

## **Catalog of the type material in the Herpetology Collection of the Instituto de Biología Animal (Facultad de Ciencias Agrarias, Universidad Nacional de Cuyo)**

### **Catálogo del material tipo de la Colección Herpetológica del Instituto de Biología Animal (Facultad de Ciencias Agrarias, Universidad Nacional de Cuyo)**

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#### **ABSTRACT**

The Herpetology Collection of the Instituto de Biología Animal of Mendoza (IBA-FCA UNCuyo) is one of the most important of Argentina, for the type material deposited there and because includes a large number of specimens from central-western Argentina and Patagonia. The collection is in a process of ordering for it to the scientific community to access the material with ease. This arrangement allows recognizing the deposited type material, most of it corresponding to Argentina's species described by J. M. Ceí, who conducted his investigations at this institute between 1955 and 1980. Also developed research in the Institute R. Donoso-Barros, J. A. Scolaro, F. Videla, L. P. Castro, G. Macola and V. Roig, among others. The type material comprises a total of 295 specimens, belonging to 38 species, 32 of them being holotypes and 263 paratypes. The materials designated as Neotypes of *Liolaemus anomalus* Koslowsky, 1896 and *Liolaemus melanops* Burmeister, 1868 do not constitute type material since the original types were found. Fourteen types that should have been deposited in the collection were not found, including the holotype of *Homonota andicola* Ceí, 1978.

#### **Keywords**

type material • IBA-UNCuyo • amphibia • reptilia • herpetology

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## RESUMEN

La Colección Herpetológica del Instituto de Biología Animal de Mendoza (IBA-FCA, UNCuyo) es una de las más importantes de la Argentina, por el material tipo en ella depositado, y por la gran cantidad de ejemplares del centro-oeste argentino y de la Patagonia. La colección está en un proceso de ordenamiento lo que permitirá que la comunidad científica pueda acceder al material con facilidad. Este ordenamiento ha permitido reconocer los ejemplares tipos en ella depositados, que en su mayor parte corresponde a especies de la Argentina descritas por J. M. Cei. Este investigador desarrolló sus investigaciones en el instituto entre 1955 y 1980. También desarrollaron investigaciones en el Instituto R. Donoso-Barros, J. A. Scolaro, F. Videla, L. P. Castro, G. Macola y V. Roig entre otros. En total hay 295 ejemplares tipo pertenecientes a 38 especies, 32 de ellos holotipos y 263 paratipos. Los materiales designados como neotipos de *Liolaemus anomalus* Koslowsky, 1896 y *Liolaemus melanops* Burmeister, 1868 no se consideran tipos ya que los ejemplares tipos originales fueron localizados posteriormente. Catorce tipos que deberían estar depositados en la colección no fueron encontrados, entre ellos el holotipo el *Homonota andicola* Cei, 1978.

### Palabras clave

material tipo • IBA-UNCuyo • amphibia • reptilia • herpetología

## INTRODUCTION

Dr. José Miguel Cei in 1955 is appointed Professor at the Department of Scientific Research by the Universidad Nacional de Cuyo. From then on, and until his retirement, he conducted intensive teaching and research activities at the Schools of Medicine and Agrarian Sciences, creating the Instituto de Biología Animal (IBA-UNCuyo), of which he was its first Director. During this fruitful period he conducted several investigations that resulted in more than 370 publications, and deposited part of the material of these investigations in the Herpetology Collection of the Instituto de Biología Animal (IBA-UNCuyo).

Currently the Facultad de Ciencias Agrarias has undertaken the task of ordering and arranging the 3811 specimens that make up the IBA collection, most of them preserved in alcohol 70°.

Until now, no review of the material has been carried out, which is why has been tackled this task, with the first contribution being the catalog of type material.

## MATERIALS AND METHODS

To establish what material has been deposited in the Collection of the Instituto de Biología Animal, the original register books of the collection and other annotations of Dr. Cei were revised. Also, all the works published by Dr. Cei and by other researchers where new species were reported were compiled. As for materials, we searched the collection for possibly-existing type specimens, both those labeled as type and those that were not and which appeared in the original publications as deposited in the collection.

The criterion for determining which material should be considered as type is that set by the International Code of Zoology (26) in article 72.1.1 "type series: all specimens on which the author established a nominal species-group taxon (with the exception of those excluded [Article 72.4.1]); In the absence of holotype designation, or the designation of syntypes, or the subsequent designation of a lectotype, all are syntypes and collectively they constitute the name-bearing type; "... (ICZN, 1999).

The following information is provided for each type material: Scientific Name designated in the original description, author or authors, year, publication page and pictures or figures; current status, category of type contained in the original publication, acronym and catalog number assigned in the IBA-UNCuyo collection. In the case of paratypes, the number of specimens present in the IBA-UNCuyo collection is placed in brackets.

The textual transcription of the original tag is done, including in some cases, country, province, locality, date (day / month / year), altitude and name of the collector.

Observations continue by detailing data that appear in the original publication and that do not match the label or any other information that is relevant.

The line jump is designated with a bar, and the reverse of the label with two bars. In all cases, the label contents were respected, and literally transcribed.

