

Extinct, obscure or imaginary: The lizard species with the smallest ranges

Shai Meiri^{1,2}  | Aaron M. Bauer³ | Allen Allison⁴ | Fernando Castro-Herrera⁵ | Laurent Chirio⁶ | Guarino Colli⁷ | Indraneil Das⁸ | Tiffany M. Doan⁹ | Frank Glaw¹⁰ | Lee L. Grismer¹¹ | Marinus Hoogmoed¹² | Fred Kraus¹³ | Matthew LeBreton¹⁴ | Danny Meirte¹⁵ | Zoltán T. Nagy¹⁶ | Cristiano de C. Nogueira¹⁷ | Paul Oliver¹⁸  | Olivier S. G. Pauwels¹⁹ | Daniel Pincheira-Donoso²⁰ | Glenn Shea²¹ | Roberto Sindaco²² | Oliver J. S. Tallowin¹ | Omar Torres-Carvajal²³ | Jean-Francois Trape²⁴ | Peter Uetz²⁵ | Philipp Wagner¹⁰ | Yuezhao Wang²⁶ | Thomas Ziegler^{27,28} | Uri Roll^{29,30} 

¹School of Zoology, Tel Aviv University, Tel Aviv, Israel

²The Steinhardt Museum of Natural History, Tel Aviv University, Tel Aviv, Israel

³Department of Biology, Villanova University, Villanova, PA, USA

⁴Department of Vertebrate Zoology, Bishop Museum, Honolulu, HI, USA

⁵Physiology Sciences Department, School of Basic Sciences, Universidad del Valle, Cali, Colombia

⁶14, rue des roses, Grasse, France

⁷Department of Zoology, University of Brasília, Brasília, Brazil

⁸Institute of Biodiversity and Environmental Conservation, Universiti Malaysia Sarawak, Kota Samarahan, Sarawak, Malaysia

⁹Division of Natural Sciences, New College of Florida, Sarasota, FL, USA

¹⁰Zoologische Staatssammlung München, München, Germany

¹¹Herpetology Laboratory, Department of Biology, La Sierra University, Riverside, CA, USA

¹²Museu Paraense Emílio Goeldi, Herpetologia, Belem, Pará, Brazil

¹³Department of Ecology and Evolutionary Biology, University of Michigan, Ann-Arbor, MI, USA

¹⁴Mosaic (Environment, Data, Technology), Yaoundé, Cameroon

¹⁵Royal Museum for Central Africa, Tervuren, Belgium

¹⁶Department of Recent Vertebrates, Royal Belgian Institute of Natural Sciences, Brussels, Belgium

¹⁷Departamento de Ecologia, Universidade de São Paulo, São Paulo, Brazil

¹⁸Ecology and Evolution, Research School of Biology, Australian National University, Canberra, ACT, Australia

¹⁹Institut Royal des Sciences naturelles de Belgique, Brussels, Belgium

²⁰School of Life Sciences, Joseph Banks Laboratories, University of Lincoln, Lincoln, UK

²¹Faculty of Veterinary Science, University of Sydney, Sydney, NSW, Australia

²²Museo Civico di Storia Naturale, Torino, Italy

²³Museo de Zoología, Escuela de Ciencias Biológicas, Pontificia Universidad Católica del Ecuador, Quito, Ecuador

²⁴Institut de Recherche pour le Développement (IRD), MIVEGEC, Dakar, Senegal

²⁵Virginia Commonwealth University, Richmond, VA, USA

²⁶Chengdu Institute of Biology, Chinese Academy of Sciences, Chengdu, China

²⁷AG Zoologischer Garten Köln, Cologne, Germany

²⁸Institute of Zoology, University of Cologne, Cologne, Germany

²⁹Mitrani Department of Desert Ecology, Ben Gurion University of the Negev, Beersheba, Israel

³⁰School of Geography & the Environment, University of Oxford, Oxford, UK

Correspondence

Shai Meiri, School of Zoology, Tel Aviv University, Tel Aviv, Israel.
Email: uncshai@post.tau.ac.il

Funding information

BSF, Grant/Award Number: 2012143; Ministry of Higher Education, Government of Malaysia, Grant/Award Number: NRGs/1087/2013(01); Ben-Gurion University; Israeli Ministry of Science and Technology

Editor: George Stevens

Abstract

Aim: Small geographic ranges make species especially prone to extinction from anthropogenic disturbances or natural stochastic events. We assemble and analyse a comprehensive dataset of all the world's lizard species and identify the species with the smallest ranges—those known only from their type localities. We compare them to wide-ranging species to infer whether specific geographic regions or biological traits predispose species to have small ranges.

Location: Global.

Methods: We extensively surveyed museum collections, the primary literature and our own field records to identify all the species of lizards with a maximum linear geographic extent of <10 km. We compared their biogeography, key biological traits and threat status to those of all other lizards.

Results: One in seven lizards (927 of the 6,568 currently recognized species) are known only from their type localities. These include 213 species known only from a single specimen. Compared to more wide-ranging taxa, they mostly inhabit relatively inaccessible regions at lower, mostly tropical, latitudes. Surprisingly, we found that burrowing lifestyle is a relatively unimportant driver of small range size. Geckos are especially prone to having tiny ranges, and skinks dominate lists of such species not seen for over 50 years, as well as of species known only from their holotype. Two-thirds of these species have no IUCN assessments, and at least 20 are extinct.

Main conclusions: Fourteen per cent of lizard diversity is restricted to a single location, often in inaccessible regions. These species are elusive, usually poorly known and little studied. Many face severe extinction risk, but current knowledge is inadequate to properly assess this for all of them. We recommend that such species become the focus of taxonomic, ecological and survey efforts.

KEYWORDS

accessibility, endemism, extinction, geckos, holotype, range size, skinks, threat, type locality

1 | INTRODUCTION

A prominent feature of the distribution of biodiversity is the extreme variation in species range sizes. Within the same lineage, some species have continental-wide distributions whereas others are restricted to a single locality (Gaston, 2003). Although ranges can be very labile (e.g., Chen, Hill, Ohlemuller, Roy, & Thomas, 2011; Currie & Venne, 2017; Lyons, 2003; Meiri, Lister, et al., 2013), range size is thought to be the product of ecologically relevant traits such as body size, population density and dispersal ability (Brown, 1984; Pimm & Jenkins, 2010; but see Novosolov et al., 2017). Crucially, from a conservation perspective, range size is known to influence extinction risk. Species with small ranges have, everything else being equal, fewer individuals and lower genetic variation than wide-ranging relatives, often leading to elevated extinction probabilities (Caughley, 1994; MacArthur & Wilson, 1967). Threats such as new (or introduced) predators, pathogens and competitors, severe climatic events (e.g., droughts), cataclysms (e.g., fires and volcanic eruptions) and population-level phenomena (e.g.,

inbreeding depression) can rapidly wipe out narrow-ranging species (Purvis, Gittleman, Cowlinshaw, & Mace, 2000). Habitat loss and collection for the pet trade can likewise easily cause species with tiny ranges to go extinct. The elevated threat these species face makes them particularly relevant for conservation efforts.

The importance of range size is reflected in the way extinction risk is evaluated by the International Union for Conservation of Nature (IUCN) Red List assessments. One of the five criteria the IUCN (2017) uses to evaluate threat, criterion B, uses estimates of range size to designate extinction probabilities. Although range size per se is insufficient to designate threat, species with ranges (defined as the extent of occurrence) smaller than 20,000 km² can qualify as vulnerable under criterion B. To qualify as endangered under criterion B, range size cannot exceed 5,000 km², whereas to qualify for the highest level of threat—critically endangered, the threshold is lowered to 100 km² (IUCN, 2017).

Although we are often ignorant regarding the true extent of a species' geographic range (because not observing a species somewhere

is not sufficient evidence of its absence), we know that ranges can be even smaller than 100 km². Many Southeast-Asian geckos, for example, seem to be confined to isolated karst outcrops (e.g., Ellis & Pauwels, 2012; Wood et al., 2017), never venturing far into the surrounding forest. At the minimum, species must be known from one locality, and a single individual, the holotype, on which the species description is based.

Species known only from small ranges are likely to be either difficult to observe, difficult to distinguish from others or genuinely rare. They may even already be extinct. Several studies have tried to link range size to biological attributes such as body size (e.g., Agosta & Bernardo, 2013) or to geographic attributes such as latitude (Rapaport's Rule; Ruggiero & Werenkraut, 2007). A common finding, however, associates range size not with particular biological attributes, but with the year, a species was described (e.g., Costello, Lane, Wilson, & Houlding, 2015; Gaston, Blackburn, & Loder, 1995). Generally, scientists observed, distinguished and described the widely distributed species early. In fact, range size consistently emerges as the key correlate of description date in all tests we know that examined this link (e.g., Collen, Purvis, & Gittleman, 2004; Colli et al., 2016; Costello et al., 2015; Diniz-Filho et al., 2005). Species that were discovered and described (as opposed to being split from other species) relatively recently are poorly known almost by definition, given that not enough time has lapsed for biologists to study their biology, abundance and true range extent. Thus, many recently discovered species may have larger ranges than are currently known.

