

Herpetological type specimens in the natural history collections of the museums in Darmstadt and Wiesbaden, Germany

Jörn Köhler & Robert Güsten

Köhler, J. & R. Güsten (2007): Herpetological type specimens in the natural history collections of the museums in Darmstadt and Wiesbaden, Germany. – Spixiana 30/2: 275–288

We provide the first complete list of the present and lost amphibian and reptile type specimens of the Hessisches Landesmuseum Darmstadt and the Museum Wiesbaden Naturhistorische Landessammlung. The Darmstadt collection currently houses primary types of 5 taxa (holotypes) and secondary types of additional 15 taxa (paratypes). The Wiesbaden collection includes primary types of 13 taxa (8 represented by holotypes, 4 by syntypes and 1 by lectotype). Furthermore, the primary types of 6 taxa formerly housed at the Museum Wiesbaden are considered lost. In several cases, we comment on the current status of the taxa present in the collections. *Bufo spinulosus* var. *arapensis* Andersson, 1908 was obviously overlooked and neglected in the literature. It is here considered a junior synonym of *Chaunus spinulosus* (Wiegmann, 1834). The largest specimen of the type series is designated as lectotype (MWNH 153/1). The current status of *Hylambates rufus* var. *aubryoides* Andersson, 1908, as a junior synonym of *Leptopelis modestus* (Werner, 1898) is rejected.

Jörn Köhler, Department of Natural History – Zoology, Hessisches Landesmuseum Darmstadt, Friedensplatz 1, 64283 Darmstadt, Germany;
e-mail: j.koehler@hlmd.de

Robert Güsten, Merckstr. 28, 64283 Darmstadt, Germany;
e-mail: robertgosten@aol.com

Introduction

The Hessisches Landesmuseum Darmstadt and the Landessammlung of the Museum Wiesbaden are two of the few German museums housing a broad variety of arts, archaeological objects and natural history collections (extant and fossil) under one roof. This is true for the public exhibitions as well as for the numerous objects stored in the non-public scientific collections. From their beginning, both museums contained natural history collections including amphibian and reptile specimens. As these collections are relatively small in comparison to major German natural history museums, they received only little attention. Nevertheless, both collections contain type specimens of amphibian and reptile taxa, which indeed were in part overlooked by scientists and neglected in the literature. The herpetological types of both collections were never

reviewed and their status remained unknown in many cases.

Due to better storing conditions, the Museum Wiesbaden alcohol collection of amphibians and reptiles was temporarily transferred to the Landesmuseum Darmstadt from 2000 to 2007. This provided an excellent opportunity to evaluate and review the type specimens of both collections at one place. Furthermore, the efforts of our colleague Frank Glaw (ZSM) made funds available through the Global Biodiversity Information Facilities (GBIF) programme to include the Darmstadt and Wiesbaden herpetological types in a digital database (see Glaw & Franzen 2004), promoting also the production of this annotated list of specimens.

The Museum Wiesbaden collection contains the by far older type specimens, most of the taxa described by the Swedish scientist L. G. Andersson and the German W. A. Lindholm. As a fate of his-

tory, most of the alcohol-preserved type specimens survived World War II in Wiesbaden as they remained in the public exhibition, whereas the rest of the alcohol collection was moved to a supposedly save place where it was destroyed.

The herpetological collection of the Landesmuseum Darmstadt contains type specimens of more recently described taxa, most of them authored by U. Joger and some received by exchange from the Zoologisches Forschungsmuseum Alexander Koenig, Bonn, subsequent to the publication of the species descriptions.

The aim of this contribution is to present for the first time a complete list of herpetological type specimens deposited in the two collections mentioned and to provide comments on the taxonomic status of some taxa rarely treated in the literature.

Material and methods

Families are listed alphabetically within each order. Within each family genus and species names are ordered alphabetically according to their original names. We generally follow the classification of Frost (2006) for amphibians and Lee (2000) and Kluge (1983, 2001) for reptiles. The information on each taxon are provided in the following order: (1) original name including author and year of original description, (2) abbreviated reference of the original description, (3) listing of the type specimens, followed by information on the type localities provided in the original description [here sometimes supplemented by additional geographical information in parentheses, if undoubted and useful], (4) present name, if changed since the original description, (5) remarks, including information on type specimens and/or taxonomic remarks. In some cases, the type material of a given taxon was destroyed during World War II. If so, the word “lost” is provided in parentheses after specification of the category of type material. Since both collections have a different history, we listed taxa for the Landesmuseum Darmstadt and the Landesmuseum Wiesbaden separately.

Used institutional abbreviations are as follows: BMNH – Natural History Museum, London; CAS – California Academy of Sciences, San Francisco; CBF – Colección Boliviana de Fauna, La Paz; CPHR – Collectio privata Herbert Rösler; GNHM – Naturhistoriska Museet Göteborg; HLMD – Hessisches Landesmuseum Darmstadt; IFAN – Instituto Fondamental d’Afrique Noire, Dakar; LBUM – Laboratoire de Biogéographie, Université de Montpellier; MCZ – Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; MHNG – Muséum d’Histoire Naturelle, Geneva; MM – Museum für Naturkunde Magdeburg; MNHN – Muséum national d’Histoire naturelle Paris; MTKD – Staatliche Naturhistorische Sammlungen Dresden, Museum für Tierkunde; MWNH – Museum Wiesbaden, Naturhistorische Landessammlung; NMP6V –

National Museum Prague; NMV – Museum Victoria, Melbourne; NMW – Naturhistorisches Museum Wien; NRM – Naturhistoriska Rjksmuseet, Stockholm; RMNH – Nationaal Natuurhistorisch Museum, Leiden; SMF – Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt am Main; ZFMK – Zoologisches Forschungsmuseum Alexander Koenig, Bonn; ZMB – Zoologisches Museum, Humboldt Universität, Berlin; ZMH – Zoologisches Museum Hamburg; ZSM – Zoologische Staatsammlung München.

Hessisches Landesmuseum Darmstadt

Class Amphibia
Order Anura

Family Bufonidae

Atelopus cruciger vogli Müller, 1934

Zool. Anz. 108: 151.

Paratypes: HLMD-RA-3056–60, Schlucht “Las Peñas” (600 m), unweit von Maracay [Venezuela].

Present name: *Atelopus vogli* Müller, 1934 according to Lötters et al. (2004).

Remarks: Received in exchange from ZSM (formerly ZSM 285/1933/312-316). Holotype in ZSM. For additional information on the type series, refer to Lötters et al. (2004) and Glaw & Franzen (2006). *Atelopus vogli* is considered to be extinct (Global Amphibian Assessment, www.globalamphibians.org).

