141–179 Second Edition.
- Mari Mutt, J.A. 1977 The taxonomic status of subgenus Alloscopus and re descriptions of its two species Collembola Entomobryidae. *Pan Pacific Entomologist*, 53 (4): 241–249.
- Mari Mutt, J.A. 1981 New genus, a new species, and complements to the descriptions of seven Neotropical Dicranocentrus (Collembola: Entomobryidae: Orchesellinae). *Journal of Agriculture of the University of Puerto Rico* 65 (2): 90–107.
- Mari Mutt, J.A. & Bellinger, P.F. 1990 *A Catalog of the Neotropical Collembola. Flora & Fauna Handbook N°5*. Sandhill Crane Press 237 pp.
- Massoud, Z. 1967 Monographie des Neanuridae, Collemboles Poduromorphes à pièces buccales modifiées. *Biologie de l'Amérique Australe* 3: 7–399.
- Massoud, Z. & Rapoport, E.H. 1968 Collemboles Isotomides d' Amérique du Sud et de l' Antarctique. *Biologie de l' Amérique Australe* 4: 306 –337.
- Morrone, J.J. 2001 *Biogeografía de América Latina y el Caribe*. M&T-Manuales & Tesis SEA vol. 3: Zaragoza Gorfi, S.A. 148 pp.
- Muzón, J. 2005 Insecta. La búsqueda de la clasificación perfecta. *Revista de la Sociedad Entomológica Argentina* 64 (3): 1–12.
- Najt, J. 1967 Colémbolos Symphypleona Neotropicales I. *Physis* 27 (74): 71–86.
- Najt, J. 1968 Nouveaux documents sur le genre Temeritas et sa distribution géographique (Collembola Symphypleone). *Revue d' Écologie et de Biologie du Sol* 5 (4): 631–636.
- Najt, J. 1969a Arthropleona de Argentina I. Insecta (Collembola). *Revista de la Sociedad Entomológica Argentina* 31 (1–4): 107–113.
- Najt, J. 1969b Colémbolos Symphypleona neotropicales II. *Revista de la Sociedad Entomológica Argentina* 31(1–4): 49–55.
- Najt, J. 1971a Una nueva especie de Neelidae de la República Argentina (Insecta: Collembola) *Revista de la Sociedad Entomológica Argentina* 33 (1–4): 121–123.
- Najt, J. 1971b Colémbolos Symphypleona neotropicales III. *Revista de la Sociedad Entomológica Argentina* 33 (1–4): 43–47.
- Najt, J. 1972a Nota sobre dos especies de Triacanthella Schaeffer, 1897 (Insecta: Collembola). *Revista de la Sociedad Entomológica Argentina* 34 (1–2): 115–117.
- Najt, J. 1972b Sobre tres colémbolos Symphypleona de la Isla de los Estados (Insecta). *Revista de la Sociedad Entomológica Argentina* 34 (1–2): 47–50.
- Najt, J. 1973 Sobre algunos Arthropleona de la Isla de los Estados I (Insecta, Collembola). *Physis* 32 (85): 241–245.
- Najt, J. & Massoud, Z. 1974 Contribution à l'étude des Brachystomellinae (Insectes, Collemboles). I. Nouvelles espèces récoltées en Argentine. *Revue d' Écologie et de Biologie du Sol* 11 (3): 367–372.
- Najt, J. & Palacios-Vargas J.G. 1987 Nuevos Brachystomellinae de México (Collembola, Neanuridae). *Nouvelle Revue d'Entomologie* 1(2) 3(4): 457–471.
- Najt, J. & Rapoport, E. 1965 Sobre algunos colémbolos (Symphypleona) de Argentina. *Revista de la Sociedad Entomológica Argentina* 27 (1–4): 33–45.

- Najt, J. & Rapoport, E.H. 1972 Una nueva especie de Actaletidae de Venezuela (Insecta: Collembola). *Physis* 31 (82): 219–221.
- Palacios-Vargas, J.G. & Salazar, A.E. 2014 A new species of Tullbergia (Collembola, Tullbergiidae) from Buenos Aires, Argentina. *ZooKeys* 416: 23–30.
- Potapov, M. 2001 Isotomidae. In: W. DUNGER (Ed.). *Synopses on Palearctic Collembola*. Abhandlungen und Berichte des Naturkundemuseums 73 (2): 1–603.
- Rapoport, E.H. 1959 Colémbolos de Bahía Blanca (Argentina), II. *Revista de la Sociedad Entomológica Argentina* 21 (3–4): 79–88.
- Rapoport, E.H. 1962a Colémbolos de Bahía Blanca (Argentina) III. *Publicaciones del Instituto de Edafología e Hidrología. Universidad Nacional del Sur. Bahía Blanca*, 2: 1–24.
- Rapoport, E.H. 1962b Colémbolos de Bahía Blanca (Argentina) IV. *Acta Zoológica Lilloana* 18: 443–455.
- Rapoport, E.H. 1963 Colémbolos de Bahía Blanca VI. *Revista de la Sociedad Entomológica Argentina* 26: 35–39.
- Rapoport, E.H. 1970 Collembola of Tristan da Cunha, Nightingale and Inaccessible Islands. *A Norwegian Journal of Zoology* 18 (1): 23–32.
- Rapoport, E.H. & Bianco, E. 1962 Dos nuevos colémbolos Symphyleona de la Argentina. *Physis* 33 (65): 245–247.
- Rapoport, E.H. & de Izarra, D.C. 1962 Colémbolos de Bahía Blanca (Argentina) V. *Physis* 23 (65): 249–256.
- Rapoport, E.H. & Maño, S. 1969 Colémbolos de Venezuela I. *Acta Biológica Venezolana* 6 (3–4): 117–128.
- Rapoport, E.H. & Najt, J. 1966 Ecología de los microartrópodos en suelos gley y solonchak de Bahía Blanca, Argentina. *Actas 1º Col. Latinoam. Biol. Suelo UNESCO*, Montevideo: 505–520.
- Rapoport, E.H. & Rubio, I. 1963 Fauna Colembólica de Chile, *Investigaciones Zoológicas Chilenas* 9: 95–124.
- Rapoport, E.H. & Rubio, I. 1968 Fauna colembólica de Chile II. *Acta Biológica Venezolana* 6 (1): 52–67.
- Rapoport, E.H. & Sánchez, L. 1963 On the epineuston or the superaqueous fauna. *Oikos*, 14 (1): 96–109.
- Soto-Adames, F.N. 1988 Revisión de la familia Actaletidae Borner, 1902 (Insecta: Collembola). *Caribbean Journal of Science* 24 (3–4): 161–196.
- Thibaud, J.M. & Palacios-Vargas, J.G. 1999 Brazilian Collembola from littoral sand with description of Austrogastrura gen. n. and Isotomodes carioca sp. n. [Hypogastruridae; Isotomidae]. *Revue française d'Entomologie (N.S.)* 21 (1): 25–31.
- Weiner, W. M. & J. Najt. 2001 Species of *Brachystomella* (Collembola: Brachystomellidae) from the Neotropical region. *Eur. J. Entomol.* 98: 387–413.

Recibido: 10 mayo 2017

Aceptado: 10 agosto 2017