



The reptile type specimens preserved in the Museo Nacional de Ciencias Naturales (CSIC) of Madrid, Spain

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Abstract

A first complete list of the reptile type specimens preserved in the Museo Nacional de Ciencias Naturales (CSIC) of Madrid (updated until 15 July 2012) is provided. The collection houses a total of 319 type specimens representing 24 taxa belonging to 6 families and 12 genera. There are 22 taxa represented by primary types (19 holotypes, 2 neotypes and 1 lectotype) and at least one paratype, and only two taxa are exclusively represented by one secondary type (paratype). The collection is specially rich in Spanish endemisms. Special attention is deserved by the type series of many subspecies of *Podarcis lilfordi* described by A. Salvador and V. Pérez-Mellado. All type specimens are housed in the Herpetological collection except *Blanus mariae* and *Psammodromus occidentalis* type series and *Psammodromus hispanicus* (neotype) which are preserved in the DNA/Tissues Collection.

Key words: Reptilia, Type specimens, Scientific collections, Museological catalogue, Museo Nacional de Ciencias Naturales, Spain

Introduction

The Royal Cabinet of Natural History, currently *Museo Nacional de Ciencias Naturales* of Madrid (MNCN), was founded in 1771 by the king Carlos III with the acquisition of the Pedro Franco Dávila's cabinet. It was not the first world-founded modern museum, but it was the first in opening its exhibitions to the public, exactly on November 1776 (Barreiro, 1992).

The amphibian and reptile collection of the MNCN preserves a few specimens of this old cabinet, among them six naturalised large sea turtle specimens (three males and three females) of *Caretta caretta* (Linnaeus, 1758), *Chelonia mydas* (Linnaeus, 1758) and *Eretmochelys imbricata* (Linnaeus, 1766), brought to Spain in 1793 by Antonio Parra from Cuba (González-Fernández & García-Díez, 2010). These specimens can be considered as the first reptiles of the Herpetology collection of the MNCN.

It was after the Spanish-French war (1808–1812) when the Royal collection began to grow. In 1835, Ramón de la Sagra came back from Cuba with herpetological material collected by himself and by Dr. Poey between 1823 and 1835. Unfortunately the most interesting specimens collected by de la Sagra were sent to the Muséum National d'Histoire Naturelle of Paris to be studied by Cocteau and Bibron. These authors used these specimens to describe several new reptile species from Cuba, as for example, *Ameiva auberi* Cocteau, 1838, *Diploglossus delasagra* (Cocteau, 1838), *Epicrates angulifer* Bibron, 1843, *Tropidophis maculatus* (Bibron, 1843), etc., but the specimens were never returned to the MNCN.

The type collection of the MNCN could have started with Marcos Jiménez de la Espada. This famous herpetologist, a member of the Pacific Scientific Commission (1862–1865), collected a lot of amphibians and reptiles in America. Between 1871 and 1875 he described some new Neotropical amphibian taxa: 1 family, 12 genera and 36 species and subspecies. Currently, 672 of these amphibians are preserved in the MNCN, and 128 of them are type specimens (González Fernández 2000; 2006; González-Fernández *et al.*, 2009). It is possible that, if

their personal circumstances and the previous Spanish political problems had been different, he probably could have also described new reptile species. In fact, some years after the Commission's journey, several new taxa previously collected by Jiménez de la Espada were described, such as: *Ameiva ameiva petersi* Cope, 1868; *Bothrops ammodytoides* Leybold, 1873; *Cercosaura vertebralis* O'Shaughnessy, 1879; *Enyalioides praestabilis* (O'Shaughnessy 1881); *Erythrolamprus mimus* (Cope 1868); *Leptophis ahaetulla nigromarginatus* (Günther, 1866); *Liolaemus nigroviridis* Müller & Hellmich, 1932; *Liolaemus pictus chiloeensis* Müller & Hellmich, 1939; etc.

Between 1879 and 1882, Eduardo Boscá gave to the collection the type specimen of *Chalcides bedriagai* (Boscá, 1880). It is the oldest reptile type preserved in the MNCN.

At the beginning of 1900 the collection grew with the specimens collected in Syria and Persia (Iran) by the brothers Manuel and Fernando Martínez de la Escalera. From 1905 and until 1910 several deposits were made from North-Morocco by the *Real Sociedad Española de Historia Natural*.

In 1914 E. Boscá donated to the MNCN the remaining specimens of Iberian amphibians and reptiles of his personal collection, which had mainly been destroyed in several fires.

During the Spanish Civil War (1936–1939) the herpetological collections were not affected directly, but this period opened a break in the activity of the Zoology Department of the MNCN, which unfortunately continued along decades. In the 80's, the amphibian and reptile collection began to grow again with new Spanish and South American specimens.

Nowadays, more than six million specimens are preserved in the zoological and geological collections of the MNCN. Of the 60.000 amphibians and reptiles from the herpetological collection, about 20.300 are reptiles. It constitutes the largest herpetological collection of Spain and the most representative for the Iberian Fauna in the world. Most of it, almost 90%, is kept entirely in fluid (aqueous solutions of ethanol and formalin) while the rest are dry or cleared and stained skeletons. It also includes a small collection of about 150 naturalized reptiles, most of them from the XVIII and XIX centuries. For more details about composition, kind of preservation, and number of species see González-Fernández (1997).

How to use this catalogue

The catalogue follows the model proposed by Gassó *et al.* (2007). It is arranged by alphabetical order using the original species names, followed by author, year of publication and pagination. The reference section includes the full reference of the publication. If the taxon is a synonymy, next line shows the current status, also followed by author and year of publication. The synonymy follows Uetz and Hallerman (2012).

Below this we list the information about type series. For each type specimen we list in this order, when known: type category, collection catalogue number, number of specimens, sex, age, type locality, date of collection, and collector. After that we include other relevant information about types such as remarks about locality, authors, status, taxonomical problems, etc.