Species that were described early, and remain poorly known (with few or even just a single observation locality), are more likely to truly occupy small ranges, rather than just poorly known ones. They may even already be extinct. Importantly, however, some may not be real species. Recent species descriptions often follow modern integrative taxonomic practices, compare more species and specimens, and examine more characters than previous descriptions. The species that remain known only from single specimens sometimes turn out to be based on aberrant or juvenile specimens, or belong to congeners or even to distantly related species, especially if they were described long ago. For example, *Oreodeira gracilipes* was described as an Australian species based on a single specimen, but was in fact a juvenile African *Agama* (Moody, 1988). *Scelotes schebeni* was described based on a single specimen from Namibia, but was later found to be a *Melanoseps occidentalis*, probably from Cameroon (Bauer, 2016).

Correctly identifying the species with the smallest ranges is important to uncover the factors affecting geographic range size. It is also of paramount importance from a conservation perspective, as it can suggest how to correctly allocate limited resources to the most threatened species. Many narrow-ranging species are among those in greatest need of conservation effort. Some may already be extinct without us knowing they are (cryptic extinctions). If some of these species are not valid taxonomic entities, we may be wasting conservation resources. Elucidating the ecological and distributional patterns of species known only from their type localities to establish the roles of true rarity, lack of records and taxonomic ambiguities in generating them is thus crucially important.

We identify all the species of lizards (Reptilia: Squamata, excluding snakes) that are known only from their type locality (the *terra typica*), the place where the species was described from (henceforth "TL-species"). We examine whether these species are taxonomically or geographically clustered (especially in poorly surveyed regions) and whether they share attributes that may make them easy to overlook, such as small size, fossorial habits (or their correlate: reduced limbs) or nocturnal activity. We compare relevant traits of these TL-species to those of all other lizard species, to highlight the attributes associated with small ranges.

We pay special attention to these TL-species that were described relatively early, using an arbitrary cut-off time of 50 years from the present (i.e., 1967 or earlier versus 1968 or later), and compare these species' traits to those of TL-species described more recently.

2 | METHODS

To identify the lizard species known only from their type localities, we reviewed and refined a dataset containing range sizes of all the world's lizards (Roll et al., 2017). We manually reviewed the ranges of all species with ranges smaller than the median size in the global dataset of Roll et al. (2017) to determine whether they are known only from their type locality. For these, we manually searched for additional geographic data in the primary and grey literature using the Reptile Database (Uetz, 2017) and Google Scholar), meta-datasets such as GBIF (www.gbif.org), Vertnet (www.vernet.org) and the Atlas of Living Australia (www.ala.org.au), IUCN assessments, field guides and our own observations. We further systematically searched data on these species in scientific journals that have dedicated sections for publishing reptile range extensions (e.g., Herpetological Review, Check List, Mesoamerican Herpetology). In addition to the geographic data, we further extracted from these sources the latest year in which individuals of each species were observed alive. We used the latest version (May 2017) of the Reptile Database for taxonomy (Uetz, 2017) and excluded all species known only from fossils or subfossils. We identified all species that are known only from their type locality. We arbitrarily defined a type locality as having a maximum latitudinal and longitudinal range of <10 km or <0.1 degrees because this represents an extent of occurrence smaller than 100 km²—fitting the IUCN's criterion B1 for an extent of occurrence of a critically endangered species (IUCN, 2017. Note that as this criterion cannot be applied alone, such species are not necessarily classified as threatened). Species inhabiting more than one island were excluded even if the islands are small and close to each other, as these species cannot be said to inhabit a single locality.

We distinguished between species that are only known from old records and those known from recent records (either having been repeatedly found at their type locality or having been described from specimens observed there recently). We arbitrarily placed the cut-off between old and recent records at 50 years ago (1967). We further distinguished species known from multiple specimens and those known only from a single specimen, the holotype. Data and metadata

of traits used in our comparisons and analyses of lizard groups can be found in Meiri, Brown, and Sibly (2012); Meiri, Lister, et al. (2013); Meiri, Bauer, et al. (2013); Scharf et al. (2015), Feldman, Sabath, Pyron, Mayrose, and Meiri (2016) and Vidan et al. (2017).

2.1 | Statistical analyses

Only 12% of the species we identified as known only from their type locality are represented in the large-scale squamate phylogeny of Pyron and Burbrink (2014), effectively preventing us from running phylogenetically informed tests. Instead, we explored the effects of individual traits on our classifications of lizards. We used a machine learning procedure to classify lizard species to groups (TL-species versus broad ranged species, and single specimen versus multiple specimens). We explored the relative importance of the different traits when used together in these classification procedures. We used a gentle adaptive stochastic boosting classification model (ADA-Boost; Friedman, Hastie, & Tibshirani, 2000) as our classification mechanism. ADA-Boost distinguishes between cases by combining the outputs of many weak classifiers to achieve, through iterations, a powerful classification with low error rates. This procedure has been successfully applied in a wide variety of fields, outperforming many other classifiers (Hastie, Tibshirani, & Friedman, 2001).

To test our predictions, we used the following predictors in the classification procedure: description year, the biogeographic realm (Wallace, 1859, 1876) in which a species reside (using the maps of Olson et al., 2001), its activity period (day or night, with cathemeral species counted in both categories), whether it is terrestrial, fossorial, saxicolous or arboreal, whether or not it has reduced legs, its infraorder, body mass, if it is an insular endemic and the latitudinal centroid of its range. Our modelling was conducted using the “ada” package in R

(Culp, Johnson, & Michailidis, 2016) and incorporated an exponential loss function with 50,000 iterations.

We further tested whether species only known from type localities are found in remote, difficult to access, regions. To do this, we compared the locations of the type locality-restricted lizard and amphisbaenians for which we had precise locality information (Appendix S1) to the point localities of all ~4,550 lizard and amphisbaenians known to be more wide-ranging (Roll et al., 2017). For each point, we extracted its accessibility as measured by the travel time (in minutes, by land or water) to major cities (Nelson, 2008). We then compared the distributions, means and medians of accessibility between point localities of species known only from their type localities with wide-ranging species (whose localities were obtained from literature, observations and museum data; Roll et al., 2017). Extraction of the accessibility information was performed using ArcGIS (ESRI, 2011); statistical analyses were conducted using R.

3 | RESULTS

3.1 | The dataset

We identified 927 species of lizards that are, as far as we know, restricted to their type locality (i.e., an area with a linear extent no larger than 10 km or 0.1 of a degree; Appendix S1). They represent fully 14.1% of all lizard diversity (6,569 species, Uetz, 2017; supplemented with additional species described until 1 September 2017). Of these 927 species, 756 were observed in the wild in the last 50 years (since 1968), whereas 171 were last seen between 1830 (*Diploglossus microlepis* (Gray, 1831)) and 1967 (e.g., *Calotes bhutanensis*, Biswas, 1975). Only 191 of the TL species were seen alive after they were described, whereas the other 736 (79%) were last seen alive when the holotype

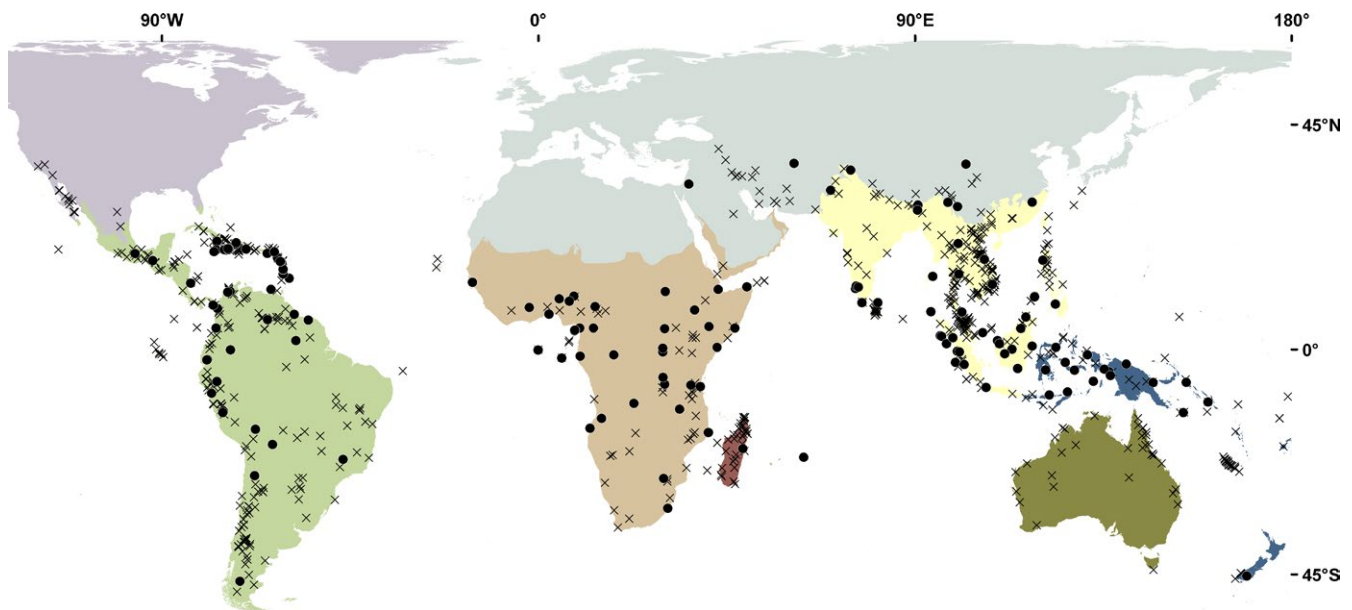


FIGURE 1 Lizard species known only from their type localities. Circles: species not observed after 1967 ($n = 151$). Crosses: species observed after 1967 ($n = 754$). Eighteen species could not be mapped. Underlying colours represent the biogeographic realms. Equal-area Behrmann projection [Colour figure can be viewed at wileyonlinelibrary.com]