The current status of the species was taken from the "Amphibian Species of the World 6.0, an Online Reference" and Reptile database (2017) (1, 31).

## RESULTS

Studying the IBA-UNCuyo collection allowed us to recognize 295 type specimens, of which 32 are holotypes and 263 paratypes. Within the Amphibia class there are 14 species, all described by José M. Cei, some coauthored by Alejandro Scolaro, Osvaldo Reig and Virgilio Roig, with a total of 14 holotypes and 74 paratypes, some of which are designated as allotypes. In the Reptilia class, the collection has 24 species described by authors such as José M. Cei, Alejandro Scolaro, Fernando Videla, Roberto Donoso Barros and Luis P. Castro, with 18 holotypes and 189 paratypes among which some are designated as allotypes.

Sixteen types specimens should have been deposited in the collection but could not be found, the holotype of *Homonota andicola* (15), five paratypes of *Telmatobius praebasalticus dobeslawi* (8), four paratypes of *Telmatobius praebasalticus luisi* (8), three paratypes of *Liolaemus elongatus petrophilus* (25) and three paratypes of *Phymaturus patagonicus somuncurensis* (20).

Six specimens designated as Neotypes are not type material. In the IBA collection there are five Neoparatypes of *Liolaemus anomalus* (27) designated by Cei (1979) (IBA-UNC 1239, IBA-UNC 0072, IBA-UNC 423, IBA-UNC 1237-1 and 2). Later, Williams and Cei (1983) rediscovered in the Museo de La Plata the materials studied by Koslowsky (1896) and which constitute series of *L. anomalus*. According to article 75.8 of the International Code of Zoological Nomenclature when rediscovering the original types, the neotypes should be set aside. For this reason, these five neoparatypes are not type material. Anyway, their information is provided. Also the neotype of *Liolaemus melanops* (2) designated by Cei (1975) (IBA-UNC 943-1)

was deposited in the IBA. Later, at the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia" of Buenos Aires, Cei (1998) (19) rediscovers the material that Burmeister (1888) studied and that constitutes the holotype of *L. melanops*. According to the same article for the previous case, the material designated as neotype does not constitute type material.

Two specimens designated as Topotypes of *Liolaemus melanops* (2) (IBA-UNC 943-2 and 3) are not type material either.

### List of Type Material

- Class Amphibia
- Order Anura
- Family Alsodidae
- Genus *Alsodes* Bell

#### *Alsodes gargola neuquensis*

- Cei 1976: 161.
- Current status - *Alsodes neuquensis* (13).
- Holotype: IBA-UNC 1963-1.
- Planicie Lonco Luán/ Neuquén. Mts 1550/ Argentina/ 7-1-68./ J. M. Cei
- Paratypes (two): IBA-UNC 1963- 2 and 3.
- Same data as Holotype.
- Remarks: The holotype is a male and the two paratypes are females. All are in good condition.

#### *Alsodes pehuenche*

- Cei 1976: 162.
- Current status - *Alsodes pehuenche* (13).
- Holotype: IBA-UNC 1646-1.
- Mts. 2400- a 15 km de/ los limites-Ruta a Talca/ Chile-/13-III-1964/ Legit J. M. Cei- V. Roig.
- Remarks: Male specimen. In the original description, the locality cited is "Pehuenche Valley, in Andean mountains of southern Mendoza Province, Argentina, 2000 up to 2500 m", and also the date is 14 november 1973.

- Paratypes (four): IBA-UNC 1646-3, 5, 6 and 7.
- Dos machos enviados (1646-2 y 1646-4) / Dr. Lynch para estudios anatómicos// a Universidad Nebraska el 14/XI/1973.
- Same data as Holotype.
- IBA-UNC 1643-1.
- Vertientes de aguas sulfurosas/ a 2-3 km antes de la frontera/ con Chile. / Ruta pehuenche- 2300 mts/ Malargüe Mendoza. / 13-III-64. / Leg Cei-Roig.
- Remarks: This material, belonging to IBA-UNC, is not in the collection.
- Paratypes (three): IBA-UNC 1642- 1 to 3.
- Arroyos a 10 km del límite- 2300 m/ Paso Pehuenche- Talca-Chile/13-III-64/ Leg. Cei- Roig.
- Remarks: In the original publication the locality is the same as that of the holotype. All paratypes are in good condition.

- Family Batrachylidae
- Genus *Atelognathus* Lynch

#### *Telmatobius reverberii*

- Cei 1969: 8, figure. 5, a-b.
- Current status - *Atelognathus reverberii* (6).
- Holotype: IBA-UNC 1980-1.
- Meseta somuncura/Río Negro-L. Miñuelo/ mt 1400. / 9-4-1968//Legit J. M. Cei
- Remarks: Male. In the original publication the author cites that it was collected on 10/04/1968 which differs from the label.
- Paratypes (four): IBA-UNC 1980- from 2 to 5.
- Same data as Holotype.
- Remarks: In the original publication, the authors cited that they were collected on 10/04/1968 but the label is dated 09/04/1968. All specimens are preserved in the same vial.
- Paratypes (two): IBA-UNC 1981-1 and 2.