The information provided is based on the original publications. Quotation marks are used to indicate that the type locality is directly taken from the original description. When additional details are added or filled in with the information derived from museum records and labels, this information is between brackets “[]”, for example “Illa des Porros, Menorca, [Balearic Islands, Spain]”.

All material is preserved in alcohol (70% ethanol) or frozen in the DNA Collection. When a specimen is damaged or in poor conditions, this is also indicated under “Remarks”.

Finally, the location of other types of a particular series in other institutions is given. We requested all institutions to confirm the presence of type specimens and this information is specified under “Remarks”.

Results

We provide a list with the 319 reptile type specimens preserved in the MNCN. The collection currently houses type specimens of 24 taxa (12 species and 12 subspecies), belonging to 6 families and 12 genera. The most represented family is Lacertidae, with 279 specimens (87,73%). There are 19 holotypes, 2 neotypes, one lectotype, one paralectotype and 296 paratypes. All specimens belong to the order Squamata; there is no representation of Chelonia or Crocodylia in the type collection of reptiles.

It is remarkable that although they do not represent a great number of species, the reptile type specimens constitute more than a half of the herpetological type collection of the MNCN, as the amphibian specimens are 301, representing 65 taxa (see González-Fernández *et al.* 2009).

All specimens are preserved in fluid, except the type series of *Blanus mariae* Albert & Fernández, 2009 which specimens have been eviscerated and only skin and tissue samples are preserved frozen in the DNA and Tissues Collection of the MNCN. The neotype of *Psammodromus hispanicus* Fitzinger, 1826 and the type series of *Psammodromus occidentalis* Fitzinger *et al.* 2012 are preserved in pure alcohol and frozen at -80°C in DNA and Tissues Collection. There are no types represented by skeletons or naturalized specimens.

The oldest specimen preserved in the collection, and the only one from the XIX century is *Chalcides bedriagai* (Boscá, 1880). Most specimens were collected in the XX century, mainly in the 1970's, and the most recent types are based on material collected during the present century: *Zootoca vivipara louislantzi* Arribas, 2009, *Blanus mariae* Albert & Fernández, 2009 and *Psammodromus occidentalis* Fitzinger *et al.* 2012.

The reptile type specimens belong mainly to Spanish fauna, and there is a great number of endemisms among them. It is worth mentioning eight different subspecies of *Podarcis lilfordi* from the Balearic Islands (of the 26 subspecies currently accepted), described by A. Salvador and V. Pérez-Mellado. They represent 71,07% of the reptile types and 36,5% of all type specimens in the herpetological collection. There is one taxon from Colombia, one from Madagascar, another one from Mauritania and one more from Morocco.