Family	TL-species	Holotype only	Wider ranging species	Proportion of TL-species
Gekkonidae*	261	33	867	23%
Scincidae	210	72	1,414	13%
Dactyloidae	58	15	361	14%
Liolaemidae	52	6	255	17%
Agamidae	48	16	439	10%
Gymnophthalmidae	42	13	220	16%
Amphisbaenidae	31	13	147	17%
Sphaerodactylidae*	31	7	184	14%
Chamaeleonidae	28	3	178	14%
Anguidae	23	11	106	18%
Tropiduridae	20	3	116	15%
Lacertidae	15	6	311	5%
Phyllodactylidae*	15	2	122	11%
Diplodactylidae*	12	3	137	8%
Dibamidae	11	5	12	48%
Eublepharidae*	8	0	28	22%
Carphodactylidae*	7	0	23	23%
Phrynosomatidae	7	0	147	5%
Teiidae	7	0	149	4%
Leiocephalidae	6	1	25	19%
Varanidae	6	2	73	8%
Xantusiidae	6	0	28	18%
Cordylidae	5	0	63	7%
Hoplocercidae	5	0	14	26%
Iguanidae	5	0	38	12%
Gerrhosauridae	3	2	34	8%
Anniellidae	2	0	4	33%
Leiosauridae	1	0	32	3%
Pygopodidae*	1	0	45	2%
Xenosauridae	1	0	10	9%
Bipedidae	0	0	4	0%
Blanidae	0	0	6	0%
Cadeidae	0	0	2	0%
Corytophanidae	0	0	9	0%
Crotaphytidae	0	0	12	0%
Helodermatidae	0	0	2	0%
Lanthanotidae	0	0	1	0%
Opluridae	0	0	8	0%
Polychrotidae	0	0	7	0%
Rhineuridae	0	0	1	0%
Shinisauridae	0	0	1	0%
Trogonophiidae	0	0	6	0%

Lizard species in each family that are known from their type locality only ("TL-species," maximum linear extent of <10 km; 1st column), and only known from the holotype (2nd column), versus the number of more widely ranging species (3rd column; maximum linear extent >10 km). The fourth column is the proportion of species known from their type locality out of all species in the family. Gecko families are marked with an asterisk.

TABLE 1 Lizards known only from their type localities versus wider ranging species within families

or type series was collected. Two hundred and thirteen species are only known from their holotype (Appendix S1; 112 species observed during the last 50 years, 101 species only observed earlier).

3.2 | The geography of small-ranged lizards

Lizards known only from their type localities inhabit mostly tropical regions and some arid regions (although the Sahara and Sahel, for example, have few TL-species). Those known only from old records show a more restricted, almost entirely tropical, distribution (mean absolute value of latitude: $11.3 \pm 9.2^\circ$ SD), especially in Indonesia, equatorial Africa, northern and western South America and the Caribbean (Figure 1). More recently observed species have additional hotspots, in both tropical and desert regions (e.g., in Australia, Argentina and Chile, Madagascar, New Caledonia, Iran, north-western Mexico and southern Asia; mean of absolute value of latitude: $15.7 \pm 9.6^\circ$; Figure 1).

Overall, TL-species tend to inhabit somewhat lower latitudes than large-ranged species (absolute latitude 14.9° vs. 18.5° , $t_{905,5607} = 9.40$, $p < .0001$). They are relatively rare in the Nearctic, the Palearctic and Australia (8%, 5% and 5% of the lizard fauna, respectively), but comprise 28% of the lizard species in the Oriental realm.

3.3 | Taxonomic composition

Geckos (Gekkota) dominate the list of TL-species (335 of 927 species, 36%), followed by skinks (210, 24%) and anoles (58, 6%; Table 1). The list TL-species not observed in the last 50 years, however, is dominated by skinks (69 of 171 species, 40%), followed by geckos (31 species, 18%) and amphisbaenians (14, 8%). Interestingly, this is mirrored in the taxonomic composition of the species known only from their type specimen (regardless of when it was collected), for which skinks are the largest group (72 of 213 species, 34%), followed by geckos (45 species), agamids (16), anoles (15) and both gymnophthalmids and amphisbaenians (14; Table 1). The Dibatidae has the highest proportion of species only known from the type locality (11 of 23 species; 48%), followed by Anniellidae (two of six species; 33%), Hoplocercidae (26%) and three gecko families: Gekkonidae (23%), Carphodactylidae (23%) and Eublepharidae (22%). Twelve of 42 families have no TL-species, but these are species poor (the largest is the 12-species Crotaphytidae).

3.4 | Traits of lizards known only from their type localities

Lizards known only from their type localities have generally been described later than wide-ranging species (by 58 years on average, $t_{927,5641} = 27.3$, $p < .0001$; Figure 2). Most (3,142 of 4,366; 72%) of the wide-ranging species for which we have data are diurnal (22% nocturnal, 6% cathemeral). Those known only from their type localities tend more towards nocturnality (232 of 612 species, 38%, vs. 59% diurnal, and 3% cathemeral; $\chi^2 = 73.9$, $p < .0001$; all χ^2 values are for 2×2 tables). This is especially the case for the TL-species observed in the last 50 years (39% nocturnal), as would be expected by the high

proportion of geckos among them. We only know the activity times of 46 TL-species that were last seen before 1968, whereas those of 127 of them (73%) are unknown.

Contrary to our expectations, fossorial species were not more dominant among species known only from the type locality. Assuming all amphisbaenians and dibamids are fossorial, 12.2% (86 of 701 species with known habits) of the TL-species are fossorial versus 10.2% (557 of 4,913) lizards with wider ranges ($\chi^2 = 0.46$, $p = .53$). Species known only from their type localities were more associated with rocky substrates (39% species fully or partially saxicolous, versus 26% of the wider ranging species; $\chi^2 = 52.5$, $p < .0001$). The maximum body mass of wider ranging species is 71% higher, on average, than those known only from their type localities (back-transformed from logarithms: average 10.2 ± 5.0 g vs. 6.0 ± 4.2 g, $t_{910,5634} = 9.38$, $p < .0001$; Figure 3; non-transformed averages are 135 and 32 g, respectively). This difference is retained when we compare sizes within families (as recognized by Uetz, 2017; average difference 41%, $t = 7.84$, $p < .0001$).

3.5 | Classifications analysis

We used our classification procedure to distinguish between TL-species and species with wider ranges for which we had data for all the traits we coded (4,237 wider ranging species, 555 TL-species). Our model managed to classify the two groups nearly perfectly, with a cross-validated training error of 0% and an out-of-bag error rate of 1.7%. These traits can thus be used to successfully distinguish TL-species from wider ranging species. Figure 4 depicts the relative importance of the different traits in the classification procedure, and the associated partial dependence plots are shown in Appendix S2. They highlight the importance of low latitude and infraorder affiliation in the classification, as well as the roles of biogeographic realm, low body mass and late description year.

In our classification of TL-species known either from one (62 species) or multiple specimens (493 species), the model achieved perfect classification between the groups with a cross-validated error of 0% (both training and out of bag). For this classification, most attributes played an important role. Realm and infraorder affiliation, fossoriality and the degree of leg reduction (species known only from their holotype tend to be fossorial, limbless or with reduced legs; see Appendix S3 for variable importance) were the best classifiers.

3.6 | Accessibility and threat

The accessibility (time to major cities, in minutes) of the localities of the 868 TL-species in our database, for which such data could be calculated, ranged from 8 min for the aptly named *Cyrtodactylus metropolis* (Grismer, Wood, Onn, Anuar, & Muin, 2014) to 7,432 min (=5.16 days) for the Venezuelan *Adercosaurus vixadnexus* (Myers & Donnelly, 2001). These 868 points are generally found in inaccessible places compared to the 136,840 unique localities for which we have data for wide-ranging lizard species (Figure 5). The mean (518 min = 8.6 hr) and median (319 min = 5.3 hr) inaccessibility values are greater for species known only from their type localities

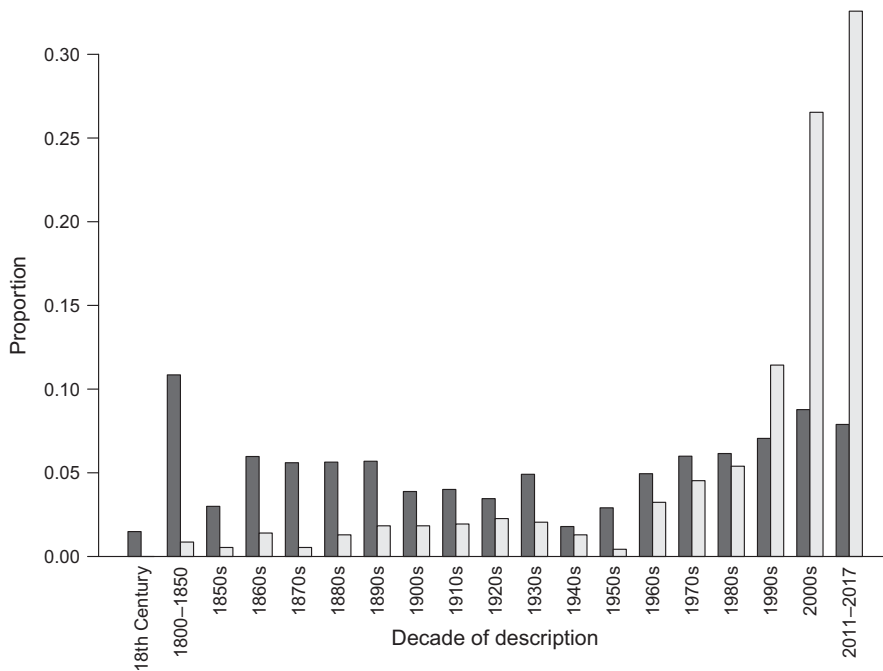


FIGURE 2 Decades when wide-ranging lizards (dark grey; 5,641 species) and species known only from their type localities (light grey; 927 species) were described. Frequency is the proportion of species in each category (TL-species and wider ranging species) described in a given decade