- *Telmatobius/ reverberii /Meseta Somuncura /Río Negro. L. Raimunda. / mt. 1400. 20/12/1967// Legit J. M. Cei.*
- Remarks: IBA-UNC 1981-1 was designated as Allotype. In the original description, it says it was collected on 19/12/1967 but in the label it is dated 12/20/1967.
- Laguna Chica. Casa de/ Piedra. m1500/ Neuquén. 7-1-70/ Legit J. M. Cei - L. Cei
- Paratypes (five): IBA-UNC-1, 2, 3, 4 and 6.
- Same data as holotype
- Remarks: There are two paratypes cited in the publication, IBA-UNC 2124-7 and 8, which are not currently deposited in the IBA Collection.

***Telmatobius solitarius***

- Cei 1970: 19, Figs. 2 and 3.
- Current status - *Atelognathus solitarius* (7).
- Holotype: IBA-UNC 2045-1.
- *Telmatobius solitarius*/(Typus) / A 5 km de Pilcaniyen/ Río Negro/A° Las Bayas/ 6-1-1969// Legit J.M. Cei
- Remarks: In the original description is only cited IBA-UNC 2045-1. In addition to this specimen there are two specimens in the same vial labeled as "Typus" that would not be type material because they are not mentioned in the original publication and, besides, they were collected *a posteriori* from the description of the species (January 10, 1970).

***Telmatobius praebasalticus***

- Cei 1968: 275, Lam. 4, 1-2.
- Current status - *Atelognathus praebasalticus* (4).
- Holotype: IBA-UNC 1845-6.
- Lag. Del Tero/Neuquén/ Oct. 1966. / Leg. Cei. Roig.
- Remarks: The type material is in good condition, but the labels are deteriorated. In the original description, the locality is Laguna del Teru.
- Paratype: IBA-UNC 1845-8.
- Remarks: 1845-8 was designated as allotype in the original description.

***Telmatobius praebasalticus agilis***

- Cei 1972: 434, figure 3, Lam. 6.
- Current status - *Atelognathus praebasalticus* (8).
- Holotype: IBA-UNC 2124-5.

***Telmatobius praebasalticus dobeslawi***

- Cei 1972: 439, Figs. 4, Lam. 5 and 6.
- Current status - *Atelognathus praebasalticus* (8).
- Holotype: IBA-UNC 2130-1.
- *Telmatobius/ Laguna del Piojo. 1000m./ Barda de S. Tomas/ Neuquén. Argentina/ 2-5-1970// Legit J. M. Cei - R. Cei.*
- Remarks: In good condition.
- Paratypes (eighteen): IBA-UNC 2130-2 to 19.
- Same data as Holotype.
- Remarks: In the IBA Collection there are currently only 18 paratypes of the 23 cited in the original publication, but specimens numbered 2130-20 to 24 are missing. All specimens are preserved in the same vial.

***Telmatobius praebasalticus luisi***

- Cei 1972: 437, Figs. 4, Lam. 3 and 4.
- Current status - *Atelognathus praebasalticus* (8).
- Holotype: IBA-UNC 2126-2.
- *Telmatobius/ Laguna Overa. 1500m. / (Lagunas basálticas a 12km NE Catan Lil.) / Neuquén-/26-01-70. // Legit J. M. Cei - L. Cei*
- Remarks: In a good state of preservation.
- Paratypes (fifteen): IBA-UNC 2126-1; 3 to 9; 11; 12; 14; 16; 19; 21; 23.
- Same data as Holotype
- Remarks: In the IBA-UNC collection currently there are only 15 specimens labeled as paratypes of the 22 cited in the original publication. In the jar of

the collection there is a label that says: "N° 2126-10; 2126-17 y 2126-22 se encuentran en U.S. National Museum Washington". This would add 18 paratypes. It has not been possible to find the IBA-UNC paratypes 2126-13, 15, 18, 20. Mixed in the same vial with all the paratypes. There are also five unlabeled specimens that belong to the same species, but cannot be assigned the category of type.

- Family Bufonidae
- Genus *Rhinella* Fitzinger

#### ***Bufo achalensis***

- Cei 1972: 237, figure 2 a-b.
- Current status - *Rhinella achalensis* (9).
- Holotype: IBA-UNC 1284-3.
- Pampa de Achala / m 2200- Córdoba / 22-XI-68 / Legit J. M. Cei
- Remarks: Holotype male. In the original description J. M. Cei and L. P. Castro are listed as collectors. In good condition.
- Paratypes (five): IBA-UNC 1284-1, 2, 4, 5 and 6
- Same data as Holotype
- Remarks: Allotype 1284-2. 1284-1 and 4 males. In the original publication, within the designated paratypes are cited as "1284-6-6, 3 females", specimens 1284-5 and 1284-6 are among the remaining adult specimens in the collected series, so it is inferred that 1284-5 is one of the females.