Family Hylidae

Dendropsophus julianii Moravec, Aparicio & Köhler, 2006

Zootaxa 1327: 24.

Paratype: HLMD-RA-3051, adult male, from the vicinity of the settlement of Barracón on the road from Cobija to Riberalta, 160 m a.s.l., 11°33'S, 66°56'W, Provincia Madre de Dios, Departamento Pando, Bolivia.

Remarks: Holotype in CBF. Additional paratypes in CBF and NMP6V.

Hyla delarivai Köhler & Lötters, 2001

Salamandra 37 (3): 176.

Paratype: HLMD-RA-3054, from approximately 32 km south of Paractito on the road via El Palmar to Cochabamba (17°07'01" S, 65°34'30" W), 1500 m a.s.l., Provincia Chapare, Departamento Cochabamba, Bolivia.



Fig. 1. Holotype of *Salamandra salamandra longirostris* Joger & Steinfartz, 1994 (HLMD-RA-2201).

Present name: *Dendropsophus delarivai* (Köhler & Lötters, 2001) fide Faivovich et al. (2005).

Remarks: Received in exchange from ZFMK (formerly ZFMK 70317).

Hyla joannae Köhler & Lötters, 2001

Stud. Neotrop. Fauna Environm. 36 (2): 105.

Paratype: HLMD-RA-3055, from Cobija (11°00'45"S, 68°45'27"W), 250 m above sea level, Provincia Nicolás Suárez, Departamento Pando, Bolivia.

Present name: *Dendropsophus joannae* (Köhler & Lötters, 2001) fide Faivovich et al. (2005).

Remarks: Received in exchange from ZFMK (formerly ZFMK 67124).

Order Urodela

Family Salamandridae

Salamandra salamandra longirostris Joger & Steinfartz, 1994

Abh. Beitr. Mus. Naturk. Magdeburg 17: 95.

Holotype: HLMD-RA-2201, male, Umgebung des Ortes Grazalema in der Sierra de Ronda, Südspanien [Spain].

Remarks: Paratypes in MM and ZFMK.

Salamandra salamandra morenica Joger & Steinfartz, 1994

Abh. Beitr. Mus. Naturk. Magdeburg 17: 90.

Holotype: HLMD-RA-2200, male, Umgebung von Cazella de la Sierra, Sierra Morena, Südspanien [Spain].

Class Reptilia
Order Squamata

Family Agamidae

Uromastyx maliensis Joger & Lambert, 1996

J. Afr. Zool. 110 (1): 24.

Holotype: HLMD-RA-1545, 40 km S.E. of Gao [Republic of Mali].

Present name: *Uromastyx dispar maliensis* Joger & Lambert, 1996 fide Wilms & Böhme (2001).

Remarks: Paratypes in MNHN and GNHM.

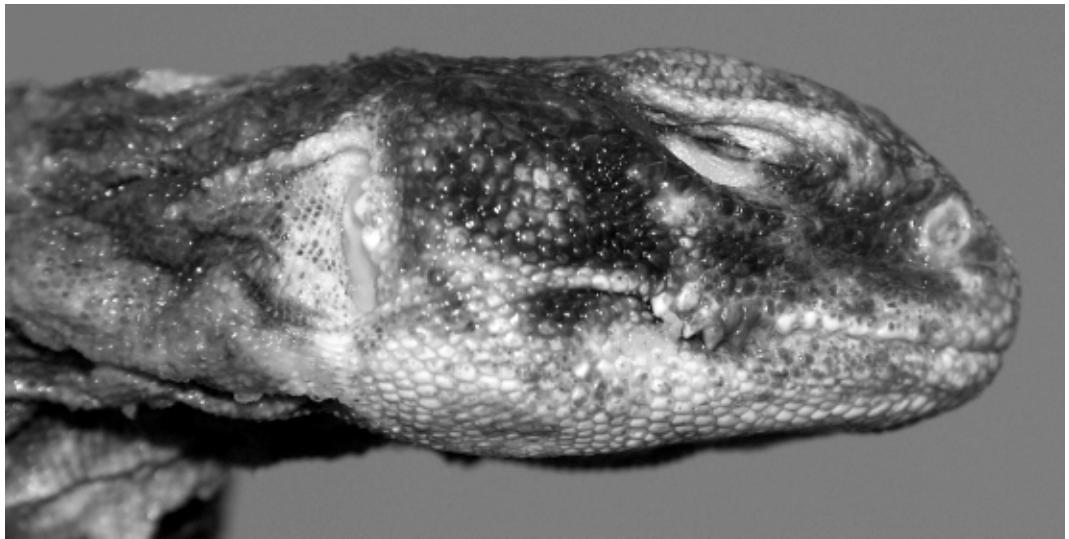


Fig. 2. Lateral view of head of the holotype of *Uromastyx maliensis* Joger & Lambert, 1996 (HLMD-RA-1545).

Family Gekkonidae

Goniurosaurus araneus Grismer, Viets & Boyle, 1999

J. Herpetol. 33(3): 386.

Holotype: HLMD-RA-2572, adult male from 40 km SE of Cao Bang, Cao Bang Province, Vietnam.

Paratypes: HLMD-RA-2573–75, same data as holotype.

Remarks: According to an exchange of specimens, HLMD-RA-2576 is now deposited at the ZFMK and HLMD-RA-2577 at the ZSM.

Pristurus obsti Rösler & Wranik, 1999

Zool. Abh. Mus. Tierk. Dresden 50(16): 254.

Paratypes: HLMD-RA-2737–43, südwestl. von Qalansiyah, Bucht von Shu'ab ($12^{\circ}34.67'N$, $53^{\circ}23.87'O$), Sokotra [Republic of Yemen].

Remarks: Holotype in MTKD. Further paratypes in CPHR, MTKD and ZFMK.

Pristurus samhaensis Rösler & Wranik, 1999

Zool. Abh. Mus. Tierk. Dresden 50(16): 259.

Paratypes: HLMD-RA-2724–25, Samhah, Südküste [“Westküste” according to label] ($12^{\circ}09.84'N$, $53^{\circ}02.14'O$); HLMD-RA-2726–29, Samhah, 240 m NN ($12^{\circ}10.00'N$, $53^{\circ}01.50'O$); HLMD-RA-2730–36, Dina-tuf, Samhah, Südwestküste [“Ostküste” according to label] ($12^{\circ}09.21'N$, $53^{\circ}05.26'O$) [Sokotra, Republic of Yemen].

Remarks: Holotype in MTKD. Further paratypes in MTKD and ZFMK.