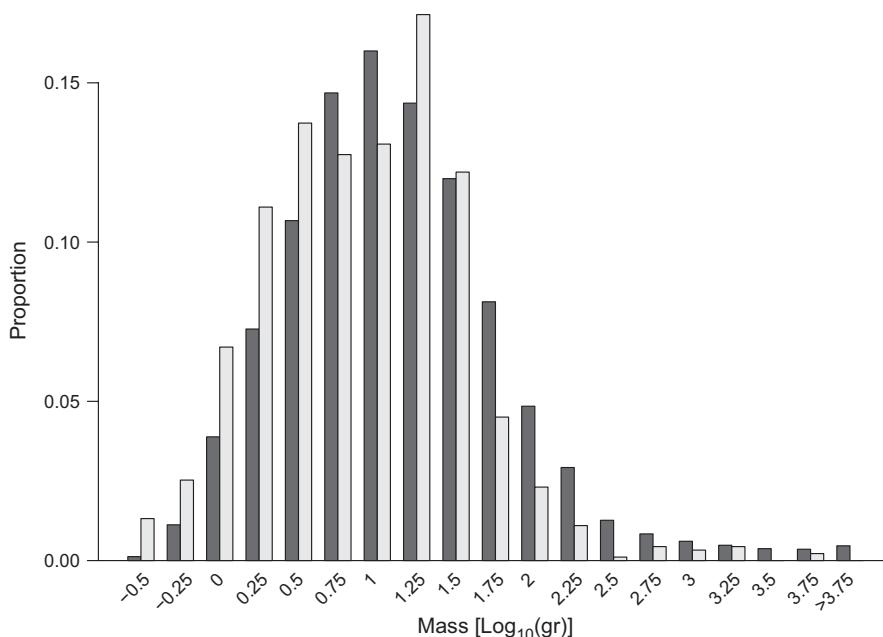


FIGURE 3 Maximum body masses of wide-ranging lizard species (dark grey, 5,634 species) and species known only from their type localities (light grey, 910 species). Frequency is the proportion of species in each category (TL-species and wider ranging species) in a given mass bin. Masses (in grams) are log-10 transformed

than those of wide-ranging species (by 34% and 49%, respectively; $t = -5.16$, $df = 873.8$, $p < .0001$).

Of the 927 species known only from their type locality, 625 (67%) have no IUCN assessment (as of September 2017). Of the 302 assessed species, 126 (42%) are data deficient (DD) and 93 (31%) are listed as threatened: 35 vulnerable (VU), 16 endangered (EN) and 42 critically endangered (CR). Seventy-seven species are classified as non-threatened (25%): 61 least concern (LC) and 16 near threatened (NT; IUCN 2017). The respective proportions for wide-ranging lizards are 11% DD, 19% threatened and 69% non-threatened species. The populations of 26 species are assessed as decreasing, and of 58 (including *Lipinia zamboangensis*, last seen in 1959, and the extinct

Tachygia microlepis) as stable. For most species, the population status is unknown (202 species) or has not been assessed (625 species). None are increasing.

Of the 171 species seen only before 1968, sixty-five have been assessed. Fifty-one are listed as data deficient. One African skink, *Panaspis helleri* (Loveridge 1932), is classified as least concern although as far as we are aware it is only known from its holotype (although a specimen in the Royal Museum for Central Africa [RMCA] from 2.70°S, 27.33°E, ~450 km from the type locality of *P. helleri* in Bugongo Ridge, Mt. Ruwenzori, DRC, may prove to also belong to this species, Danny Meirte, personal observation). Seven are listed as threatened (2 VU, 1 EN and 4 CR). Finally, the IUCN lists six species in our list as extinct

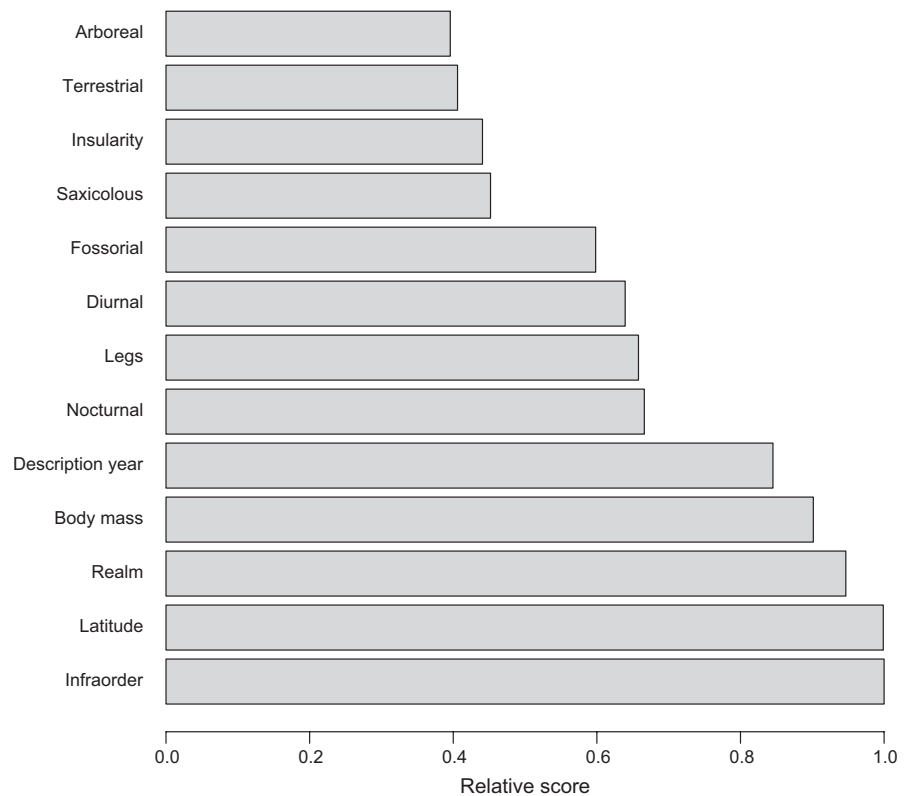


FIGURE 4 The relative importance of different traits in classifying lizards to the TL-species versus wider ranging species groups (555 and 4237 species in each group, respectively, for which data on all traits are known)

(*Celestus occiduus*, *Hoplodactylus delcourti*, *Leiocephalus herminieri*, *Leiocephalus eremitus*, *Tachygia microlepis* and *Tetradactylus eastwoodae*). Slavenko, Tallowin, Itescu, Raia, and Meiri (2016), however, lists 20 species known only from their type localities (2.2%) as extinct (as well as 20 extinct wide-ranging species; 0.4%).

4 | DISCUSSION

We found that 927 of the world's lizard species—nearly one in seven of the currently recognized 6,568 species—are known only from the lowest end of the range size spectrum, basically from their type locality alone. Furthermore, 736 of them have never been recorded after being described, which was more than 50 years ago for 162 of them. No fewer than 213 species are only known from a single specimen.

Many species may indeed have extremely small ranges, particularly the 64 species residing on islands with <10 km maximum linear extent (e.g., *Anolis ernestwilliamsi*, Lazell, 1983), as well as cave and rock-associated endemics (e.g., *Cyrtodactylus hontreensis*, Ngo et al., 2008). Others may be more wide-ranging but were either only recently described or elevated to species level, have cryptic lifestyles, or inhabit poorly surveyed or difficult-to-access regions. Our results highlight those species of lizards (and those regions, e.g., Indonesia; see Figure 1) that are in most desperate need of further work to assess their true ranges.

Our definition of a type locality, as an area with a maximum known linear extent of less than 10 km, is arbitrary. The range sizes of lizards in general, however, are distinctly bimodal, with a pronounced mode of tiny ranges (<30 km²), followed by a relatively symmetrical

distribution around 100,000 km² (Roll et al., 2017). Thus, although a type locality versus wider ranging dichotomy of some sort seems justified, there is nothing special about our chosen cut-off. A similar argument can be made regarding our decision to place the early versus late cut-off at 50 years ago. We arbitrarily chose this value to represent a time span that is about the same as a long career in herpetology and much longer than the lifespan of nearly all lizards (Scharf et al., 2015). It also approximately marks an era of expanded research into lizard systematics, with 44% of all lizard species described since 1967 (the median year is 1947). The 1950s and 1960s were a time of few lizard species descriptions (Figure 2, see also Pincheira-Donoso, Bauer, Meiri, & Uetz, 2013), and the 1960s and 1970s are often thought to be when global warming started to strongly affect the phenology and ranges of organisms (e.g., Walther et al., 2002). Thus, contrasts based on these arbitrary numbers serve to illustrate important points: many lizards are known from single localities, and many of them have not been seen for a very long time, during which many important changes (e.g., habitat loss, climate change) have occurred.