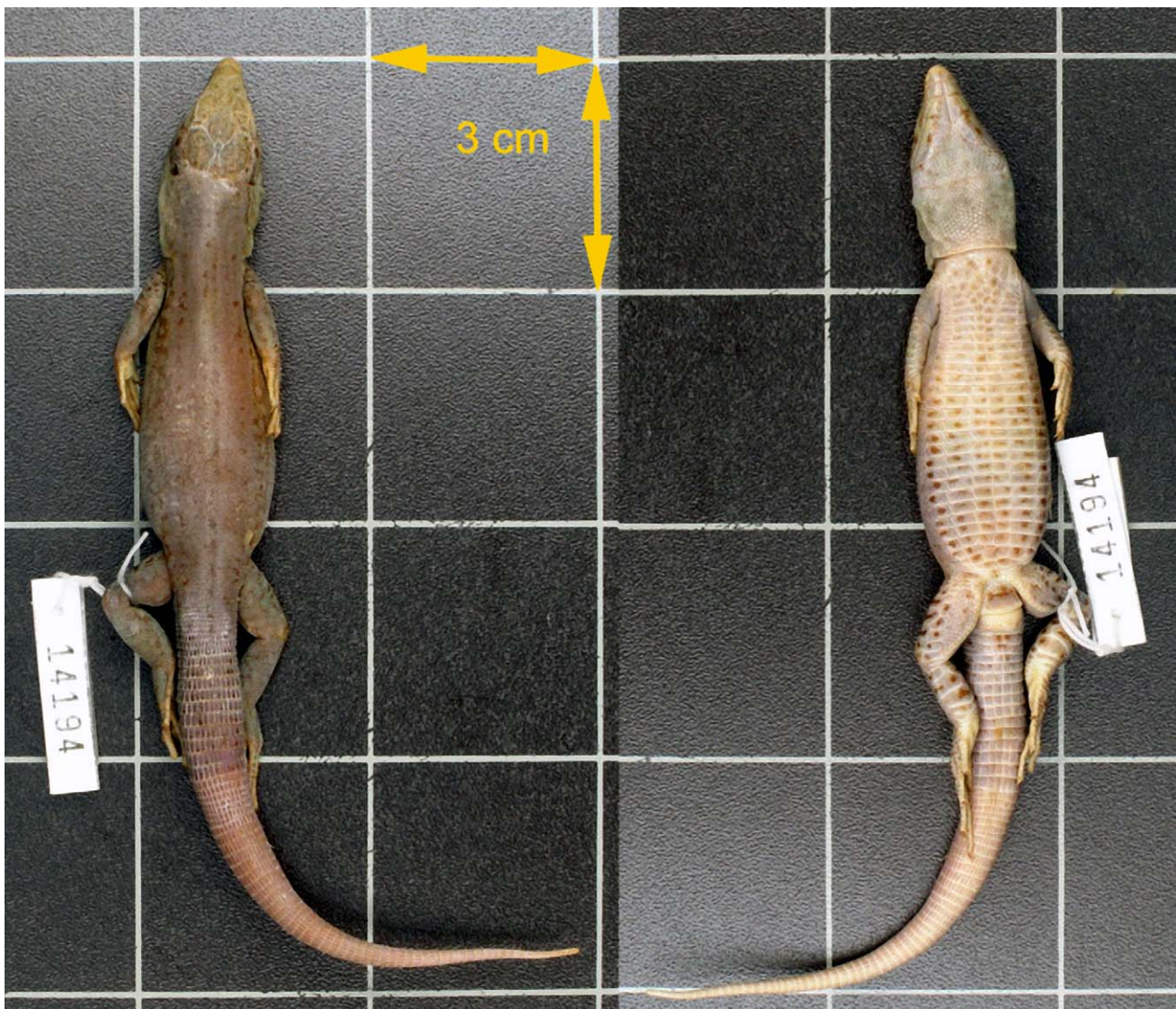


FIGURE 1. Holotype of *Podarcis lilfordi porrosicola* Pérez-Mellado & Salvador, 1988