Tarentola boettgeri hierrensis Joger & Bischoff, 1983

Bonn. zool. Beitr. 34(4): 464.

Paratypes: HLMD-RA-1684–85 [formerly ZFMK 24910–911], Hierro [Canary Islands, Spain].

Remarks: Holotype in ZFMK. Further paratypes in ZFMK and SMF.

Tarentola ephippiata senegambiae Joger, 1984

Bonn. zool. Beitr. 35(1–3): 159.

Paratypes: HLMD-RA-1680 [formerly ZFMK 17126], Mboro sur Mer; HLMD-RA-1681 [formerly ZFMK 17117], Diattacounda; aus dem westlichen und südlichen Senegal.

Remarks: Holotype in ZFMK. Further paratypes in BMNH, ZFMK and SMF.

Tarentola gomerensis Joger & Bischoff, 1983

Bonn. zool. Beitr. 34(4): 460.

Paratype: HLMD-RA-1683 [formerly ZFMK 35232], Gomera [Canary Islands, Spain].

Remarks: Holotype in ZFMK. Further paratypes in ZFMK, NMW, ZMH and MNHN.



Fig. 3. Paratype of *Amblyrhynchus cristatus venustissimus* Eibl-Eibesfeld, 1956 (HLMD-RA-3049) in the Galapagos diorama of the HLMD.

Tarentola neglecta geyri Joger, 1984

Bonn. zool. Beitr. 35(1-3): 168.

Paratype: HLMD-RA-1679 [formerly ZFMK 2133], Gassi-Abu, 360 km südlich Ouargla, Südalgerien [southern Algeria].

Remarks: Holotype in ZFMK. Further paratypes in BMNH and ZFMK.

Tarentola parvicarinata Joger, 1980

Amphibia-Reptilia 1: 138.

Paratypes: HLMD-RA-1677 [formerly ZFMK 19952], W Nioro du Sahel, Mali; HLMD-RA-1678 [formerly ZFMK 19945], 20 km W Kita, Mali; HLMD-RA-1682 [formerly ZFMK 19950], 9 km N Fatao, Mali.

Remarks: Holotype in ZFMK. Further paratypes in ZFMK, BMNH, MNHN, USNM, MHNG, LBUM, IFAN, CAS and GNHM.

Tarentola rufis boavistensis Joger, 1993

Courier Forsch.-Inst. Senck. 159: 438.

Paratype: HLMD-RA-1470, Ilheu Sal Rey, southern part [Cape Verde].

Remarks: Holotype in RMNH. Further paratypes in BMNH and RMNH.

Tarentola rufis hartogi Joger, 1993

Courier Forsch.-Inst. Senck. 159: 439.

Paratype: HLMD-RA-1471, Cima island, southernmost tip, under rock [Cape Verde].

Remarks: Holotype in RMNH. Further paratypes in SMF and RMNH.

Family Iguanidae

Amblyrhynchus cristatus venustissimus
Eibl-Eibesfeldt, 1956

Senck. biol. 37(1/2): 90.

Paratypes: HLMD-RA-3046, 3049–50, Insel Gardner (nördlich von Hood), SO-Strand [Galapagos, Ecuador].

Remarks: Holotype and further paratypes in SMF. In the original description, Eibl-Eibesfeld (1956) listed the five HLMD paratypes under Xarifa expedition field numbers 78/1-3 and 84/1-2. Four of these paratypes were renumbered by applying the HLMD-RA system. According to a catalogue note, the fifth paratype was obviously given to the “Haus der Natur” in Salzburg, Austria, probably in the 1960's. HLMD-RA-3047 was recently exchanged with the



Fig. 4. Largest syntype of *Arthroleptis variabilis pica* Andersson, 1907 (MWNH 124).

ZFMK (now ZFMK 84450). Subsequent to the description, probably in the 1960's, HLMD-RA-3049 and HLMD-RA-3050 were prepared as dermoplastics and placed in the small Galapagos diorama in the permanent exhibition of the HLMD (see Fig. 3).

Family Lacertidae

Mesalina kuri Joger & Mayer, 2002

Fauna of Arabia 19: 502.

Holotype: HLMD-RA-2796, female, Abd al-Kuri Island, Yemen, west coast, 12°11'N 53°14'E.

Remarks: Paratypes in BMNH, MTKD and NMW. During this evaluation, we were not able to trace the holotype. However, we tentatively do not consider it being lost, as it probably may still be hidden in the collection.

Family Typhlopidae

Rhinotyphlops debilis Joger, 1990

Vertebrates in the tropics, Museum A. Koenig, 1990: 93.

Paratype: HLMD-RA-1450, near Bangui [Central African Republic].

Remarks: Holotype in ZFMK.

Museum Wiesbaden Naturhistorische Landessammlung

Class Amphibia
Order Anura

Family Arthroleptidae

Arthroleptis variabilis var. *pica* Andersson, 1907

Jb. Nassauer Ver. Naturk. 60: 236.

Syntypes: MWNH 124 (5 specimens), vom Urwald, Bibundi, Kamerun [Cameroon].

Present name: *Arthroleptis taeniatus* Boulenger, 1906. Synonymy by Mertens (1938).

Hylambates rufus var. *aubryoides* Andersson, 1907

Jb. Nassau. Ver. Naturk. 60: 241.

Syntypes: MWNH 135 (3 specimens)

Present name: *Leptopelis modestus* (Werner, 1898) fide Ahl (1929). See remarks.

Remarks: Considered a junior synonym of *Leptopelis modestus* (Werner, 1898) by Ahl (1929). In 1975, J.-L. Perret examined the MWNH syntypes and according to a written note accompanying the type specimens considered them to represent a junior synonym of *Leptopelis calcaratus* (Boulenger, 1906), but this observation has never been published. Our comparisons indeed confirmed that it does not represent *L. modestus* (for characters of this taxon see Köhler et al. 2006). However, the evaluation of the taxonomic status of *H. rufus* var. *aubryoides* will be the subject of a forthcoming publication.

Family Bufonidae

Bufo spinulosus var. *arapensis* Andersson, 1908

Jb. Nassau. Ver. Naturk. 61: 306.

Lectotype: MWNH 153/1, Arapa, Peru, 4500 m above sea level [Provincia Azángaro, Departamento Puno].



Fig. 5. Dorsal and ventral view of the lectotype of *Bufo spinulosus arapensis* (MWNH 153/1). Snout-vent length 41.6 mm.

Paralectotypes: MWNH 153/2-4 (3 specimens).

Present name: *Chaunus spinulosus* (Wiegmann, 1834); see remarks below.