4.1 | Taxonomic considerations

Some of the species in our dataset may not be real species but belong to other, better known and more widely ranging species (Isaac, Mallet, & Mace, 2004; Meiri & Mace, 2007). Many of the 'older' species we list here are known from very few specimens, and some have been lost. For example, the holotype (and only specimen) of *Chalcides pentadactylus* (Beddome, 1870) was lost before 1935 (Smith, 1935), and the holotype of *Lipinia miangensis* (Werner, 1910) was destroyed during World War II. Others are in a poor state of preservation (e.g., *Liolaemus*

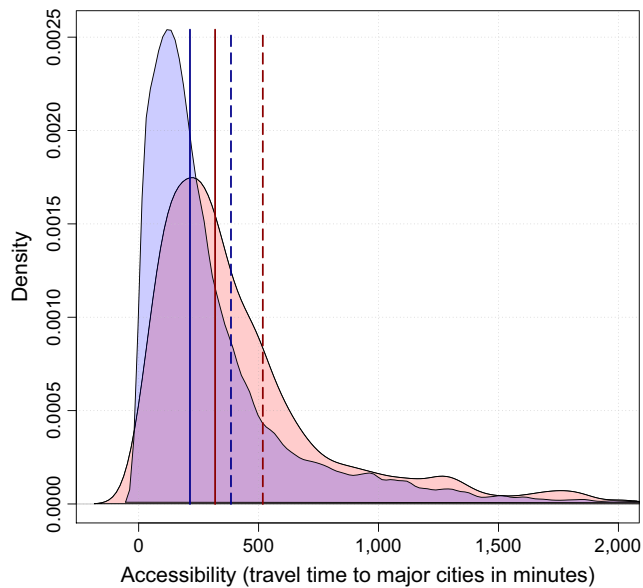


FIGURE 5 Accessibility of lizard species known only from type localities (pink, red lines) versus wide-ranging species (blue). The plots depict histograms of accessibility (= travel time to major cities, in minutes) of localities from which TL-species and wider ranging lizards are known (dashed lines: mean values, full lines: median values) [Colour figure can be viewed at wileyonlinelibrary.com]

melanopleurus, Pincheira-Donoso & Nuñez, 2005; *Capitellum parvicruzae*, Hedges & Conn, 2012). This makes it difficult to assess whether they are indeed distinct from other, better known and more widely ranging species. Even some recently described species are known from very old specimens that long remained unidentified in scientific collections. For example, *Mabuya guadeloupae* (Hedges & Conn, 2012) and *Hemidactylus endophis* (Carranza & Arnold, 2012) are based on specimens dating back to 1892 and 1887, respectively (Hedges & Conn, 2012; and Salvador Carranza, personal communication to Shai Meiri). This also likely means that they were kept in preservatives that left little DNA accessible for genetic analysis. That said, some of the species we identify as being known only from their type locality—especially those known just from the holotype—have long been known as requiring further taxonomic evaluation (e.g., *Leiopisma fasciolare*, *Salea gularis* and *Trachylepis betsileana*; Zug, 1985; Smith, 1935; Nussbaum, Raxworthy, & Ramanamanjato, 1999; respectively). Together with more survey work, taxonomic revision of some of these lizards is strongly warranted.

4.2 | Traits of lizards known only from their type localities

In general, TL-species have a unique set of attributes that distinguishes them from wider ranging species. We identify some traits that may make these species difficult to find, such as relatively small body size and nocturnal behaviour. It is important to interpret these findings cautiously given that, for example, the apparently small body size of most TL-species we list may be an artefact of the use of maxima to represent lizard sizes (Meiri, 2008). Coupled with small sample size, this will automatically result in small inferred body sizes

(Meiri, 2007). That said, the large effect size we identify (see above) makes it unlikely that all the size differences could be ascribed to sampling. Nocturnality may make lizards more difficult to detect, possibly meaning that the recent increased rate of finding nocturnal TL-species could reflect the increased use of head torches (which also resulted in finding new species of diurnal lizards, e.g., anoles and chameleons, which were detected sleeping on branches, e.g., Poe, Latella, Ayala-Varela, Yanez-Miranda, & Torres-Carvajal, 2015). It may also reflect the propensity of geckos to have narrow ranges, tropical distribution and nocturnal behaviour (Gamble, Greenbaum, Jackman, & Bauer, 2015; Meiri, 2016; Vidan et al., 2017). Indeed, the propensity of geckos to specialize in using specific and naturally isolated substrates (usually rocks; e.g., Giri, Bauer, Vyas, & Patil, 2009; Grismer, 2010; Heinicke, Jackman, & Bauer, 2017; Oliver, Bourke, Pratt, Doughty, & Moritz, 2016; Oliver & Doughty, 2016; Pauwels & Sumontha, 2014; Wood et al., 2017) and speciate where these are found may often predispose them to have very small ranges. Large, relatively continuous patches of habitat, such as Amazonia and the Sahara, on the other hand, harbour many lizard species (Roll et al., 2017), but relatively few TL-species (Figure 1).

Surprisingly, we did not find that burrowing lifestyle makes lizards more likely to have tiny ranges. Living underground may not only make species difficult to find, but may also seriously limit their dispersal abilities. The obligatory fossorial amphisbaenians, however, have a similar proportion of species known only from the type locality to that of non-fossorial lizards (31 species, 2.2% vs. 166, 3.3% of the more wide-ranging species). The mostly fossorial and secretive dibamids, however, have the highest ratio of TL-species of all lizard families. The high percentage of recently described geckos could have 'diluted' the signal of fossorial taxa. On the other hand, habitats used by fossorial reptiles are often extensive, whereas some exposed rock escarpments that specialized saxicolous lizards (e.g., many geckos) use are small and relatively stable over evolutionary time, mediating persistence. It should be noted, however, that many species known only from their type localities, especially some of the skinks, are so poorly studied that we have no data indicating whether they are fossorial or not.

4.3 | Threat status

By definition, species known from only a few specimens are also relatively little known. This is especially true for species known only from old records and from few or even single specimens. Thus, even though the IUCN guidelines explicitly say that "the liberal use of 'Data Deficient' is discouraged"; IUCN, 2017), DD is the most commonly ascribed status for the species we analysed here, and rightfully so. We suggest that DD species are probably rare (or they would be easier to ascribe to another category; cf. Bland & Böhm, 2016). We think that, until more data are gathered, species known only from a single specimen cannot be ascribed any status other than DD—or extinct. They may reasonably be listed as threatened if their habitat is known to be deteriorating, but then perhaps they are already extinct. If their habitat is large and relatively intact they may well be doing fine, but current knowledge probably precludes us from making any strong

inference. Forty-six species in our list (Appendix S1) are assessed as non-threatened despite being known only from their original description. Four of them (*Panaspis helleri*, *Liolaemus lopezi*, *Adercosaurus vix-adnexus* and *Loxopholis hoogmoedi*) are assessed as least concern while being known from just one individual (but see above for *P. helleri*). We suggest they may not be sufficiently well known to merit such a positive assessment.

Species known only from a single locality, especially if they have not been seen for a long time, may already be extinct. Only six species in our list are formally recognized as extinct by the IUCN. Red listing is not yet complete for reptiles (only 51%, 5,338 of >10,500 species as of May 2017), and several species most likely extinct (e.g., *Phelsuma edwardnewtoni*) are not yet listed by the IUCN. Twenty species we identify here (Appendix S1) as being known only from their type localities were listed as extinct by Slavenko et al. (2016). These include forms that have not been seen for decades, despite repeated surveys (e.g., *Alinea lanceolata*, Hedges & Conn, 2012), and species that were recently described based on old specimens (e.g., *Tarentola albertschwartzi*, Sprackland & Swinney, 1998; and many of the skinks described by Hedges and Conn (2012), such as *Mabuya guadeloupae* and *Capitellum parvicruzae*). In contrast, Slavenko et al. (2016) identify exactly the same number (20) of extinctions in species we consider more wide ranging. Thus species known only from the type locality are seven times more likely to have gone extinct than wider ranging ones. Even these numbers may underestimate the actual extinction rates of species known only from the type locality—as many of them were not seen for decades. We suggest that species not seen for 50 years or more should be reviewed as a matter of priority by the IUCN and are surveyed for in their last (and only) known locality by conservation agencies and herpetologists alike.

5 | CONCLUSIONS

Range-restricted species, i.e. true narrow endemics, are critical for the study of evolution, bioregionalization processes, small-population ecology and conservation (Nogueira, Ribeiro, Costa, & Colli, 2011; Whittaker, Araújo, Jepson, Ladle, & Willis, 2005). In general, lizards (and amphibians) have much smaller ranges than other vertebrates (e.g., Anderson, 1984; Lewin et al., 2016; Roll et al., 2017). They may thus be particularly important proxies for patterns of endemism in other, poorly known narrow-ranging taxa (e.g., most invertebrate taxa). Our work demonstrates that we still poorly understand the status of even the narrow-ranging taxa already described—many may well be threatened, or even extinct, but at the moment, we simply lack adequate data to assess their status. At the same time, the rate of accumulation of newly described endemics is increasing (Figure 2), suggesting that endemism levels in many regions and habitats remain underestimated. Thus, above all else, this work underlines the critical importance of careful, targeted surveys in nature and of integrated taxonomic analyses, to refine our understanding of which narrow-ranging lizards are valid species, which are likely to be already extinct and which are in dire need of protection.