#### ***Bufo spinulosus atacamensis***

- Cei 1962: 77.
- Current status- *Rhinella atacamensis* (3).
- Holotype: IBA-UNC 422-1.
- Río Huasco. Vallenar/Atacama (Chile)/ 9-XI-59/ Legit J. M. Cei
- Remarks: Female in good condition.
- Paratype: IBA-UNC 421-1.
- Río Huasco. Vallenar/ Atacama (Chile)/9-XI-59/ Legit J. M. Cei
- Remarks: Male in good condition.

- Family Ceratophryidae
- Genus *Lepidobatrachus* Budgett

#### ***Lepidobatrachus llanensis***

- Reig & Cei 1963: 199, Lam. 1.
- Current status - *Lepidobatrachus llanensis* (30).
- Holotype: IBA-UNC 037-1. Punta de los Llanos. La Rioja/ 30-III-'51/ Legit J. M. Cei// IL 01016.
- Remarks: Holotype male. In the original description J. M. Cei, J. Grecco and S. Tomsic are cited as collectors.
- Paratype: IBA-UNC 037-2
- Same data as Holotype.
- Remarks: Female designated as Allotype. In the original description J. M. Cei, J. Grecco and S. Tomsic are cited as collectors. In good condition.

- Family Craugastoridae
- Genus *Psychrophrynella* Hedges, Duellman & Heinicke

#### ***Syrrophus laplacai***

- Cei 1968: 139, figure 2.
- Current status- *Psychrophrynella wettsteini* (5).
- Holotype: IBA-UNC 1251-1.
- Unduavi. Transición a las/yungas. / Altura: 3400 mts./ 13-2-63/ Leg: Dr. J. M. Cei- R. Cei.
- Remarks: They are in a good state of conservation.
- Paratypes (eight): IBA-UNC 1251-2 to 5 and 7 to 10.
- Remarks: Four females and five males. IBA-UNC 1251-2 was designated as Allotype. Specimen 1251-6 of the series is not present. In the original publication, aside from the locality, the author added "On the road to Coroico (National road to Beni Valley) at 3 km West of Pongo".
- Family Leptodactylidae
- Subfamily Leiuperinae
- Genus *Pleurodema* Tschudi

***Telmatobius somuncurensis***

- Cei 1969: 14, figure 5, g-h.
- Current status- *Pleurodema somuncurensis* (6)
- Holotype: IBA-UNC 1982-1.
- *Telmatobius somuncu/rensis* (Typus) /Arroyo el Rincón/ 700 m./ Meseta Somuncurá/ Río Negro/ 10- 04-68 / Legit J. M. Cei.
- Remarks: In good condition.
- Paratypes (four): IBA-UNC 1982-2 to 5.
- Same data as Holotype.
- Remarks: All specimens are preserved in the same vial.
- Family Telmatobiidae
- Genus *Telmatobius* Wiegmann
- Remarks: Holotype is not present in the vial.
- Paratypes (three): IBA-UNC 1100-2, 3 and 4.
- Same data as Holotype.
- Paratype: IBA-UNC 1109.
- 15- 20 km Norte/ del límite de Mendoza- San Juan/ 1850 m// 17-01/75/ Legit J. M. Cei/ L. P Castro. A. Roig.
- Remarks: In The original publication, the locality is 25 km north of the San Juan- Mendoza border. The specimen is in a good state of conservation.
- Paratype: IBA-UNC 0367.
- Angualasto/San Juan/ Enero 1977// Gend. Nac.
- Remarks: The National Gendarmerie collected the material.

***Telmatobius contrerasi***

- Cei 1977: 359, figure 1.
- Current status - *Telmatobius contrerasi* (14).
- Holotype: IBA-UNC 2420-1.
- *Telmatobius/contrerasi/ Cerro Madrid/ Valle del Río Gualcamayo/3050 m/ San Juan (Jachal)// 2-2-1976/ Legit/J. Contreras.*
- Remarks: In good condition.
- Paratypes (two): IBA-UNC 2420-2 and 2124-3.
- Same data as Holotype.
- Remarks: All specimens are preserved in the same vial.
- Class Reptilia
- Order Squamata
- Suborder Gekkota
- Family Phyllodactylidae
- Genus *Homonota* Gray
- Suborder Iguania
- Family Leiosauridae
- Genus *Diplolaemus* Bell

***Diplolaemus sexcintus***

- Cei, Scolaro & Videla 2003: 143.
- Current status- *Diplolaemus sexcintus* (24).
- Holotype: IBA-UNC 605-1.
- Meseta pedregosa- 1100m/ 10 km Sur de Las Bayas/ Río negro/ 24-1-70 // Legit J. M. Cei- L. Cei.
- Remarks: Identified as *Diplolaemus darwini* on the label which does not have the coordinates mentioned in the original publication.
- Paratype: IBA-UNC 605-2.
- Same data as Holotype
- Paratypes (two): IBA-UNC 1412-1 and 2.
- Entre Pto Alvarado y Cruz / de Piedra/ 22-3-82/ Leg. Castro- Mácola- García.
- Remarks: Identified as *Diplolaemus darwini* on the label which does not have the altitude at which it was collected cited in the original publication.
- Paratype: IBA-UNC 926.
- 40 km Norte/Uspallata- Mendoza / 2500m- roquedales/ 17-1-75// Legit J. M. Cei/ L. P. Castro/ A. Roig.