Remarks: Among the type specimens still present in the MWNH collection, we came along this taxon described by L. G. Andersson which raised some questions. A South American collection of K. Seyd delivered to Wiesbaden and examined by Andersson included 23 specimens of *Bufo spinulosus* (now *Chaunus spinulosus*) from Peru and Bolivia. This series contained five specimens from Arapa, Peru, which Andersson (1908) considered to be distinct from the 'typical' form. He named this new variety *arapensis*. According to Article 45.6.4. of the Code (ICZN 1999), the name *arapensis* has to be considered as subspecific rank. Apparently, the subspecies *arapensis* has been overlooked by scientists since its description as it was impossible to trace it in the literature. The main diagnostic characters used by Andersson (1908) to distinguish *Bufo spinulosus* var. *arapensis* from the typical form were: obtuse horny dorsal tubercles instead of acute spines, lack of larger black spots on dorsum, a distinct light medial stripe and a shorter fourth toe. The series of syntypes consist of four small juveniles (MWNH 153/2-4, NRM 10051) and one larger juvenile specimen (MWNH 153/1). The

latter is hereby designated as lectotype (Fig. 5). As described by Andersson (1908), all specimens exhibit a light vertebral stripe on the tan dorsum bordered by brown. The dorsal warts in the lectotype are prominent round to conical.

At least seven phenetic groups have been proposed for South American members of the genus *Chaunus* (Duellman & Schulte 1992; as *Bufo*). Among them is the *Chaunus spinulosus* group occurring from southern Ecuador to southern Argentina and Chile (Pramuk & Kadivar 2003). However, alpha taxonomy is in part poorly understood within the group. Duellman & Schulte (1992) recognised 13 species, whereas Pramuk & Kadivar (2003) excluded *C. flavolineatus* and *C. trifolium* from the group (both considered to be junior synonyms of *C. spinulosus*). The latter authors considered six species to be distributed in Peru and adjacent Bolivia: *Chaunus arequipensis*, *C. cophotis*, *C. corynetes*, *C. limensis*, *C. spinulosus* and *C. vellardi* (Pramuk & Kadivar 2003). However, they overlooked that *C. arequipensis* was already placed in the synonymy of *C. spinulosus* by Córdova (1999) based on cytogenetic data. Whereas *C. limensis* inhabits the dry Pacific versants of the Peruvian Andes, the other species have a purely Andean distribution at elevations above



Fig. 6. Formerly dessicated holotype of *Megalixalus lindholmi* Andersson, 1907 (MWNH 130) after treatment with cherrylaurel aerosoles and trisodiumphosphate.

1000 m a.s.l. (Duellman & Ochoa 1991, Pramuk & Kadivar 2003).

Among these Andean species, *Chaunus spinulosus arapensis* can be readily distinguished from *C. limensis* occurring at the dry Pacific Andean ver-
sant by round parotoid glands (triangular in *C. li-
mensis*). The two central Andean species *C. cophotis* and *C. corynetes* both differ from *C. s. arapensis* by lacking an externally visible tympanum (distinct in *C. s. arapensis*). The remaining Andean species, *C. vellardi*, also differs from *C. s. arapensis* by exhibiting triangular parotoid glands. Furthermore, *C. s. arapensis* is distinguished from other Andean species groups of *Chaunus* by the lack of cranial crests which are present in members of the *C. marinus* and *C. veraguensis* species groups, as well as in species in the genus *Rhinella*.

In conclusion, *C. spinulosus arapensis* indeed displays the characters typical for *B. spinulosus*. The known range of *C. spinulosus* includes the Andes of central Peru southward to Argentina and Chile. The type locality of *C. s. arapensis* is situated just north of Lake Titicaca on the high-Andean plateau. Comparisons of *C. s. arapensis* with *C. spinulosus* speci-
mens from almost allover its geographic range re-
vealed no principal differences in external morphol-
ogy. The coloration and condition of dorsal warts in *C. s. arapensis* apparently falls within the intra-spe-
cific variation of *C. spinulosus*. For the above men-
tioned reasons *Bufo spinulosus* var. *arapensis* Anders-
son, 1908 is here considered a junior synonym of *Chaunus spinulosus* (Wiegmann, 1834). However, as
further studies may indicate that the Andean popu-
lations of *C. spinulosus* constitute a species complex,
the name *arapensis* has to be considered available.

Family Hyperoliidae

Megalixalus lindholmi Andersson, 1907

Jb. Nassau. Ver. Naturk. 60: 239.

Holotype: MWNH 130, Bibundi bei Kamerun [Cameroon].

Present name: *Afrixalus lindholmi* (Andersson, 1907) fide Perret (1976) and Frost (2006).

Remarks: The type specimen was found completely dessicated in the collection jar. It was softened using cherrylaurel aerosoles and restored with trisodium-phosphate and again stored in 70 % ethanol (Fig. 6).

Class Reptilia

Order Squamata

Family Gekkonidae

Diplodactylus weileri L. Müller, 1909

Jb. Nassau. Ver. Naturk. 62: 113.

Holotype: MWNH 491, bei Bibundi, Kamerun [Cameroon].

Present name: *Urocotyledon weileri* (L. Müller, 1909) fide Kluge (1983).

Gehyra lampei Andersson, 1913

Jb. Nassau. Ver. Naturk. 66: 67.

Holotype: MWNH 690, Bogadjim at Stephansort, German New Guinea [Madang Province, Papua New Guinea].

Hemidactylus laticaudatus Andersson, 1910

Jb. Nassau. Ver. Naturk. 63: 200.

Syntypes: MWNH 581 [2 males], Harrar, Abyssinia [Ethiopia].

Palmatogecko rangei Andersson, 1908

Jb. Nassau. Ver. Naturk. 61: 299.

Holotype: MWNH 460, Lüderitzbucht in the Ger-
man South-West Africa [Namibia].

Present name: *Pachydactylus rangei* (Andersson, 1908). New generic placement by Bauer & Lamp (2005).

Remarks: *P. rangei* is the type species of the genus *Palmatogecko* Andersson, 1908 by monotypy. Syno-
nymy with *Pachydactylus* Wiegmann, 1834 by Bauer & Lamp (2005).