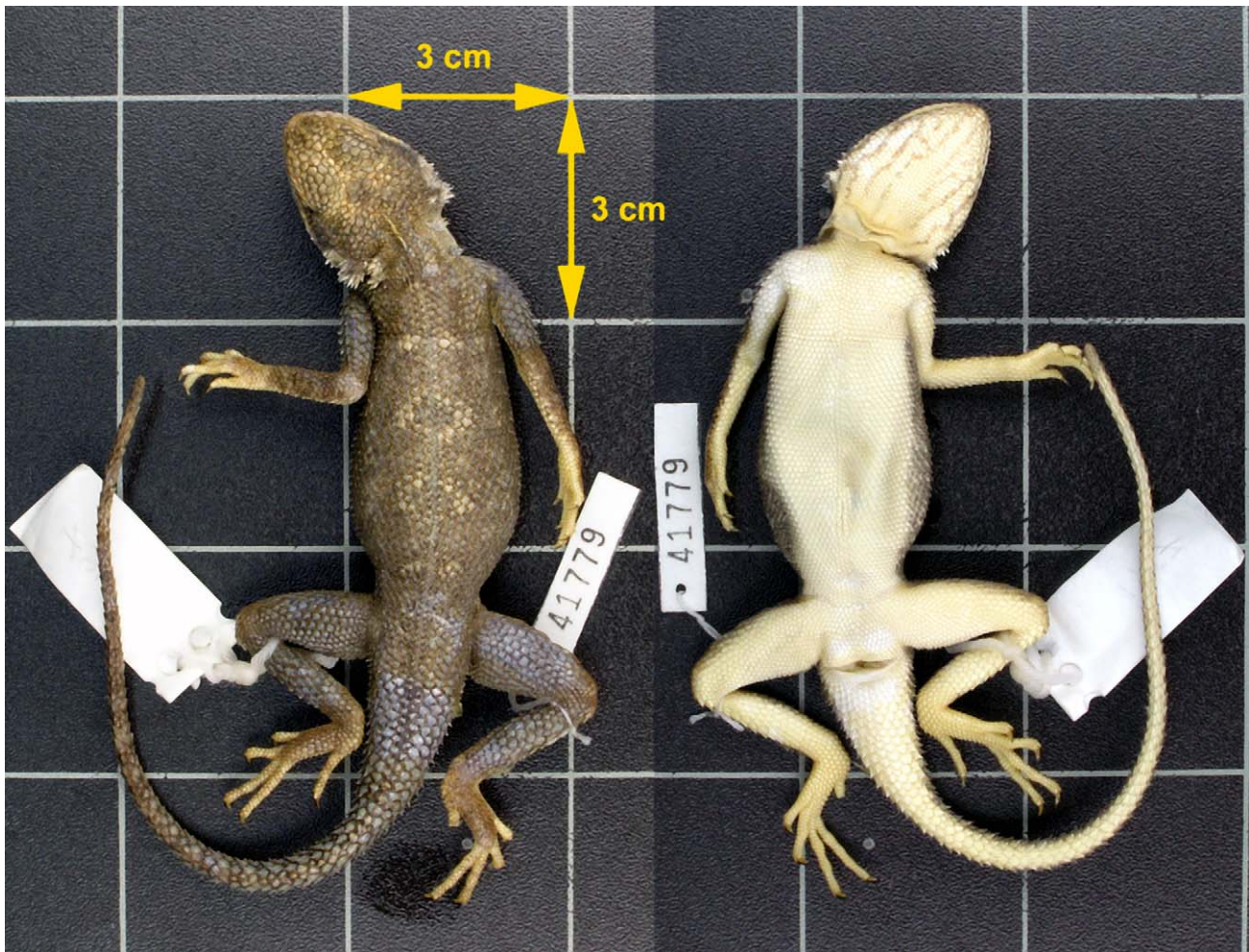


FIGURE 2. Holotype of *Agama castroviejoi* Padial, 2005

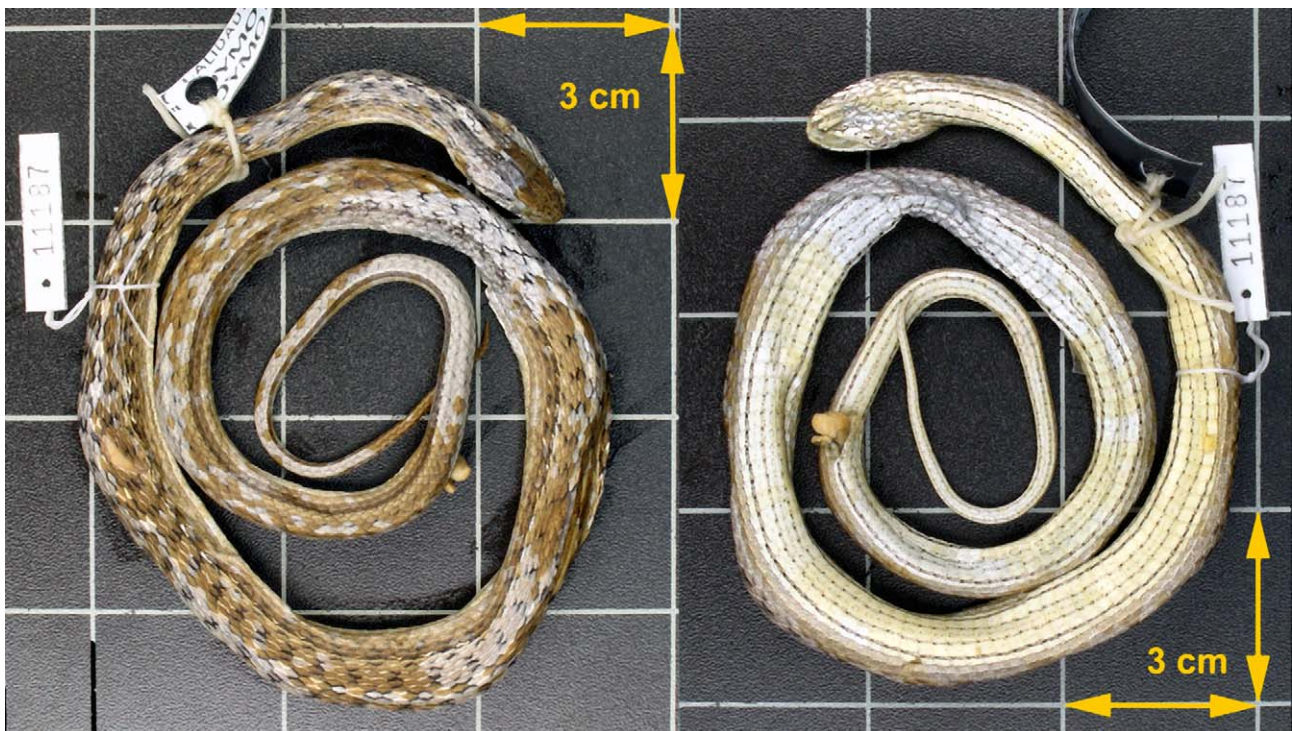


FIGURE 3. Holotype of *Thamnodynastes gambotensis* Pérez-Santos & Moreno, 1989

Finally, some material that could be type specimens of the species *Vipera latasti* Boscá, 1878 and *Podarcis pityusensis* (Boscá, 1883) has been found in the collection. This material is currently under revision, awaiting the results of more detailed studies.

We provide a list ordered by species with the number of type specimens currently preserved in the MNCN (Table 1). We also give a list with the number of specimens listed by families (Table 2).

Photographs of three reptile type specimens are also given (Figure 1, Holotype of *Podarcis lilfordi porrosicola* Pérez-Mellado & Salvador, 1988; Figure 2, Holotype of *Agama castroviejo* Padial, 2005; Figure 3, Holotype of *Thamnodynastes gambotensis* Pérez-Santos & Moreno, 1989).

TABLE 1. Number of current reptile type specimens preserved in the MNCN ordered by species.

| Taxon | Nº Specimens |
|---|--------------|
| <i>Agama castroviejo</i> Padial, 2005 | 5 |
| <i>Algyroides marchi</i> Valverde, 1958 | 1 |
| <i>Amphiglossus meva</i> Miralles, Raselimanana, Rakotomalala, Vences & Vieites, 2011 | 3 |
| <i>Blanus mariae</i> Albert & Fernández, 2009 | 5 |
| <i>Chalcides coeruleopunctatus</i> Salvador, 1975 | 22 |
| <i>Chalcides bedriagai</i> (Boscá, 1880) | 2 |
| <i>Iberolacerta cyreni</i> (Müller & Hellmich, 1937) | 1 |
| <i>Lacerta agilis garzoni</i> Palacios & Castroviejo, 1975 | 14 |
| <i>Podarcis lilfordi espongicola</i> (Salvador, 1979) | 2 |
| <i>Podarcis lilfordi estelicola</i> (Salvador, 1979) | 35 |
| <i>Podarcis lilfordi imperialensis</i> (Salvador, 1979) | 36 |
| <i>Podarcis lilfordi nigerrima</i> (Salvador, 1979) | 11 |
| <i>Podarcis lilfordi pobrae</i> (Salvador, 1979) | 62 |
| <i>Podarcis lilfordi xapaticola</i> (Salvador, 1979) | 56 |
| <i>Podarcis lilfordi codrellensis</i> Pérez-Mellado & Salvador, 1988 | 10 |
| <i>Podarcis lilfordi porrosicola</i> Pérez-Mellado & Salvador, 1988 | 14 |
| <i>Psammodromus algirus ketamensis</i> Galán, 1931 | 10 |
| <i>Psammodromus hispanicus</i> Fitzinger, 1826 | 1 |
| <i>Psammodromus jeanneae</i> Busack, Salvador & Lawson, 2006 | 7 |
| <i>Psammodromus manuelae</i> Busack, Salvador & Lawson, 2006 | 4 |
| <i>Psammodromus occidentalis</i> Fitzee, González-Jimena, San-José, San Mauro & Zardoya, 2012 | 4 |
| <i>Thamnodynastes gambotensis</i> Pérez-Santos & Moreno, 1989 | 2 |
| <i>Vipera seoanei cantabrica</i> Braña & Bas, 1983 | 1 |
| <i>Zootoca vivipara louislantzi</i> Arribas, 2009 | 11 |
| Total | 319 |

TABLE 2. Total number of specimens listed by families.

| Family | Nº Species | Nº Specimens |
|-------------------------|------------|--------------|
| Agamidae (Sauria) | 1 | 5 |
| Lacertidae (Sauria) | 17 | 279 |
| Scincidae (Sauria) | 3 | 27 |
| Blanidae (Amphisbaenia) | 1 | 5 |
| Colubridae (Serpentes) | 1 | 2 |
| Viperidae (Serpentes) | 1 | 1 |
| Total | 24 | 319 |