***Homonota andicola***

- Cei 1978: 1.
- Current status - *Homonota andicola* (15).
- Holotype: IBA-UNC 1100-1.

- Portillo Argentino/ 2500m Tunuyán/ Mendoza / 12-II-1973// Legit A. Mataloni.
  - Remarks: In good condition.
  - Paratype: IBA-UNC 461.
  - L. Raimunda / Meseta Somuncura / Río Negro 20-12-67 // Legit J. M. Cei.
  - Paratype: IBA-UNC 418.
  - Laguna Blanca / Neuquén / 1965 // Legit T. A. Antil
  - Remarks: while the specimen's label has the same location as that in the original publication, it has no data on altitude, distance, day of collection or the collector's name is not the same either.
  - Paratype: IBA-UNC-513.
  - Meseta Somuncura/Cerro Merlo/Río Negro/ 18-XI-68// Legit J. M. Cei/ L. P. Castro
  - Híbrido/*Diplolaemus darwini* x *Diplolaemus bibroni*.
  - Remarks: in good condition.
  - Paratypes (two): IBA-UNC 1177-1 and 2.
  - Observations: Identified as *Diplolaemus darwini*/ Antiplanicie 1800 m./ 80 km Sur Nihuil/ 15 km W Nevado/ Mendoza // Legit J. M. Cei/ N. Tuzi/ F. Videla.Paratypes (two): IBA-UNC 611-1 and 2.
  - A° Las Bayas y bardas vasálticas [sic] (850-1100 m)/ Río Negro/ 9-1-70// Legit J. M. Cei- L. Cei.
  - Remarks: Identified as *Diplolaemus darwini* and date of collection does not match that in the original publication, this being 9-1-1975.
  - Genus *Pristidactylus* Fitzinger
- Pristidactylus nigroiugulus***
- Cei, Scolaro & Videla 2001: 600, figure 3.
  - Current status - *Pristidactylus nigroiugulus* (23).
  - Paratype: IBA-UNC 784.
  - Ruta Paso de Indios-Sombrero/ empalme a Horqueta/ Chubut/ 15-1-1972/ J. M. Cei- L. Cei- R. Ferreira.
- Remarks: In good condition.
  - Paratype: IBA-UNC 934.
  - Callejas- borde/ Meseta Canquel/ Chubut/ 900 m/ Enero 1972// Legit J. M. Cei, L. Cei y Ferreira.
  - Remarks: In good condition.
  - Paratype: IBA-UNC R 1477.
  - Remarks: Material presumably lost.
- Family Liolaemidae
  - Genus *Liolaemus* Wiegman
- Ctenoblepharis donosobarrosi***
- Cei 1974: 72, figure 2, a-b.
  - Current status - *Liolaemus donosobarrosi* (10).
  - Holotype: IBA-UNC 824-1.
  - Mantacilla/ SE Mendoza/ Médanos salobres/ 1000 m/ XII-1972// Legit J. M. Cei, L.P. Castro/ T. Ferreyra.
  - Paratype: IBA-UNC 824-2.
  - Same data as Holotype.
  - Remarks: All are in good condition.
- Ctenoblepharis rabinoi***
- Cei 1974: 73, figure 3 and 4.
  - Current status - *Liolaemus rabinoi* (10).
  - Holotype: IBA-UNC 818-1.
  - Arenales SE Dique Nihuil/ 1200 m. Mendoza/ Abril 1974// Legit A. Rabino.
  - Paratype: IBA-UNC 818-2.
  - Same data as Holotype
  - Remarks: In good condition.
- Liolaemus archeforus***
- Donoso-Barros 1971: 93, figure 2, e-h.
  - Current status - *Liolaemus archeforus* (25).
  - Holotype: IBA-UNC 517-3.
  - Puesto Lebrun/ Meseta Lago B. Aires/ 1500 m. S. Cruz/ 24- XII-68 // Legit J. Cei- L. P. Tuzi.
  - Remarks: In good condition.
  - Paratypes (two): IBA-UNC 516-1 and 2.
  - Meseta Lago B. Aires / 800 mt. de la Laguna Cisnes Cuello Negro/ Santa Cruz/ 25-XII-1968 // Legit J. M. Cei- N. P. Tuzi.

- Paratypes (five): IBA-UNC 517-1, 2, 4, 5 and 6.
- Same data as Holotype
- Paratype: IBA-UNC-518-2.
- Meseta L. B. Aires / S. Cruz. M 1500 / Central Plain / 23-XII-68 / Legit J. M. Cei-Tuzi.
- Remarks: Juvenile. Specimen in a good state of conservation.

***Liolaemus austromendocinus***

- Cei 1974: 224, figure 5, 1-4.
- Current status- *Liolaemus austromendocinus* (11)
- Holotype: IBA-UNC 826-1.
- 70 km S Nihuil/Mendoza-/20-XII-72// J. M. Cei- L P Castro/ T. Ferreira.
- Remarks: In good condition.
- Paratypes (two): IBA-UNC 826-2 and 3.
- Remarks: In good condition.