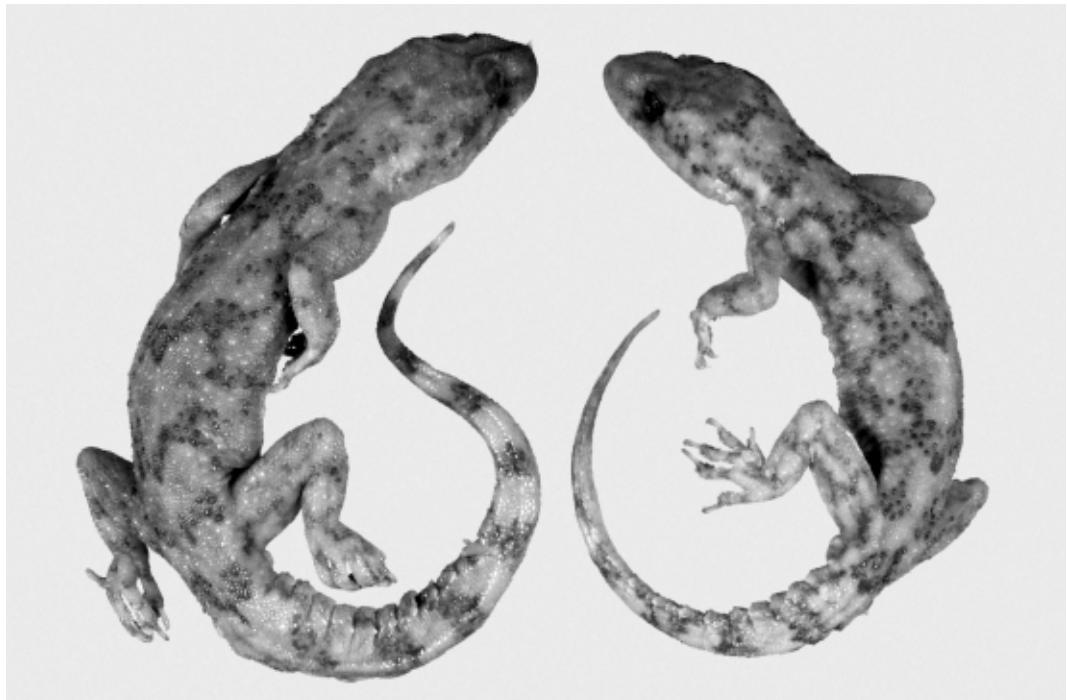


Fig. 7. Syntypes of *Hemidactylus laticaudatus* Andersson, 1910 (MWNH 581).

Family Pygopodidae

Alopecosaurus cuneirostris Lindholm, 1905

Jb. Nassau. Ver. Naturk. 58: 231.

Syntypes (lost): MWNH 400, Umgebung von Bogadjim an der Astrolabe-Bai in Deutsch-Neuguinea [Madang Province, Papua New Guinea].

Present name: *Lialis jicari* Boulenger, 1903 fide Kluge (1974).

Remarks: Types lost in World War II according to entry in the MWNH catalogue. Type species by monotypy of the genus *Alopecosaurus* Lindholm, 1905; synonymized with *Lialis* Gray, 1835 by Kluge (1974). The same author argued that *cuneirostris* could possibly represent a subspecies of *Lialis jicari*.

Alopecosaurus cuneirostris var. *inornata* Lindholm, 1905

Jb. Nassau. Ver. Naturk. 58: 233.

Holotype (lost): MWNH 401, Umgebung von Bogadjim an der Astrolabe-Bai in Deutsch-Neuguinea [Madang Province, Papua New Guinea].

Present name: *Lialis jicari* Boulenger, 1903 fide Kluge (1974).

Remarks: Lost in World War II according to entry in the MWNH catalogue.

Family Scincidae

Lygosoma schoedei Vogt, 1912

Sitzungsber. Ges. Naturforsch. Fr. Berlin 1912(1): 6.

Syntype: MWNH 3090, Valise [Walisi Island, Province East Sepik, Papua New Guinea].

Present name: *Sphenomorphus solomonis* (Boulenger, 1887). Synonymy by Greer & Parker (1974).

Remarks: Further syntypes in ZMB, MCZ and CAS. Bauer et al. (2003) suggested that more syntypes are extant, possibly in SMF.

Lygosoma paganstecheri Lindholm in Lampe & Lindholm, 1901

Jb. Nassau. Ver. Naturk. 54: 214.

Holotype (lost): MWNH 314, Süd-Australien [southern Australia].

Present name: *Pseudemoia paganstecheri* (Lindholm, 1901) fide Hutchinson & Donnellan (1992).

Remarks: The holotype was obviously lost during shipping according to an entry in the MWNH cata-

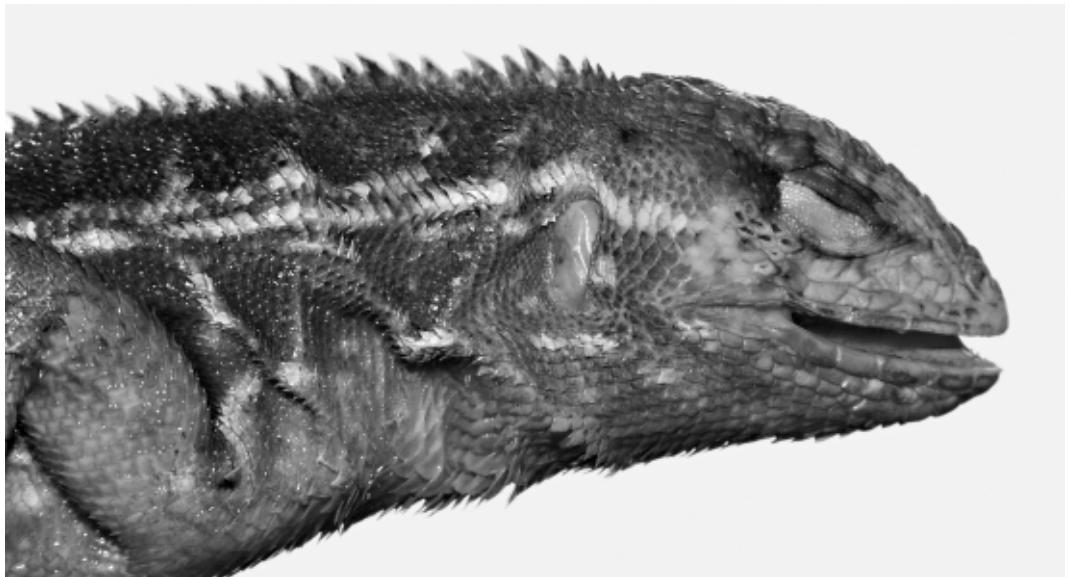


Fig. 8. Lateral view of head of the holotype of *Stenocercus seydi* Andersson, 1908 (MWNH 473).

logue. This loss was already noted by Lampe (1911). Neotype (NMV D50902) designated by Hutchinson & Donnellan (1992).

Mabuya geisthardti Joger, 1993

Courier Forsch.-Inst. Senck. 159: 442.