Abbreviations

Ad.: Adult

Sa.: Subadult

Juv.: Juvenile

Spec.: Specimen(s)

Loc.: Type locality

Dat.: Date of collect

Leg.: *Legit* or Collector

Museum abbreviations

The following museum abbreviations were drawn from Frost (2011) and directly from the Institutions:

| | |
|-------|---|
| BMNH | The Natural History Museum, formerly British Museum (of Natural History), London. |
| CM | Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, USA. |
| EBD | Estación Biológica de Doñana (CSIC), Sevilla, Spain. |
| EEZA | Estación Experimental de Zonas Áridas (CSIC), formerly Instituto de Aclimatación de Almería, Spain. |
| MHNG | Museum d'Histoire Naturelle, Geneva, Switzerland. |
| MNCN | Museo Nacional de Ciencias Naturales (CSIC), Madrid, Spain. |
| MRSN | Museo Regionale di Scienze Naturali di Torino, Italy. |
| NHMW | Naturhistorisches Museum Wien, Austria. |
| UADBA | Université d'Antananarivo, Département de Biologie Animale, Antananarivo, Madagascar. |
| USNM | United States National Museum of Natural History, Smithsonian Institution, Washington, USA. |
| ZFMK | Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany. |

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***Agama castroviejo* Padial, 2005**

Padial, 2005. *Herpetological Journal*, 15(1): 28.

Current name: *Agama boueti* Chabanaud, 1917

Holotype: MNCN 41779. 1 ♂ Ad. Loc.: “Dahr Chinguetti, on the road between Atar and Tidjikja (20° 26.547’N/ 12° 49.407’W), Wilaya of Adrar, Mauritania. Altitude: 679 masl”. Dat.: 20-05-2002. Leg.: J.M. Padial.

Paratypes: MNCN 41776 – 41778 and 41780. 2 ♀ Juv + 1 ♀ Ad + 1 ♀ Sa. Same data as the holotype.

Remarks: Synonymized by Geniez, Padial, and Crochet (2011) *Zootaxa* 3098: 26–46.

***Algiroides marchi* Valverde, 1958**

Valverde, 1958. *Arch. Inst. Aclim., Almería*, 7: 127.

Current name: *Algyroides marchi* Valverde, 1958

Paratype: MNCN 7947. 1 ♂ Juv. Loc.: “Piedra de Aguamula, Sierra de Cazorla, Jaén, [Spain], en las márgenes del pequeño arroyo que corre al pie de la peña”. Dat.: 19-04-1958. Leg.: J.A. Valverde.

Remarks: Three paratypes kept in the Estación Biológica de Doñana (CSIC). The specimen is in poor conditions.

***Amphiglossus meva* Miralles, Raselimanana, Rakotomalala, Vences & Vieites, 2011**

Miralles, Raselimanana, Rakotomalala, Vences and Vieites, *Zootaxa*, 2918: 53.

Holotype: MNCN 44648.- Ad.- Loc.: “Western portion of the Makira Plateau, close to a campsite locally named Angozongahy, at 15°26’13.3”S 49°07’07.0”E.- 1009 m above sea level, district of Mandritsara, region of Sofia, province of Mahajanga”.- Dat.: 28-06-2009.- Leg.: D.R. Vieites, M. Vences, F. Ratsoavina & R. D. Randrianiaina.

Paratypes: MNCN 44649-44650.- Sa+Ad. Same data as the holotype.

Remarks: Other paratypes are in the Département de Biologie Animale, Université d'Antananarivo, Madagascar (UADBA 29402 – 29408).

***Blanus mariae* Albert & Fernández, 2009**

Albert and Fernández, 2009. *Zootaxa*, 2234: 64.

Holotype: MNCN 44638. 1 ♀ Ad. Loc.: “Faro Region, Loulé (37° 08’N, -8° 02’W), Portugal”. Dat.: 20-03-2002. Leg.: Eva M. Albert & Jordi Bascompte.

Paratypes: MNCN 44639. 1 ♂ Ad. Loc.: “San José del Valle, Cádiz, Spain”. Dat.: 19-04-2001. Leg.: M. García-París & E. Recuero.

MNCN 44640. 1 ♂ Ad. Loc.: “Oliva de la Frontera, Badajoz, Spain”. Dat.: 22-05-2001. Leg.: M. García-París & E. Recuero.

MNCN 44641. 1 spec. Loc.: “Alanis, Sevilla, Spain”. Dat.: 02-05-2002. Leg.: Eva M. Albert.

MNCN 44642. 1 ♀ Ad. Loc.: “Baena, Córdoba, Spain”. Dat.: 22-05-2003. Leg.: M. García-París & E. Recuero.

Remarks: From this material only tissue samples and frozen voucher specimens are preserved. They are deposited in the Tissues and DNA Collection of the MNCN (MNCN/ADN 21738, 21719, 21721, 21754 and 21774).

***Chalcides viridanus coeruleopunctatus* Salvador, 1975**

Salvador, 1975. *Bol. Est. Centr. Ecol.* (Madrid), 4(8): 83.

Current name: *Chalcides coeruleopunctatus* Salvador, 1975

Holotype: MNCN 22960. 1 Ad. Loc.: “Valle Gran Rey, en el sur de la isla de La Gomera, [Islas Canarias, España]”. Dat.: 08-09-1971. Leg.: A. Salvador.

Paratypes: MNCN 22961-22970. 6 Ad + 4 Juv. Same data as the holotype.

MNCN 1805-1815. 11 spec. Ad + Juv. Loc.: “San Sebastián de La Gomera, [Islas Canarias, España]”. Dat: 04-1935. Leg.: C. Bolívar & F. Bonet.