ACKNOWLEDGEMENTS

We thank Erez Maza for invaluable help in digitizing range maps. This study is supported by a BSF grant #2012143 to SM and AA. OT is supported by a BSF grant #2012143 to SM and AA. ID was supported by a Niche Research Grant from the Ministry of Higher Education, Government of Malaysia (NRGS/1087/2013(01)). UR is supported by the Kreitman Post-doctoral Fellowship at the Ben-Gurion University of the Negev, and the Shamir Fellowship of the Israeli Ministry of Science and Technology. We thank three anonymous referees for comments on an earlier version of this manuscript.

DATA ACCESSIBILITY

All data and references on the species known only from their type localities are included in Appendix S1.

ORCID

Shai Meiri  <http://orcid.org/0000-0003-3839-6330>

Paul Oliver  <http://orcid.org/0000-0003-4291-257X>

Uri Roll  <http://orcid.org/0000-0002-5418-1164>

REFERENCES

- Agosta, S. J., & Bernardo, J. (2013). New macroecological insights into functional constraints on mammalian geographical range size. *Proceedings of the Royal Society of London B*, 280, 20130140. <https://doi.org/10.1098/rspb.2013.0140>
- Anderson, S. (1984). Areography of North American fishes, amphibians and reptiles. *American Museum Novitates*, 2802, 1–16.
- Bauer, A. M. (2016). On the taxonomic status of two enigmatic southern African fossorial skinks, *Scelotes bicolor* and *S. schebeni*. *African Journal of Herpetology*, 65, 33–38. <https://doi.org/10.1080/21564574.2016.1138149>
- Beddome, R. H. (1870). Descriptions of some new lizards from the Madras Presidency. *Madras Monthly Journal of Medical Science*, 1, 30–35.
- Bland, L. M., & Bohm, M. (2016). Overcoming data deficiency in reptiles. *Biological Conservation*, 204, 16–22. <https://doi.org/10.1016/j.biocon.2016.05.018>
- Brown, J. H. (1984). On the relationship between abundance and distribution of species. *The American Naturalist*, 124, 255–279. <https://doi.org/10.1086/284267>
- Carranza, S., & Arnold, E. N. (2012). A review of the geckos of the genus *Hemidactylus* (Squamata: Gekkonidae) from Oman based on morphology, mitochondrial and nuclear data, with descriptions of eight new species. *Zootaxa*, 3378, 1–95.
- Caughley, G. (1994). Directions in conservation biology. *Journal of Animal Ecology*, 63, 215–244. <https://doi.org/10.2307/5542>
- Chen, I. C., Hill, J. K., Ohlemuller, R., Roy, D. B., & Thomas, C. D. (2011). Rapid range shifts of species associated with high levels of climate warming. *Science*, 333, 1024–1026. <https://doi.org/10.1126/science.1206432>
- Collen, B., Purvis, A., & Gittleman, J. L. (2004). Biological correlates of description date in carnivores and primates. *Global Ecology and Biogeography*, 13, 459–467. <https://doi.org/10.1111/j.1466-822x.2004.00121.x>
- Colli, G. R., Fenker, J., Tedeschi, L. G., Barreto-Lima, A. F., Mott, T., & Ribeiro, S. L. B. (2016). In the depths of obscurity: Knowledge gaps and extinction risk of Brazilian worm lizards (Squamata, Amphisbaenidae).

- Biological Conservation, 204, 51–62. <https://doi.org/10.1016/j.biocon.2016.07.033>
- Costello, M. J., Lane, M., Wilson, S., & Houlding, B. (2015). Factors influencing when species are first named and estimating global species richness. *Global Ecology and Conservation*, 4, 243–254. <https://doi.org/10.1016/j.gecco.2015.07.001>
- Culp, M., Johnson, K., & Michailidis, G. (2016) *ada: The R Package Ada for Stochastic Boosting. R package version 2.0-5*. Retrieved from <https://CRAN.R-project.org/package=ada>
- Currie, D. J., & Venne, S. (2017). Climate change is not a major driver of shifts in the geographical distributions of North American birds. *Global Ecology and Biogeography*, 26, 333–346. <https://doi.org/10.1111/geb.12538>
- Diniz-Filho, J. A. F., Bastos, R. P., Rangel, T. F. L. V. B., Bini, L. M., Carvalho, P., & Silva, R. J. (2005). Macroecological correlates and spatial patterns of anuran description dates in the Brazilian Cerrado. *Global Ecology & Biogeography*, 13, 1–5.
- Ellis, M., & Pauwels, O. S. G. (2012). The bent-toed geckos (*Cyrtodactylus*) of the caves and karst of Thailand. *Cave and Karst Science*, 39, 16–22.
- ESRI (2011). *ArcGIS Desktop: Release 10*. Redlands, CA: Environmental Systems Research Institute.
- Feldman, A., Sabath, N., Pyron, R. A., Mayrose, I., & Meiri, S. (2016). Body-sizes and diversification rates of lizards, snakes, amphisbaenians and the tuatara. *Global Ecology and Biogeography*, 25, 187–197. <https://doi.org/10.1111/geb.12398>
- Friedman, J., Hastie, T., & Tibshirani, R. (2000). Additive logistic regression: A statistical view of boosting (with discussion and a rejoinder by the authors). *The Annals of Statistics*, 28, 337–407. <https://doi.org/10.1214/aos/1016218223>
- Gamble, T., Greenbaum, E., Jackman, T. R., & Bauer, A. M. (2015). Into the light: Diurnality has evolved multiple times in geckos. *Biological Journal of the Linnean Society*, 115, 896–910. <https://doi.org/10.1111/bij.12536>
- Gaston, K. J. (2003). *The structure and dynamics of geographic ranges*. Oxford, UK: Oxford University Press.
- Gaston, K. J., Blackburn, T. M., & Loder, N. (1995). Which species are described first?: The case of North American butterflies. *Biodiversity and Conservation*, 4, 119–127. <https://doi.org/10.1007/BF00137780>
- Giri, V., Bauer, A. M., Vyas, R., & Patil, S. (2009). New species of rock-dwelling *Hemidactylus* (Squamata: Gekkonidae) from Gujarat, India. *Journal of Herpetology*, 43, 385–393. <https://doi.org/10.1670/08-137.R1.1>
- Gray, J. E. (1831). A synopsis of the species of class Reptilia. In E. Griffith, & E. Pidgeon (Eds.), *The animal kingdom arranged in conformity with its organisation by the Baron Cuvier with additional descriptions of all the species hitherto named, and of many before noticed* (pp. 481 + 110). London, UK: Whittaker, Treacher & Co.
- Grismer, L. L. (2010). The first record of the genus *Cnemaspis* Strauch (Squamata: Gekkonidae) from Laos with the description of a new species. *Zootaxa*, 2475, 55–63.
- Grismer, L. L., Wood, P. L., Onn, C. K., Anuar, S., & Muin, M. A. (2014). Cyrtos in the city: A new Bent-toed Gecko (Genus *Cyrtodactylus*) is the only endemic species of vertebrate from Batu Caves, Selangor, Peninsular Malaysia. *Zootaxa*, 3774, 381–394. <https://doi.org/10.11646/zootaxa.3774.4>
- Hastie, T., Tibshirani, R., & Friedman, J. (2001). *The elements of statistical learning*, 2nd ed. New York, NY: Springer. <https://doi.org/10.1007/978-0-387-21606-5>
- Hedges, S. B., & Conn, C. E. (2012). A new skink fauna from Caribbean islands (Squamata, Mabuyidae, Mabuyinae). *Zootaxa*, 3288, 1–244.
- Heinicke, M. P., Jackman, T. R., & Bauer, A. M. (2017). The measure of success: Geographic isolation promotes diversification in *Pachydactylus* geckos. *BMC Evolutionary Biology*, 17, 9. <https://doi.org/10.1186/s12862-016-0846-2>
- Isaac, N. J. B., Mallet, J., & Mace, G. M. (2004). Taxonomic inflation: Its influence on macroecology and conservation. *Trends in Ecology and Evolution*, 19, 464–469. <https://doi.org/10.1016/j.tree.2004.06.004>
- IUCN (2017). *The IUCN Red List of Threatened Species. Version 2017-1*. Retrieved from <http://www.iucnredlist.org>
- Lewin, A., Feldman, A., Bauer, A. M., Belmaker, J., Broadley, D. G., Chirio, L., ... Meiri, S. (2016). Patterns of species richness, endemism and environmental gradients of African reptiles. *Journal of Biogeography*, 43, 2380–2390. <https://doi.org/10.1111/jbi.12848>
- Lyons, S. K. (2003). A quantitative assessment of the range shifts of Pleistocene mammals. *Journal of Mammalogy*, 84, 385–402. [https://doi.org/10.1644/1545-1542\(2003\)084\[0385:AQAOTR\]2.0.CO;2](https://doi.org/10.1644/1545-1542(2003)084[0385:AQAOTR]2.0.CO;2)
- MacArthur, R. H., & Wilson, E. O. (1967). *The theory of island biogeography*. Princeton, NJ: Princeton University Press.
- Meiri, S. (2007). Size evolution in island lizards. *Global Ecology and Biogeography*, 16, 702–708. <https://doi.org/10.1111/j.1466-8238.2007.00327.x>
- Meiri, S. (2008). Evolution and ecology of lizard body sizes. *Global Ecology and Biogeography*, 17, 724–734. <https://doi.org/10.1111/j.1466-8238.2008.00414.x>
- Meiri, S. (2016). Small, rare and trendy: Traits and biogeography of lizards described in the 21st century. *Journal of Zoology*, 299, 251–261. <https://doi.org/10.1111/jzo.12356>
- Meiri, S., Bauer, A. M., Chirio, L., Colli, G. R., Das, I., Doan, T. M., ... Van Damme, R. (2013). Are lizards feeling the heat? A tale of ecology and evolution under two temperatures. *Global Ecology and Biogeography*, 22, 834–845. <https://doi.org/10.1111/geb.12053>
- Meiri, S., Brown, J. H., & Sibly, R. M. (2012). The ecology of lizard reproductive output. *Global Ecology and Biogeography*, 21, 592–602. <https://doi.org/10.1111/j.1466-8238.2011.00700.x>
- Meiri, M., Lister, A. M., Higham, T. F. G., Stewart, J. R., Straus, L. G., Obermaier, H., ... Barnes, I. (2013). Late-glacial recolonization and phylogeography of European red deer (*Cervus elaphus* L.). *Molecular Ecology*, 22, 4711–4722. <https://doi.org/10.1111/mec.12420>
- Meiri, S., & Mace, G. M. (2007). New taxonomy and the origin of species. *PLoS Biology*, 5, 1385–1386.
- Moody, S. M. (1988). Rediscovery and taxonomic identity of *Oreoderia gracilipes* Girard 1857 (Lacertilia, Agamidae). *Herpetologica*, 44, 108–113.
- Myers, C. W., & Donnelly, M. A. (2001). Herpetofauna of the Yutaje–Corocoro Massif, Venezuela: Second report from the Robert G. Goelet American Museum-Terramar expedition to the northwestern Tepuis. *Bulletin of the American Museum of Natural History*, 261, 1–85. [https://doi.org/10.1206/0003-0090\(2001\)261\[0001:HOTYCM\]2.0.CO;2](https://doi.org/10.1206/0003-0090(2001)261[0001:HOTYCM]2.0.CO;2)
- Nelson, A. (2008). *Estimated travel time to the nearest city of 50,000 or more people in year 2000*. Ispra, Italy: Global Environment Monitoring Unit – Joint Research Centre of the European Commission. Retrieved from <http://forbs.jrc.ec.europa.eu/products/gam/>
- Nogueira, C., Ribeiro, S. R., Costa, G. C., & Colli, G. R. (2011). Vicariance and endemism in a Neotropical savanna hotspot: Distribution patterns of Cerrado squamate reptiles. *Journal of Biogeography*, 38, 1907–1922. <https://doi.org/10.1111/j.1365-2699.2011.02538.x>
- Novosolov, M., & Meiri, S. (2013). The effect of island type on lizard reproductive traits. *Journal of Biogeography*, 40, 2385–2395. <https://doi.org/10.1111/jbi.12179>
- Novosolov, M., Rodda, G. H., North, A. C., Butchart, S. H. M., Tallowin, O. J. S., Gainsbury, A. M., & Meiri, S. (2017). Population density–range size relationship revisited. *Global Ecology and Biogeography*, 26, 1088–1097. <https://doi.org/10.1111/geb.12617>
- Nussbaum, R. A., Raxworthy, C. J., & Ramanamanjato, J. B. (1999). Additional species of *Mabuya* Fitzinger (Reptilia: Squamata: Scincidae) from western Madagascar. *Journal of Herpetology*, 33, 264–280. <https://doi.org/10.2307/1565724>
- Oliver, P. M., Bourke, G., Pratt, R. C., Doughty, P., & Moritz, C. (2016). Systematics of small *Gehyra* (Squamata: Gekkonidae) of the southern Kimberley, Western Australia: Redescription of *G. kimberleyi* Börner & Schüttler, 1983 and description of a new restricted range species. *Zootaxa*, 4107, 47–64.
- Oliver, P. M., & Doughty, P. (2016). Systematic revision of the marbled velvet geckos (*Oedura marmorata* species complex, Diplodactylidae)