Holotype: MWNH 3274, Grande da Lagoa, NW of the Cova plateau, 10 km from the east coast of Sto. Antão, at 1200 m elevation [Cape Verde].

Present name: *Chioninia geisthardti* (Joger, 1993). Generic placement implied by Mausfeld et al. (2002).

Remarks: Considered possibly being conspecific with *Mabuya fogoensis antaoensis* Schleich, 1987 and *M. fogoensis* (O'Shaughnessy, 1874) by Carranza et al. (2001).

Family Tropiduridae

Stenocercus seydi Andersson, 1908

Jb. Nassau. Ver. Naturk. 61: 301.

Holotype: MWNH 473, La Merced, 1000 m, Peru [Departamento Junín].

Present name: *Stenocercus formosus* (Boulenger, 1880). Synonymy by Fritts (1974). See taxonomic remarks below.

Remarks: *Stenocercus seydi* Andersson, 1908 was rarely mentioned in the literature. Fritts (1974) pla-

ced *S. seydi* as a junior synonym of *S. formosus* (Boulenger, 1880) based on the original description, obviously without examination of the holotype. However, recently collected specimens of *S. formosus* from the Peruvian departments of Junín and Pasco perfectly agree with the type of *S. seydi* (E. Lehr & M. Lundberg, pers. comm.) and thus seem to confirm the allocation by Fritts (1974).

Family Colubridae

Dipsadophidium weileri Lindholm, 1905

Jb. Nassau. Ver. Naturk. 58: 186.

Holotype (lost): MWNH 1238, Umgegend von Bimbundi (Kamerun) [Cameroon].

Present name: *Dipsadoboia weileri* (Lindholm, 1905). Combination by Rasmussen (1993).

Remarks: Lost in World War II according to entry in the MWNH catalogue. Type species by monotypy of *Dipsadophidium* Lindholm, 1905; synonymized with *Dipsadoboia* Günther, 1858 by Müller (1910).

Helicops carinicauda var. *triserialis* Lindholm in Lampe & Lindholm, 1902

Jb. Nassau. Ver. Naturk. 55: 16.

Holotype (lost): MWNH 857, Brasilien [Brasil].

Present name: *Helicops carinicaudus triserialis* Lindholm in Lampe & Lindholm, 1902.



Fig. 9. Dorsal view of the holotype of *Stegonotus diehli* Lindholm, 1905 (MWNH 1244).

Remarks: This taxon was apparently not mentioned again in the literature subsequent to its description. Its status is uncertain. According to the characters provided in the original description, *Helicops carinicaudus triserialis* could presumably represent a junior synonym of *Helicops infrataeniatus* (Jan, 1865) (see Hofstadler Deiques & Zanini Cechin 1990, Cei 1993).

Prosymna bergeri Lindholm in Lampe & Lindholm, 1902

Jb. Nassau. Ver. Naturk. 55: 57.

Syntypes (lost): MWNH 1164 (male and female), Rietmond, Bezirk Gibeon, D.-S.-W.-Afrika [Namibia].

Present name: *Prosymna frontalis* (Peters, 1867). Synonymy by Mertens (1955). See also Broadley (1980).

Remarks: Types lost in World War II according to entry in the MWNH catalogue. Type species by monotypy of the subgenus *Pseudoprosymna* Lindholm in Lampe & Lindholm, 1902; synonymy with *Prosymna* Gray, 1849 by Mertens (1955).

Stegonotus diehli Lindholm, 1905

Jb. Nassau. Ver. Naturk. 58: 236.

Holotype: MWNH 1244, Bogadjim an der Astrolabe-Bai (Deutsch-Neuguinea) [Madang Province, Papua New Guinea].

Order Testudines

Family Testudinidae

Homopus bergeri Lindholm, 1906

Jb. Nassau. Ver. Naturk. 59: 348.

Holotype: MWNH 711, bei Gibeon, Deutsch-Südwestafrika [Namibia].

Present name: *Psammobates tentorius verroxii* (Smith, 1839). Synonymy by Karl & Tichy (1999) and Branch (2007).

Remarks: Lindholm (1906) noted that the collector C. Berger obtained the specimen from indigenous people who used it as a container for buchu (traditional herbal medicine) and that therefore the true type locality of this taxon might actually be elsewhere

in the country. For a detailed discussion of the confusing taxonomic history connected with the name *bergeri* see Branch (2007).

Acknowledgements

We are indebted to Michael Apel and Fritz Geller-Grimm (MWNH) for providing relevant literature and miscellaneous information on certain type specimens. Erik Ahlander (NRM) kindly provided information on some syntypes present at his institution. Edgar Lehr and Mikael Lundberg (MTKD) kindly provided information on recently collected specimens of *Stenocercus formosus* and thus confirmed the status of *S. seydi*. We thank Frank Glaw (ZSM) for providing GIBF funding to promote this evaluation. Hildegard Enting (HLMD) restored the dessicated type of *Megalixalus lindholmi*. Wolfgang Böhme (ZFMK) and Ulrich Joger (SNHM) critically read the manuscript.