Remarks: According to the original publication, the paratype series is MNCN 1805-1816. MNCN 1816 has not been found and it does not figure in the old books or collection cards. It might have disappeared a long time ago or there might be a mistake in the original publication.

***Gongylus ocellatus bedriagai* Boscá, 1880**

Boscá, 1880. *An. Soc. Esp. Hist. Nat.*, 9, Mem.: 503.

Current name: *Chalcides bedriagai* (Boscá, 1880)

Lectotype: MNCN 5116. 1 spec. Loc.: “Dosaguas, Valencia, [Spain]” Dat.: 09-1879. Leg.: “adquiridos por E. Boscá”

Paralectotype: MNCN 5117. 1 spec. Same data as the Lectotype.

Remarks: Lectotype and paralectotype designated by Salvador (1998:152).

***Iberolacerta cyreni* (Müller & Hellmich, 1937)**

Müller & Hellmich, 1937. *Zool. Anz.*, 117: 65-73.

Neotype: MNCN 39934, designed by Óscar Arribas 2010. ♂. Ad. Loc.: Entre el Puerto de Cotos y Puerto de Navacerrada, La Granja de San Ildefonso, Segovia, España.- UTM: VL/11.- Dat.: 21-04-1984 – Leg.: J. Gisbert & R. Gª Perea (Unidad de Zoología Aplicada, Comunidad Autónoma de Madrid).

***Lacerta agilis garzoni* Palacios & Castroviejo, 1975**

Palacios and Castroviejo, 1975. *Doñana, Acta Vertebrata*, 2(1): 6.

Holotype: MNCN 44271. 1 ♀ Ad. Loc.: “Falda oeste del Puig de Basa, Tossas, Pirineos, provincia de Gerona, España. 1850 msnm”. Dat.: 07-08-1972. Leg.: F. Palacios and J. López.

Paratypes: MNCN 44258. 1 ♀ Ad. Loc.: “La Molina, Alp, Pirineos, Gerona, [Spain]”. Dat.: 20-08-1971. Leg.: J. Palaus.

MNCN 44259-44263. 3 Ad + 2 Juv. Loc.: Same locality as the holotype. Dat.: 06-08-1972. . Leg.: F. Palacios and J. López.

MNCN 44264-44270. 2 Ad + 3 Juv + 2 Ad. Loc.: “Falda oeste del Puig de Basa, Tossas, Pirineos, provincia de Gerona, España. 1.850 msnm”. Dat.: 07-08-1972. Leg.: F. Palacios and J. López.

Remarks: The validity of this subspecies is currently discussed. For more details see Bischoff *in* Böhme (1984), Bischoff (1988), Pérez-Mellado *in* Salvador (1998), Arribas (2001), Kalyabina-Hauf and Ananjeva (2004) and Amat (2008).

***Lacerta lilfordi espongicola* Salvador, 1979**

Salvador, 1979. *Bonn. Zool. Beitr.*, 30(1/2): 181.

Current name: *Podarcis lilfordi espongicola* (Salvador, 1979)

Holotype: MNCN 14388. 1 ♂ Ad. Loc.: “Isla L’Esponge, situada al norte de Cabrera entre la Illa des Conis y Na Plana (Islas Baleares), [Spain]” Dat.: 14-08-1974. Leg.: F.J. Purroy and J. Muñoz Cobo.

Paratype: MNCN 14383. 1 ♀ Ad. Same data as the holotype.

***Lacerta lilfordi estelicola* Salvador, 1979**

Salvador, 1979. *Bonn. Zool. Beitr.*, 30(1/2): 180.

Current name: *Podarcis lilfordi estelicola* (Salvador, 1979)

Holotype: MNCN 13577. 1 ♂ Ad. Loc.: “Estel de Fora, situado al sur de Cabrera (Islas Baleares), [Spain]”. Dat.: 07-10-1976. Leg.: B. Arroyo.

Paratypes: MNCN 14105-14107. 3 Ad. Same locality as the holotype. Dat.: 06-10-1975. Leg.: B. Arroyo.

MNCN 14108-14114. 7 Ad. Same data as the holotype. Leg.: B. Arroyo.

MNCN 14367-14374. 8 Ad. Loc.: “Estel des Dos Cols, [Balearic Islands, Spain]”. Dat.: 05-10-1975. Leg.: B. Arroyo.

MNCN 14351-14357. 2 ♀ + 2 ♂ + 3 ♀ Ad. “Estel des Dos Cols, [Balearic Islands, Spain]”. Dat.: 10-08-1974. Leg.: B. Arroyo.

MNCN 14358-14366. 9 Ad. “Estel des Dos Cols, [Balearic Islands, Spain]”. Dat.: 29-07-1975. Leg.: B. Arroyo.

***Lacerta lilfordi imperialensis* Salvador, 1979**

Salvador, 1979. *Bonn. Zool. Beitr.*, 30(1/2): 179.

Current name: *Podarcis lilfordi imperialensis* (Salvador, 1979)

Holotype: MNCN 14387. 1 ♂ Ad. Loc.: “Isla Imperial, frente al extremo sudeste de Cabrera (Islas Baleares), [Spain]”. Dat.: 26-03-1975. Leg.: A. Salvador.

Paratypes: MNCN 13483. Same locality as the holotype. Dat.: 10-08-1974. Leg.: J. Araujo.

MNCN 13844-13859. 16 ♂ + ♀ Ad. Same data as the holotype.

MNCN 16687-16704. 18 spec. Ad. Same locality as the holotype. Dat.: 14-04-1976. Leg.: F.J. Purroy and A. Salvador.

***Lacerta lilfordi nigerrima* Salvador, 1979**

Salvador, 1979. *Bonn. Zool. Beitr.*, 30(1/2): 178.