***Liolaemus ceii***

- Donoso-Barros, 1971: 49, figure 1.
- Current status - *Liolaemus kriegi* (25).
- Holotype: IBA-UNC 452.
- Planicie Lonco Luan/Neuquén- 1550 m/ 7-1-67. Legit J. M. Cei.
- Remarks: In good condition.

***Liolaemus duellmani***

- Cei 1978: 1.
- Current status - *Liolaemus duellmani* (16).
- Holotype: IBA-UNC 0139.
- El Choique-mt 2400/ MENDOZA 22-XI-61/ Legit Cei J- V. Roig
- Det. A. Donoso.
- Remarks: It is in a good state of conservation.

***Liolaemus elongatus petrophilus***

- Donoso-Barros & Cei, 1971: 224, figure 4, 5.
- Current name - *Liolaemus petrophilus* (11).
- Holotype: IBA-UNC 496-3.
- Entre L. Raimunda y/ L. Chara m.1400 Meseta Somuncura/ R. Negro. 16-XI-1968/ Legit Cei- Castro- Tuzi.

- Paratype: IBA-UNC 496-2.
- Remarks: Paratypes 496-1, 4 and 5 should be deposited in the IBA collection but they are not present.

***Liolaemus famatinae***

- Cei 1980: 61, figure 4.
- Current name - *Liolaemus famatinae* (18).
- Paratypes (ten): IBA-UNC 1344- 1 to 10.
- Cueva de Perez- 4.200 mts /Sierra de Famatina/ L Rioja- 3-III-79/ Legit J. M. Cei.
- Remarks: In good condition.

***Liolaemus fitzingeri canqueli***

- Cei 1975: 220, figure 3 b.
- Current status - *Liolaemus canqueli* (12).
- Holotype: IBA-UNC 861-9.
- E° Callejas- Borde N/ Meseta Canquel/ Chubut/ 19-1-1973// Legit J. M. Cei- L. Cei / T. Ferreira.
- Paratypes (ten): IBA-UNC 861-1, 2, 4, 5, 6, 7, 8, 10, 11 and 12.
- Same data as Holotype
- Remarks: In good condition
- Paratype: IBA-UNC 689.
- Meseta Canquel- 800-900m / Chubut- 11-4-70 // Leg: J. M. Cei- L. P Castro
- Paratypes (two): IBA-UNC 804-1 and 2.
- Paso de Indios- Sombrero/ Chubut/ 15-1-72 / Leg: J. M. Cei, L. Cei, T. Ferreira
- Remarks: The altitude mentioned for this locality in the original publication (12) is not on the label. In good condition.

***Liolaemus fitzingeri cuyanus***

- Cei & Scolaro 1980: 38, figure 1.
- Current status - *Liolaemus cuyanus* (22).
- Paratypes (fifteen): IBA-UNC 1271-1 to 15.
- Carrizal del / Medio/ Mendoza/ 7-XII-76 // J. M. Cei / L. P. Castro.
- Remarks: All in good condition.
- Paratypes (nine): IBA-UNC 1322- 1 to 9.
- Carrizal del Medio/ Mza, 12 Marzo 1978// Legit J. M. Cei /L. P Castro.

- Remarks: There are nine specimens in the vial of which only one has no label, which should be IBA-UNC 1322-9. All in good condition.
- Paratypes (sixteen): IBA-UNC 1206-1 to 16.
- Carrizal del Medio / Mendoza / 10-III-76 / Legit L. P. Castro.
- Remarks: All in good condition.
- Paratypes (two): IBA-UNC 1245-1 and 2.
- Lagunas de Guanacache- Algarrobita/ Mendoza / 5-XI-76 // Legit J. M. Cei. L. P. Castro/ E. Otmeño.
- Remarks: The month of collection does not match the one cited in the publication. In good condition.
- Paratype: IBA-UNC 0073.
- Mendoza/ a 30 km Desaguadero/ 10 Diciembre 1955// Legit F. Roig.
- Remarks: In good condition.
- Paratype: IBA-UNC 1269.
- Embarcadero El Alpero/ Dep. Lavalle- Mendoza/ Argentina (Médanos) / 23-IX-77/ Legit J. M. Cei- E. Ormeño.
- Paratypes (five): IBA-UNC 1229-1 to 5.
- Médanos 10 km cruce/ Baldecitos – 1400m/ Ruta Villa Unión- Patquia- La Rioja 15-XI- 76/ L. M. Cei- L. P. Castro.
- Remarks: In the original description this series of paratypes appears as IBA-UNC 1929, possibly a typing mistake since the registers do not reach beyond number 1900.

***Liolaemus fitzingeri xanthoviridis***

- Cei & Scolaro 1980: 39, figure 2.
- Current status - *Liolaemus xanthoviridis* (22).
- Paratypes (four): IBA-UNC 1080 1 to 4.
- 7km Sur de Trelew/ Río Chubut/ 20-XII-75/ Legit. A. Scolaro.
- Remarks: All in good condition.
- Paratypes (two): IBA-UNC 1081 and 1082.
- Same data of IBA-UNC 1080.