- from the Australian arid and semi-arid zones. *Zootaxa*, 4088, 151–176. <https://doi.org/10.11646/zootaxa.4088.2>
- Olson, D. M., Loucks, C. J., Dinerstein, E., Wikramanayake, E. D., Burgess, N. D., Powell, G. V. N., ... Kassem, K. R. (2001). Terrestrial ecoregions of the world: A new map of life on earth. *BioScience*, 51, 933–938. [https://doi.org/10.1641/0006-3568\(2001\)051\[0933:TEOTWA\]2.0.CO;2](https://doi.org/10.1641/0006-3568(2001)051[0933:TEOTWA]2.0.CO;2)
- Pauwels, O. S. G., & Sumontha, M. (2014). *Cyrtodactylus samroiyot*, a new limestone-dwelling Bent-toed Gecko (Squamata: Gekkonidae) from Prachuap Khiri Khan Province, peninsular Thailand. *Zootaxa*, 3755, 573–583. <https://doi.org/10.11646/zootaxa.3755.6>
- Pimm, S. L., & Jenkins, C. N. (2010). Extinctions and the practice of preventing them. In N. S. Sodhi & P. R. Ehrlich (Eds.), *Conservation biology for all* (pp. 181–198). Oxford, UK: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199554232.001.0001>
- Pincheira-Donoso, D., Bauer, A. M., Meiri, S., & Uetz, P. (2013). Global taxonomic diversity of living reptiles. *PLoS ONE*, 8(3), e59741. <https://doi.org/10.1371/journal.pone.0059741>
- Pincheira-Donoso, D., & Nuñez, H. (2005). *Las especies chilenas del genero Liolaemus (Iguania, Tropiduridae, Liolaeminae). Taxonomia, sistematica y evolucion*. Santiago, Chile: Publicacion Ocasional del Museo Nacional de Historia Natural de Chile. 486 pp.
- Poe, S., Latella, I., Ayala-Varela, F., Yanez-Miranda, C., & Torres-Carvajal, O. (2015). A new species of phenacosaur *Anolis* (Squamata; Iguanidae) from Peru and a comprehensive phylogeny of *Dactyloa*-clade *Anolis* based on new DNA sequences and morphology. *Copeia*, 103, 639–650. <https://doi.org/10.1643/CH-14-127>
- Purvis, A., Gittleman, G. L., Cowlinshaw, G., & Mace, G. M. (2000). Predicting extinction risk in declining species. *Proceedings of the Royal Society of London B*, 267, 1947–1952. <https://doi.org/10.1098/rspb.2000.1234>
- Pyron, R. A., & Burbrink, F. T. (2014). Early origin of viviparity and multiple reversions to oviparity in squamate reptiles. *Ecology Letters*, 17, 13–21. <https://doi.org/10.1111/ele.12168>
- Roll, U., Feldman, A., Novosolov, M., Allison, A., Bauer, A., Bernard, R., ... Meiri, S. (2017). The global distribution of tetrapods reveals a need for targeted reptile conservation. *Nature Ecology & Evolution*, 1, 1677–1682. <https://doi.org/10.1038/s41559-017-0332-2>
- Ruggiero, A., & Werenkraut, V. (2007). One-dimensional analyses of Rapoport's rule reviewed through meta-analysis. *Global Ecology and Biogeography*, 16, 401–414. <https://doi.org/10.1111/geb.2007.16.issue-4>
- Scharf, I., Feldman, A., Novosolov, M., Pincheira-Donoso, D., Das, I., Bohm, M., ... Meiri, S. (2015). Late bloomers and baby boomers: Ecological drivers of longevity in squamates and the tuatara. *Global Ecology and Biogeography*, 24, 396–405. <https://doi.org/10.1111/j.1466-8238.2006.00303.x>
- Slavenko, A., Tallon, O. J. S., Itescu, Y., Raia, P., & Meiri, S. (2016). Late Quaternary reptile extinctions: Size matters, insularity dominates. *Global Ecology and Biogeography*, 25, 1308–1320. <https://doi.org/10.1111/geb.12491>
- Smith, M. A. (1935). *The fauna of British India, including Ceylon and Burma. Reptilia and Amphibia. Vol. II. Sauria*. London, UK: Taylor & Francis.
- Sprackland, R. G., & Swinney, G. N. (1998). A new species of giant gecko of the genus *Tarentola* (Reptilia: Squamata: Gekkonidae) from Jamaica. *Journal of Zoology*, 245, 73–78. <https://doi.org/10.1017/s09528336998005081>
- Uetz, P. (2017). *The reptile database*. Retrieved from <http://reptile-database.reptarium.cz>
- Vidan, E., Roll, U., Bauer, A. M., Grismer, L. L., Guo, P., Maza, E., Novosolov, M., Sindaco, R., Wagner, P., Belmaker, J., and Meiri, S. (2017). The Eurasian hot nightlife—Environmental forces associated with nocturnality in lizards. *Global Ecology & Biogeography*, 26, 1316–1325. <https://doi.org/10.1111/geb.12643>
- Wallace, A. R. (1859). The geographical distribution of birds. *Ibis*, 1, 449–454.
- Wallace, A. R. (1876). *The geographical distribution of animals, with a study of the relation of living and extinct faunas as elucidating the past changes of the earth's surface*. London, UK: Macmillan and Co..
- Walther, G. R., Post, E., Convey, P., Menzel, A., Parmesan, C., Beebee, T. J., ... Bairlein, F. (2002). Ecological responses to recent climate change. *Nature*, 416, 389–395. <https://doi.org/10.1038/416389a>
- Werner, F. (1910). Über neue oder seltene reptilien des Naturhistorischen Museums in Hamburg. ii. Eidechsen. *Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten*, 27(Suppl. 2), 1–46.
- Whittaker, R. J., Araújo, M. B., Jepson, P., Ladle, R. J., & Willis, K. J. (2005). Conservation biogeography: Assessment and prospect. *Diversity and Distributions*, 11, 3–23. <https://doi.org/10.1111/j.1366-9516.2005.00143.x>
- Wood, P. L., Grismer, L. L., Aowphol, A., Aguilar, C. A., Cota, M., Grismer, M. S., ... Sites, J. W. (2017). Three new karst-dwelling *Cnemaspis* Strauch, (1887) (Squamata; Gekkonidae) from Peninsular Thailand and the phylogenetic placement of *C. punctatounuchalis* and *C. vandeventeri*. *PeerJ*, 5, e2884. <https://doi.org/10.7717/peerj.2884>
- Zug, G. R. (1985). Pacific island lizards: Status of type specimens from the US Exploring Expedition 1838–1842. *Copeia*, 1985, 150–154. <https://doi.org/10.2307/1444804>

BIOSKETCH

The research team is dedicated to the study of lizard taxonomy, biology and biogeography, as well as to lizard conservation.