References

- Ahl, E. (1929). Zur Kenntnis der afrikanischen Baumfrosch-Gattung *Leptopelis*. – Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin **1929**: 185-222
- Andersson, L. G. (1907). Verzeichnis einer Batrachiersammlung von Bibundi bei Kamerun des Naturhistorischen Museums zu Wiesbaden. – Jahrbücher des Nassauischen Vereins für Naturkunde **60**: 228-245
- (1908). A remarkable new Gecko from South-Africa and a new *Stenocercus*-species from South-America in the Natural Museum in Wiesbaden. – Jahrbücher des Nassauischen Vereins für Naturkunde **61**: 299-306
- (1910). A new species of *Hemidactylus* from Harrar, Abyssinia. – Jahrbücher des Nassauischen Vereins für Naturkunde **63**: 200-205
- (1913). On a small collection of Reptiles and Batrachians from German New Guinea and some other herpetological notes. – Jahrbücher des Nassauischen Vereins für Naturkunde **66**: 67-79
- Bauer, A. M. & T. Lamp (2005). Phylogenetic relationships of southern African geckos in the *Pachydactylus* group (Squamata: Gekkonidae). – African Journal of Herpetology **54**: 105-129
- , G. Shea & R. Günther (2003). An annotated catalogue of the types of scincid lizards (Reptilia, Squamata, Scincidae) in the collection of the Museum für Naturkunde der Humboldt-Universität zu Berlin (ZMB). – Mitteilungen des Museums für Naturkunde zu Berlin, Zoologische Reihe **79**: 253-321
- Branch, W. R. (2007). A new species or tortoise of the genus *Homopus* (Chelonia: Testudinidae) from southern Namibia. – African Journal of Herpetology **56**: 1-21.
- Broadley, D. G. (1980). A revision of the African snake genus *Prosymna* Gray (Colubridae). – Occasional Papers of the National Museums and Monuments of Southern Rhodesia, B: Natural Sciences **6**: 481-556
- Carranza, S., E. N. Arnold, J. A. Mateo & L. F. López-Jurado (2001). Parallel gigantism and complex colonization patterns in the Cape Verde scincid lizards *Mabuya* and *Macroscincus* (Reptilia: Scincidae) revealed by mitochondrial DNA sequences. – Proceedings of the Royal Society of London B **268**: 1595-1603
- Cei, J. M. (1993). Reptiles del noroeste, nordeste y este de la Argentina – Herpetofauna de las selvas subtropicales, Puna y Pampas. – Museo Regionale di Scienze Naturali Torino, Monografie XIV, 949 pp.
- Córdoba, J. H. (1999). On karyomorphs, cladistics and taxonomic status of the *Bufo spinulosus* species group (Amphibia: Anura) in Peru. – Stuttgarter Beiträge zur Naturkunde Serie A (Biologie) **600**: 1-28
- Duellman, W. E. & O. Ochoa (1991). A new species of *Bufo* (Anura: Bufonidae) from the Andes of southern Peru. – Copeia **1991**: 137-141
- & R. Schulte (1992). Description of a new species of *Bufo* from northern Peru with comments on phenetic groups of South American toads. – Copeia **1992**: 162-172
- Eibl-Eibesfeldt, I. (1956). Eine neue Rasse der Meerechse, *Amblyrhynchus cristatus venustissimus*, nebst einigen Bemerkungen über *Amblyrhynchus cristatus cristatus*. – Senckenbergiana biologica **37**: 87-100
- Etheridge, R. E. (1982). Checklist of the Iguanine and Malagasy iguanid lizards. In: Burghardt, G.M. & Rand, A.S. (eds) Iguanas of the world. Their behavior, ecology, and conservation. – Noyes Publishers, New Jersey: 7-37
- Faivovich, J., C. F. B. Haddad, P. C. A. Garcia, D. R. Frost, J. A. Campbell & W. C. Wheeler (2005). Systematic review of the frog family Hylidae, with special reference to Hylinae: phylogenetic analysis and taxonomic revision. – Bulletin of the American Museum of Natural History **294**: 1-240
- Fritts, T. H. (1974). A multivariate evolutionary analysis of the Andean iguanid lizards of the genus *Stenocercus*. – San Diego Society of Natural History, Memoire **7**: 1-89
- Frost, D. R., T. Grant, J. Faivovich, R. H. Bain, A. Haas, C. F. B. Haddad, R. O. de Sá, A. Channing, M. Wilkinson, S. C. Donnellan, C. J. Raxworthy, J. A. Campbell, B. L. Blotto, P. Moler, R. C. Drewes, R. A. Nussbaum, J. D. Lynch, D. M. Green & W. C. Wheeler (2006). The amphibian tree of life. – Bulletin of the American Museum of Natural History **297**: 1-370
- Glaw, F. & M. Franzen (2004). A digital type catalogue of amphibians and reptiles in German research collections: progress and perspectives. – In: Berendsohn, W. G. & S. Oehlschlaeger (eds.): Projects in the German National Programme for the Global Biodiversity Information Facility 2003-2006, Status Report 2004: 136-137