***Liolaemus multimaculatus riojanus***

- Cei 1979: 300.
- Current status - *Liolaemus riojanus* (17).

- Paratypes (nine): IBA- UNC 1238-1 to 9.
- Médanos entre/Baldecitos y/ Pagancillo- La Rioja/ Argentina/ 13-XI-1976/ Legit Cei J. M.- L. P. Castro.
- Remarks: All are in good condition.

***Liolaemus ruizleali***

- Donoso-Barros & Cei, 1971: 93, figure 2, c-d.
- Current status- *Liolaemus rothi* (28)
- Holotype: IBA-UNC 483.
- Cerro Corona- Mta. Somuncura. Río Negro/ m 1500. /Ladera Sierra Paileman/ 16-XI-68/ Cei-Castro-Tuzi.
- Remarks: Holotype is in good condition. On the label, the altitude does not match that in the original publication, neither does the month of collection, and Tuzi does not appear as a collector in the publication.
- Paratypes (two): IBA-UNC 484-2 and 3.
- Frente a Cerro Corona/ Mta. Somuncura/ Río Negro/ 16-XI-68 / Cei- Castro-Tuzi// Coironal-Poa-Festuca. m 1400/ 4 km L. Blanca. Mta Somuncura/ Río Negro. 16-XI-68/ Cei- Castro- Tuzi.
- Remarks: The specimens are in good state of conservation. Two reference locations are given on the same label, in neither location do the months of collection match those cited in the publication and neither does the altitude. Again, Tuzi does not appear as a collector in the original publication.
- Paratypes (two): IBA-UNC-482 1 and 2.
- Same data as Holotype
- Remarks: In good condition.

***Liolaemus uspallatensis***

- Macola & Castro 1982: 1, Lam. 1.
- Current status - *Liolaemus uspallatensis* (28).
- Holotype: IBA-UNC 1407-1
- Estancia el Tambillo/ Uspallata- 10-11-81/ Leg. Castro-Mácola- García
- Paratypes (five): IBA-UNC 1407-2 to 6.
- Same data as Holotype.

- Remarks: Specimen 1407-3 is designated as Allotype.
- Paratypes (two): IBA-UNC 1408-1 and 2.
- A° Ranchillo- Uspallata/4-3-82/ Leg. Castro- Mácola.
- Remarks: In good condition.
- Paratype: IBA-UNC 1414-1
- Remarks: In good condition. Paratypes IBA-UNC 1414-2 and 3 are not present.

***Liolaemus vallecurensis***

- Pereyra 1992: 11, figure 1 and 2.
- Current status - *Liolaemus vallecurensis* (29).
- Holotype: IBA-UNC 1468-3.
- *Liolaemus* sp.-(Grupo Ruibali)/ "La sepultura"- Valle del/ Cura (3500 m s. n. m.)/ Dpto. Iglesia. San Juan / 24 y 25-III-89/ Col: Enrique y Carlos Pereyra.
- Paratypes (four): IBA-UNC 1468- 1, 2, 4, and 7.
- Same data as Holotype
- Remarks: The specimen IBA-UNC 1468-7 is designated as Allotype. Paratypes IBA-UNC 1468-8 to 25 mentioned in the original publication are not present in the collection.

- Genus *Phymaturus* Gravenhorst.

***Phymaturus patagonicus indistinctus***

- Cei & Castro 1973: 241, figure 7, a-a'.
- Current status- *Phymaturus indistinctus* (20).
- Holotype: IBA-UNC 666-1.
- 2 km Oeste. Las Pulgas / (Lago Musters)- Chubut /700-800 m. 23-1-70/ Legit J. M. Cei- L. Cei
- Remarks: In good condition.
- Paratypes (two): IBA-UNC 666-2 and 3.
- Remarks: In good condition.

***Phymaturus patagonicus nevadoi***

- Cei & Roig 1975: 256.
- Current status- *Phymaturus nevadoi* (21).
- Holotype: IBA-UNC 999-1.

- Agua de la India Muerta/ 1750- Macizo Nevado/ SE Mendoza-/ XII -1973/ Legit Willoud, Stassi, Castro.
- Remarks: In good condition.
- Paratypes (two): IBA- UNC 999-2 and 3.
- Same data as Holotype

***Phymaturus patagonicus payuniaie***

- Cei & Castro 1973: 244, figure 7, a-a'.
- Current status- *Phymaturus payuniaie* (20).
- Holotype: IBA-UNC 769-6.
- Payún-2000 m-/Mendoza/ 7-XII-1971// Legit J. M. Cei/ L. P. Castro- R. Ferreira.
- Remarks: In good condition.
- Paratypes (eight): IBA-UNC 769-1, 2, 3, 4, 5, 7, 15 and 28.
- Same data as Holotype
- Remarks: In good condition. The original publication mentions a paratype IBA-UNC 769-13 which should be held in the collection but is not present.
- Paratypes (four): IBA-UNC 726-1 to 4.
- Arroyo Seco- Base Cam/ pamento- Payún/ Mendoza/ ARGENTINA- 5-1-71/ Legit: L. P. Castro.
- Remarks: In good condition. There are three embryos in the vial, possibly removed from the specimens.
- Paratypes (five): IBA-UNC 787-1 to 5.
- Payún- Volcán- 2000m/ Mendoza/ 28-1-1972/ Legit- J. M. Cei- L. P. Castro- P. Furieri/ R. Ferreira
- Remarks: In good condition.
- Paratypes (two): IBA-UNC 734- 1 and 2
- Base campamento/ Lado SW Payún- Mendoza- Argentina/ 6-1-71/ Legit: L. P. Castro.