Current name: *Podarcis lilfordi nigerrima* (Salvador, 1979)

Holotype: MNCN 14386. 1 ♂ Ad. Loc.: “Isla Sas Bledas, frente a la costa este de Cabrera (Islas Baleares), [Spain]”. Dat.: 25-03-1975. Leg.: F.J. Purroy, J. Muñoz Cobo and A. Salvador.

Paratypes: MNCN 14135-14139 and 14144-14147. 9 spec., ♂ + ♀, 8Ad+1Juv. Same data as the holotype.

MNCN 14148. 1 spec. Ad. Loc.: Same locality as the holotype. Dat.: 31-07-1975. Leg.: F.J. Purroy and J. Muñoz Cobo.

***Lacerta lilfordi pobrae* Salvador, 1979**

Salvador, 1979. *Bonn. Zool. Beitr.*, 30(1/2): 182.

Current name: *Podarcis lilfordi pobrae* (Salvador, 1979)

Holotype: MNCN 14391. 1 ♂ Ad. Loc.: “Isla Na Pobra, situada al norte de la Illa Des Conis, entre Na Foradada y Na Plana (Islas Baleares), [Spain]”. Dat.: 09-10-1975. Leg.: J. Muñoz Cobo and B. Arroyo.

Paratypes: MNCN 13555-13574; 14024-14063. 60 spec. Ad+Juv. Same locality as the holotype. Dat.: 08/09-10-1975.

MNCN 13575. 1 Ad. Same locality as the holotype. Dat.: 13-08-1974.

***Lacerta lilfordi xapaticola* Salvador, 1979**

Salvador, 1979. *Bonn. Zool. Beitr.*, 30(1/2): 179.

Current name: *Podarcis lilfordi xapaticola* (Salvador, 1979)

Holotype: MNCN 13578. 1 ♂ Ad. Loc.: “Isla Xapat Gros, al sur de Cabrera (Islas Baleares), [Spain]”. Dat.: 10-04-1976. Leg.: A. Salvador.

Paratypes: MNCN 14290-14298. 9 spec. Same data as the holotype.

MNCN 14287-14289. 3 spec. Same locality as the holotype. Dat.: 09-08-1974. Leg.: A. Salvador.

MNCN 14285-14286; 14272-14283 and 14284. 15 spec. Same locality as the holotype. Dat.: 27-07-1975. Leg.: A. Salvador.

MNCN 14560-14569. 10 Ad. Loc.: “Xapat Petit, [Balearic Islands, Spain]”. Dat.: 10-04-1976. Leg.: A. Salvador.

MNCN 14557-14559. 3 Ad. Loc.: “Xapat Petit, [Balearic Islands, Spain]”. Dat.: 28-07-1975. Leg.: A. Salvador.

MNCN 13414-13515. 2 Ad. Loc.: “Isla de La Teula, [Balearic Islands, Spain]”. Dat.: 30-04-1976. Leg.: A. Salvador.

MNCN 13508-13513. 6 Ad. Loc.: “Isla de La Teula, [Balearic Islands, Spain]”. Dat.: 29-07-1975. Leg.: A. Salvador.

MNCN 13507. 1 ♂ Ad. Loc.: “Isla de La Teula, [Balearic Islands, Spain]”. Dat.: 23-02-1975. Leg.: A. Salvador.

MNCN 13494-13506. 4 ♂ Ad + 7 ♀ Ad + 2Juv. Loc.: “Isla de La Teula, [Balearic Islands, Spain]”. Dat.: 18-02-1975. Leg.: A. Salvador.

MNCN 13492-13493. 2 ♂ Ad. Loc.: “Isla de La Teula, [Balearic Islands, Spain]”. Dat.: 08-08-1974. Leg.: A. Salvador.

***Podarcis lilfordi codrellensis* Pérez-Mellado & Salvador, 1988**

Pérez-Mellado and Salvador, 1988. *Arq. Mus. Bocage, n.s.*, 1(10): 174.

Holotype: MNCN 14207. 1 ♂ Ad. Loc.: “Escull de Codrell I, in the southern coast of Menorca [Balearic Islands, Spain]”. Dat.: 28-09-1982. Leg.: A. Salvador.

Paratypes: MNCN 14208-14216. 9 spec. Ad. Same data as the holotype.

Remarks: There are other paratypes in the Zoologisches Forschungsmuseum Alexander Koenig, Bonn (ZFMK 11910-11916 and 11857-111861).

***Podarcis lilfordi porrosicola* Pérez-Mellado & Salvador, 1988**

Pérez-Mellado and Salvador, 1988. *Arq. Mus. Bocage, n.s.*, 1(10): 174.

Holotype: MNCN 14194. 1 ♂ Ad. Loc.: “Illa des Porros, in the Bay of Fornells, Menorca [Balearic Islands, Spain]”. Dat.: 23-09-1982. Leg.: A. Salvador.

Paratypes: MNCN 14193, 14195-14206. 13 spec. Ad. Same data as the holotype.

***Psammodromus algirus ketamensis* Galán, 1931**

Galán, 1931. *Bol. Soc. Esp. Hist. Nat.*, 31(5): 364.

Holotype: MNCN 7853. 1 ♂ Ad. Loc.: “Telata de Ketama, Marruecos”. Dat.: 17-06-1930. Leg.: [F. Galán].

Paratypes: MNCN 7848-7852. 2 ♀ + 3 ♂ Ad. Same data as the holotype^(*).

MNCN 7779-7780. 2 ♂ Ad. Loc.: “Targuist (Targuist), [Marruecos]”. Dat.: 24-06-1930. Leg.: [F. Galán].

MNCN 7797. 1 ♀ Ad. Loc.: “Yebel Magot (El Ajmas) [Marruecos]”. Dat.: 14-06-1930. Leg.: [F. Galán].

MNCN 7846. 1 ♂ Ad. Loc.: “Tizi Taka (Beni Seddat), [Marruecos]”. Dat.: 23-06-1930. Leg.: [F. Galán].