- & -- (2006). Type catalogue of amphibians in the Zoologische Staatssammlung München. – *Spixiana* **29**(2): 153-192
- Greer, A. E. & F. Parker (1974). The *fasciatus* species group of *Sphenomorphus* (Lacertilia: Scincidae): notes on eight previously described species and descriptions of three new species. – *Papua New Guinea Scientific Society Proceedings* **25**: 31-61
- Grismer, L. L., B. E. Viets & L. J. Boyle (1999). Two new continental species of *Goniurosaurus* (Squamata: Eublepharidae) with a phylogeny and evolutionary classification of the genus. – *Journal of Herpetology* **33**: 382-393
- Hofstadler Deiques, C. & S. Zanini Cechin (1990). O status de *Helicops carinicaudus* (Wied, 1825) (Serpentes: Colubridae). – *Acta Biologica Leopoldensia* **12**: 313-326
- Hutchinson, M. N. & S. C. Donnellan (1992). Taxonomy and genetic variation in the Australian lizards of the genus *Pseudemoia* (Scincidae: Lygosominae). – *Journal of Natural History* **26**: 215-264
- ICZN – International Comission on Zoological Nomenclature (1999). International Code of Zoological Nomenclature adopted by the International Union of Biological Sciences. Fourth Edition. International Trust for Zoological Nomenclature, London, 306 + xxix pp.
- Joger, U. (1980). Eine neue Art der Gattung *Tarentola* (Reptilia: Sauria: Gekkonidae) aus Westafrika. – *Amphibia-Reptilia* **1**: 137-147
- (1984). Taxonomische Revision der Gattung *Tarentola* (Reptilia: Gekkonidae). – *Bonner zoologische Beiträge* **35**: 129-174
- (1990). The herpetofauna of the Central African Republic, with description of a new species of *Rhinotyphlops* (Serpentes: Typhlopidae). In: Peters, G. & Hutterer, R. (eds) Vertebrates in the Tropics. – Museum Alexander Koenig, Bonn, pp. 85-102
- (1993). On two Collections of Reptiles and Amphibians from the Cape Verde Islands, with Descriptions of three New Taxa. – *Courier Forschungsinstitut Senckenberg* **159**: 437-444
- & W. Bischoff (1983). Zwei neue Taxa der Gattung *Tarentola* (Reptilia: Sauria: Gekkonidae) von den Kanarischen Inseln. – *Bonner zoologische Beiträge* **34**: 459-468
- & M. R. K. Lambert (1996). Analysis of the herpetofauna of the Republic of Mali, I. Annotated inventory, with description of a new *Uromastyx* (Sauria: Agamidae). – *Journal of African Zoology* **110**: 21-51
- & W. Mayer (2002). A new species of *Mesalina* (Reptilia: Lacertidae) from Abd al-Kuri, Socotra Archipelago, Yemen, and a preliminary molecular phylogeny for the genus *Mesalina*. – *Fauna of Arabia* **19**: 497-505
- & S. Steinfartz (1994). Zur subspezifischen Gliederung der südiberischen Feuersalamander (*Salamandra salamandra*-Komplex). – *Abhandlungen und Berichte für Naturkunde des Museums für Naturkunde Magdeburg* **17**: 83-98
- Karl, H.-V. & G. Tichy (1999). Die Taxonomie von *Homopus bergeri* Lindholm 1906 (Testudines: Testudinoidea). – *Mauritiana* (Altenburg) **17**: 277-284
- Kluge, A. G. (1974). A taxonomic revision of the lizard family Pygopodidae. – *Miscellaneous Publications of the Museum of Zoology of the University of Michigan* **147**: 1-227
- (1983). Cladistic relationships among gekkonid lizards. – *Copeia* **1983**: 465-475
- (2001). Gekkotan Lizard Taxonomy. – *Hamadryad* **26**: 1-209
- Köhler, J. & S. Lötters (2001). Description of a small tree frog, genus *Hyla* (Anura: Hylidae), from humid Andean slopes of Bolivia. – *Salamandra* **37**(3): 175-184
- & -- (2001). A new species of minute *Hyla* from the southwestern Amazon basin (Amphibia, Anura, Hylidae). – *Studies on Neotropical Fauna and Environment* **36** (2): 105-112
- , B. Bwong, S. Schick, M. Veith & S. Lötters (2006). A new species of arboreal *Leptopelis* (Anura: Arthroleptidae) from the forests of western Kenya. – *Herpetological Journal* **16**(2): 183-189
- Lampe, E. (1911). Erster Nachtrag zum Katalog der Reptilien und Amphibien-Sammlung des Naturhistorischen Museums der Stadt Wiesbaden. – *Jahrbücher des Nassauischen Vereins für Naturkunde* **64**: 137-142
- & W. A. Lindholm (1901). Catalog der Reptilien-Sammlung (Schildkröten, Crocodile, Eidechsen und Chamaleons) des Naturhistorischen Museums zu Wiesbaden. Mit Bemerkungen und Beschreibung einer neuen Eidechsenart. – *Jahrbücher des Nassauischen Vereins für Naturkunde* **54**: 177-222 + Taf. III
- & -- (1902). Catalog der Reptilien- und Amphibien-Sammlung (Schlangen; Frosch-, Schwanz- und Schleichenlurche) des Naturhistorischen Museums zu Wiesbaden. Mit Bemerkungen. – *Jahrbücher des Nassauischen Vereins für Naturkunde* **55**: 1-66
- Lee, M. S. Y. (2000). Soft anatomy, diffuse homoplasy, and the relationships of lizards and snakes. – *Zoologica Scripta* **29**: 101-130
- Lindholm, W. A. (1905). Beschreibung einer neuen Schlangenart (*Dipsadophidium weili* nov. gen. et nov. sp.) aus Kamerun. – *Jahrbücher des Nassauischen Vereins für Naturkunde* **58**: 183-187
- (1905). Über einige Eidechsen und Schlangen aus Deutsch-Neuguinea. – *Jahrbücher des Nassauischen Vereins für Naturkunde* **58**: 227-240
- (1906). Beschreibung einer neuen Schildkrötenart aus Deutsch-Südwestafrika nebst Bemerkungen über die Gattung *Homopus* D. et B. – *Jahrbücher des Nassauischen Vereins für Naturkunde* **59**: 345-351
- Lötters, S., E. La Marca & M. Vences (2004). Redescription of two toad species of the genus *Atelopus* from coastal Venezuela. – *Copeia* **2004**: 222-234
- Mausfeld, P., A. Schmitz, W. Böhme, B. Misof, D. Vrcibradic & C. F. D. Rocha (2002). Phylogenetic affinities of *Mabuya atlantica* Schmidt, 1945, endemic to the Atlantic Ocean archipelago of Fernando de

- Noronha (Brazil): necessity of partitioning the genus *Mabuya* Fitzinger, 1826 (Scincidae: Lygosominae). – *Zoologischer Anzeiger* **241**: 281-293
- McDiarmid, R. W., J. A. Campbell & T. A. Touré (1999). Snake Species of the World: A Taxonomic and Geographic Reference. Vol. 1. – The Herpetologists' League, Washington (D.C.), 511 pp.
- McDowell, S. B. (1972). The species of *Stegonotus* (Serpentes, Colubridae) in Papua New Guinea. – *Zoologische Mededelingen* **47**: 6-26
- Mertens, R. (1938). Herpetologische Ergebnisse einer Reise nach Kamerun. – *Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft* **442**: 1-52
- (1955). Die Amphibien und Reptilien Südwestafrikas. – *Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft* **490**: 1-172
- Moravec, J., J. Aparicio & J. Köhler (2006). A new species of tree frog, genus *Dendropsophus* (Anura: Hylidae), from the Amazon of northern Bolivia. – *Zootaxa* **1327**: 23-40
- Müller, L. (1909). Vorläufige Mitteilung über ein neues Chamäleon und einen neuen Gecko aus Kamerun. – *Jahrbücher des Nassauischen Vereins für Naturkunde* **62**: 111-115
- (1910). Beiträge zur Herpetologie Kameruns. – *Abhandlungen der Bayerischen Akademie der Wissenschaften, Mathematisch-Physikalische Klasse* **24**: 544-625
- (1934). Über eine neue Rasse von *Atelopus cruciger* (Licht. u. Marts.) von Venezuela. – *Zoologischer Anzeiger* **108** (7/8): 145-155
- Perret, J.-L. (1976). Identité de quelques *Afrixalus* (Amphibia, Salientia, Hyperoliidae). – *Bulletin de la Société Neuchâteloise des Sciences Naturelles* **99**: 19-28
- Pramuk, J. B. & F. Kadivar (2003). A new species of *Bufo* (Anura: Bufonidae) from southern Ecuador. – *Herpetologica* **59** (2): 270-283.
- Rasmussen, J. B. (1993). A taxonomic review of the *Dipsadoboaa unicolor* complex, including a phylogenetic analysis of the genus (Serpentes, Dipsadidae, Boiginae). – *Steenstrupia* **19**: 129-196
- Rösler, H. & W. Wranik (1999). Beiträge zur Herpetologie der Republik Jemen. 5. Drei neue Gecko-Arten vom Sokotra-Archipel (Reptilia: Sauria: Gekkonidae). – *Zoologische Abhandlungen des Staatlichen Museums für Tierkunde Dresden* **50**: 249-265
- Vogt, T. (1912). Beitrag zur Reptilien- und Amphibienfauna der Südseeinseln. – *Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin* **1912** (1): 1-13
- Wilms, T. & W. Böhme (2001). Revision der *Uromastyx acanthinura*-Artengruppe, mit Beschreibung einer neuen Art aus der Zentralsahara (Reptilia: Sauria: Agamidae). – *Zoologische Abhandlungen des Staatlichen Museums für Tierkunde Dresden* **51**: 73-104