***Phymaturus patagonicus somuncurensis***

- Cei & Castro 1973: 242, figure 5, a-a'.
- Current status- *Phymaturus somuncurensis* (20).
- Holotype: IBA-UNC 470-1.
- Laguna Raimunda/ Mta. Somuncura. Río Negro /10-4-68 /Legit J. M. Cei- N. P. Tuzi
- Remarks: In good condition.

- Paratype: IBA-UNC 470-2.
  - Same data as Holotype.
  - Remarks: In good condition.
  - Paratype: IBA-UNC 433.
  - L. Raimunda R. N- Meseta Somuncura/ 20-12-67
  - Remarks: Three specimens (IBA-UNC 433-1, 2 and 3) are included in the original publication. There is only one IBA-UNC 433, without serial number.
  - Paratypes (two): IBA-UNC 495-1 and 2.
  - Laguna Raimunda/ Mta Somuncura- Río Negro/15-XI-68/ Legit L. P. Castro
  - Remarks: In good condition.
  - Paratypes (five): IBA-UNC 507-1 to 5.
  - Entre L. Raimunda y / L. Chara/ Mta Somuncura. Río Negro./ 17-XI-1968/. Legit Cei- Castro Tuzi
  - Paratypes (four): IBA-UNC 508 2 to 5.
  - Cerro Corona- m 1500/ Meseta Somuncura/ Argentina/ Río Negro/ 18-XI-68/ Legit Cei- Castro- Tuzi.
  - Remarks: Five specimens of this series appear in the original publication (IBA-UNC 508-1 to 5). In the Collection the specimen IBA-UNC 508-1 is missing.
- Phymaturus patagonicus zapalensis***
- Cei & Castro 1973: 243, figure 6, a-a'.
  - Current status- *Phymaturus zapalensis* (20).
  - Holotype: IBA-UNC 792-2.
  - Laguna Teru (L. Blanca)/ 6-1-1972/ Legit. J. M. Cei.- R. Ferreira.
  - Remarks: In good condition.
  - Paratypes (three): IBA-UNC 792-1, 3 and 4.
- Same data as Holotype
  - Paratype: IBA-UNC 349-1.
  - Laguna del Burro/ Neuquén. 16-X-66.
  - Remarks: In the original publication, J. M Cei and V. G. Roig are mentioned as collectors.
  - Paratype: IBA-UNC 436-1.
  - Laguna Blanca-Zapala / Neuquén-8-1-68 // Legit J. M. Cei.
  - Remarks: In the original publication, the Locality appears as 30 km W Zapala.
  - Paratypes (four): IBA-UNC 590-1 to 4.
  - Laguna Chica- m 1500/ Casa de Piedra/ 70 km SE Zapala/ Neuquén/ 8-1-70. // J. M. Cei- L. Cei.
  - Paratypes (seven): IBA-UNC 681- 1 to 7.
  - Laguna del Teru- Zapala/ Neuquén/ 7-4-70/ Leg. J. M. Cei- L. P. Castro.
- Vilcunia silvanae***
- Donoso-Barros & Cei, 1971: 91, figure 2, a-b.
  - Current name - *Liolaemus silvanae* (25).
  - Holotype: IBA-UNC 519.
  - Laguna del Sello/ Mta L. B. Aires- 1500/ 24-XII-68/ s. Cruz/ Legit Cei. Tuzi
  - Remarks: In good condition
  - Paratypes (two): IBA-UNC 520-1 and 2.
  - Laguna del Sello/ Mta L. B. Aires- 1600/ 24-XII-68/ s. Cruz/ Legit Cei. Tuzi
  - Paratype: IBA-UNC 534.
  - Laguna del Sello/ Mta L. B. Aires- 1500/ 24-XII-68/ s. Cruz/ Legit Cei. Tuzi
  - Remarks: Juvenile. In good condition.

## CONCLUSIONS

The ordering of the Herpetological collection of the IBA allows not only to have the knowledge of the wealth of the same but also that facilitates its use and conservation.

The realization of this catalog represents part of this work of ordering and has repercussion at national and international level since the users can know the present type material and its state of conservation, reason why will be a tool for the scientific community.

The bibliographic records show that from 1961 to 2003, type material

was deposited in the Collection. In the exhaustive review of the original publications and the labels contained in the flasks it was observed that the information corresponds faithfully in most cases.

Some differences were in years of collection and other errors that could be typography.

The deposited type material is in good condition. The preparation of this catalog allowed to establish that 14 of them are lost. The disclosure of this information will allow the herpetological community to seek out its search.

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