Remarks: (*): Among these specimens, there is one adult male that was collected in Ismasinen (Beni Seddat) on 20-06-1930. It is impossible to determine which one is from this locality as they are all mixed in the same jar. MNCN 7848 was described in the original publication as “alotype”, as it is para- and topotypic with the holotype. The holotype and alotype were differentiated thanks to the measurements given in the original publication.

***Psammodromus hispanicus* Fitzinger, 1826**

Fitzinger, 1826. *Neue Classification der Reptilien*: 52

Neotype: MNCN/ADN 41745, designed by Fitze, González-Jimena, San-José, San Mauro & Zardoya, 2012. ♂.-Ad.- Loc.: Perales de Tajuña, Madrid, (Spain).- Dat.: 15-10-2010.- Leg.: Patrick S. Fitze and Luis M. San-José.

Remarks: It is deposited in the Tissues and DNA Collection of the MNCN.

***Psammodromus jeanneae* Busack, Salvador & Lawson, 2006**

Busack, Salvador and Lawson, 2006. *Annals of the Carnegie Mus.*, 75(1): 4.

Current name: *Psammodromus algirus* (Linnaeus, 1758)

Holotype: MNCN 11941. 1 ♂ Ad. Loc.: “25.6 km NE of Facinas (36°08’N, 5°42’W) along CA-221, Cádiz Province, Spain, elevation ca. 200m”. Dat.: 12-06-1982. Leg.: S.D. Busack and J.A. Visnaw.

Paratypes: MNCN 11937-11938, 11940, 11942, 11944 and 36727. Same locality as the holotype.

Remarks: For more details about the validity of this species see Speybroeck *et al.* (2010) and Verdú-Ricoy *et al.* (2010). Other paratypes are in the Carnegie Museum in Pittsburgh, Pennsylvania (CM 63198-53199 and 54566).

***Psammodromus manuelae* Busack, Salvador & Lawson, 2006**

Busack, Salvador and Lawson, 2006. *Annals of the Carnegie Mus.*, 75(1): 4.

Current name: *Psammodromus algirus* (Linnaeus, 1758)

Holotype: MNCN 36792. 1 ♂ Ad. Loc.: “Manzanares el Real, Madrid Province, Spain (40°44’N, 3°52’W)”. Dat.: 24-06-1973. Leg.: J. Ibáñez.

Paratypes: MNCN 7830, 36791 and 36797. Same locality as the holotype.

Remarks: For more details about the validity of this species see Speybroeck *et al.* (2010) and Verdú-Ricoy *et al.* (2010). Other paratypes are in the Carnegie Museum in Pittsburgh, Pennsylvania (CM 60946 and 60950) and in the National Museum of Natural History in Washington (USNM 199211 and 199212).

***Psammodromus occidentalis* Fitze, González-Jimena, San-José, San Mauro & Zardoya, 2012**

Fitze, González-Jimena, San-José, San Mauro and Zardoya, *Zootaxa*, 3205: 41-52.

Holotype: MNCN/ADN 34516.- ♂.- Ad.-Loc.: Colmenar de Arroyo, Madrid, Spain (40° 27’ 22,14”N, 4° 10’ 28,36”W). Dat.: 24-10-2008.- Leg.: Patrick S. Fitze & Virginia González-Jimena.

Paratypes: MNCN/ADN 34515; 34517-34518. Same data as the holotype.

Remarks: This material is conserved in pure alcohol and frozen at -80°C in the DNA and Tissues Collection. The paratypes MNCN/ADN 34517 and 34518 are in the Natural History Museum (BMNH 2008.271, BMNH 2008.272). The MNCN only preserves tissue samples.

***Thamnodynastes gambotensis* Pérez-Santos & Moreno, 1989**

Pérez-Santos and Moreno, 1989. *Boll. Mus. Reg. Sci. Nat. Torino*, 7(1): 1.

Holotype: MNCN 11187. 1 ♂ Ad. Loc.: “a 2 km. de Gambote sobre la carretera de Cartagena de Indias, Departamento de Bolívar, Colombia. Altitud: 5 msnm.”. Dat.: 11-07-1987. Leg.: C. Pérez-Santos.

Paratype: MNCN 11188. 1 ♀ Ad. Same data as the holotype.

Remarks: Another paratype is kept in the Museo Regionale di Scienze Naturali di Torino (R76).

***Vipera seoanei cantabrica* Braña & Bas, 1983**

Braña and Bas, 1983. *Munibe*, 35(1-2): 87.

Paratype: MNCN 39119. 1 spec. Loc.: “Villablino (León), [Spain]”.

Remarks: Holotype and 8 paratypes are in the Sociedad de Ciencias ARANZADI (n° 456-464), 2 paratypes in the Museum d’Histoire Naturelle, Geneva (MHNG 9581 and 9599), and 2 more paratypes in the Zoology and Ecology Department of University of Oviedo (n° 75191001 and 79290601). (Without confirmation).

***Zootoca vivipara louislantzi* Arribas, 2009**

Arribas, 2009. *Herpetozoa*, 21(3/4): 140.

Holotype: MNCN 44290. 1 ♂ Ad. Loc.: “Pla de Beret, Vall d’Aràn, Lleida, Spain”. Dat.: 30-07-1995. Leg.: O. Arribas.

Paratypes: MNCN 44291-44398: 3 ♂ Ad + 5 ♀ Ad. Loc.: Same locality as the holotype. Dat.: 17-07-1995. Leg.: O. Arribas.

MNCN 44299-44300: 2 ♂ Ad. Loc.: Same data as the holotype. Leg.: O. Arribas.

Remarks: 11 paratypes are in the Naturhistorisches Museum of Wien (NMW 38569-38579) and the remaining paratypes (24) in O. Arribas’ personal collection.