Author contributions: S.M. conceived and designed the study, U.R. and S.M. analysed the data, all the authors helped collect and verify the data, S.M. wrote the manuscript. All the authors helped the writing.

SUPPORTING INFORMATION

Additional Supporting Information may be found online in the supporting information tab for this article.

How to cite this article: Meiri S, Bauer AM, Allison A, et al.

Extinct, obscure or imaginary: The lizard species with the smallest ranges. *Divers Distrib*. 2018;24:262–273. <https://doi.org/10.1111/ddi.12678>

species	only type	year of description	last seen	last date	source for last date seen	Region	Range	Latitude	Longitude	activity time	substrate	Family	Accessability (minutes travel)	last mass (g)	Source for geographic data	IUCN Status	RUCN	population trend (al. 2016)	status (Slavenko et al. 2016)	notes
<i>Abronia anzeleti</i>	description	1993	1974	recent	Campbell and Frost 1993	Neotropic	Guatemala	14.44	-90.73	Diurnal	Aboveal	Anguidae	Diplglossa	1.65	93	Campbell and Brodie 1999	VU	unknown	extant	
<i>Abronia frosti</i>	locality	1998	2009	recent	Ariano-Sanchez et al. 2011	Neotropic	Guatemala	15.86	-91.52	Diurnal	Aboveal	Anguidae	Diplglossa	1.34	312	Kahler et al. 1998	CR	decreasing	extant	
<i>Abronia lewisi</i>	specimen	1993	1937	early	Campbell and Frost 1993	Neotropic	Mexico	16.45	-92.13	NA	Aboveal	Anguidae	Diplglossa	1.27	84	Kahler 2003	DD	unknown	extant	
<i>Abronia melanos</i>	description	1999	1992	recent	Campbell and Brodie 1999	Neotropic	Guatemala	14.53	-90.12	Diurnal	Aboveal	Anguidae	Diplglossa	1.53	122	Campbell and Brodie 1999	EN	unknown	extant	
<i>Abronia michelii</i>	specimen	1982	1974	recent	Campbell 1982	Neotropic	Mexico	17.56	-96.48	NA	NA	Anguidae	Diplglossa	1.27	243	NatureServe, IUCN	DD	unknown	extant	
<i>Abronia ochotermi</i>	description	1939	1936	early	RUCN	Neotropic	Mexico	16.35	-92.14	Diurnal	Aboveal	Anguidae	Diplglossa	1.39	45	Kahler 2003	DD	unknown	extant	
<i>Abronia ornata</i>	locality	1984	1985	recent	RUCN	Neotropic	Mexico	16.68	-94.14	Diurnal	Aboveal	Anguidae	Diplglossa	1.15	1282	Kahler 2003	DD	unknown	extant	
<i>Abronia ramsayi</i>	specimen	1994	1990	recent	Campbell 1994	Neotropic	Mexico	16.33	-93.89	Diurnal	Aboveal	Anguidae	Diplglossa	1.47	299	Kahler 2003	DD	unknown	extant	
<i>Acanthodactylus almuiddisti</i>	specimen	2004	1936	early	Werner 2004	Palaearctic	Jordan	31.50	36.00	Diurnal	NA	Lacertidae	Lacertoides	1.05	161	Werner 2004	EN	decreasing	extant	
<i>Acanthosaurus bitangensis</i>	description	2009	2008	recent	Wood et al. 2009	Oriental	Peninsular Malaysia	4.86	100.81	Diurnal	Aboveal	Agamidae	Acrodactyla	2.00	116	Wood et al. 2009, Grismer 2011	NA	NE	extant	
<i>Acanthosaurus brachypoda</i>	specimen	2011	2008	recent	Anisuya et al. 2011	Oriental	Vietnam	16.46	106.46	Diurnal	Aboveal	Agamidae	Acrodactyla	1.74	290	Anisuya et al. 2011	NA	NE	extant	
<i>Acanthis schmitzi</i>	specimen	2012	2000	recent	Wagner et al. 2012	Neotropic	Zambia	-15.23	23.24	NA	Aboveal	Scincidae	Scincoides	0.95	610	Wagner et al. 2012	NA	NE	extant	
<i>Adrenosaurus viadnaensis</i>	specimen	2001	1995	recent	Myers and Donnelly 2001	Neotropic	Venezuela	5.77	-66.13	NA	NA	Gymnophthalmidae	Lacertoides	0.57	7432	Myers and Donnelly 2001	LC	unknown	extant	
<i>Afrodura granatica</i>	description	2014	2012	recent	Jacobson et al. 2014	Afrotronic	South Africa	-24.07	30.84	NA	Saxicolous	Gekkonidae	Gekkotia	0.63	339	Jacobson et al. 2014	NA	NE	extant	
<i>Afrodura randofolei</i>	description	2014	1991	recent	Jacobson et al. 2014	Afrotronic	South Africa	-24.57	30.83	NA	Saxicolous	Gekkonidae	Gekkotia	0.56	878	Jacobson et al. 2014	NA	NE	extant	
<i>Agama lucayae</i>	description	2011	1984	early	Wagner and Bauer 2011	Afrotronic	Ethiopia	7.27	37.38	NA	NA	Agamidae	Acrodactyla	0.80	474	Kissling et al. 2016	NA	NE	extant	
<i>Alania lanceolata</i>	locality	1862	1889	early	Hedges and Conn 2012	Neotropic	Barbados	13.07	-59.54	NA	NA	Scincidae	Scincoides	1.24	49	Hedges and Conn 2012	NA	NE	extinct	
<i>Alania luciae</i>	description	1887	1887 or earlier	early	inferred from date of description	Neotropic	St. Lucia	13.89	-60.97	NA	NA	Scincidae	Scincoides	1.45	73	Miralles et al. 2009	NA	NE	extinct	
<i>Alapoglossus lehmanni</i>	description	1984	1962	early	Ayala and Harris 1984	Neotropic	Colombia	4.00	-76.98	Diurnal	Terrestrial	Gymnophthalmidae	Lacertoides	-0.15	104	Fernando-Castro Herrera	NA	NE	extant	
<i>Anetia provatae</i>	specimen	1995	1995	recent	Garcia-Perez 1995	Neotropic	Venezuela	8.48	-71.33	Diurnal	Terrestrial	Teiidae	Lacertoides	1.88	300	Garcia-Perez 1995	EN	decreasing	extant	
<i>Amphiosaurus decaryi</i>	locality	1930	2011	recent	RUCN	Madagascar	Madagascar	-25.03	47.00	NA	NA	Scincidae	Scincoides	0.15	266	RUCN	EN	unknown	extant	
<i>Amphiosaurus mandaty</i>	specimen	2002	1999	recent	Andreone and Greer 2002	Madagascar	Madagascar	-13.38	49.99	Nocturnal	Terrestrial	Scincidae	Scincoides	0.22	1769	Andreone and Greer 2002	DD	unknown	extant	
<i>Amphiosaurus spinolichus</i>	description	2002	1996	recent	Andreone and Greer 2002	Madagascar	Madagascar	-14.91	49.71	Nocturnal	Terrestrial	Scincidae	Scincoides	1.05	1674	Andreone and Greer 2002	DD	unknown	extant	
<i>Amphiosaurus stylus</i>	specimen	2002	1999	recent	Andreone and Greer 2002	Madagascar	Madagascar	-15.38	49.99	Nocturnal	NA	Scincidae	Scincoides	NA	2018	Andreone and Greer 2002	DD	unknown	extant	
<i>Amphiosaurus abuberi</i>	description	2001	1993	recent	Strassmann and Carvalho 2001	Neotropic	Brazil	-16.17	-57.08	NA	Fossorial	Amphibaenidae	Amphibaenia	0.90	22	Colli et al. 2016	DD	unknown	extant	
<i>Amphiosaurus acrobates</i>	specimen	2009	2003	recent	Ribeiro et al. 2009	Neotropic	Brazil	-16.01	-46.77	NA	Fossorial	Amphibaenidae	Amphibaenia	NA	254	Colli et al. 2016	NA	NE	extant	
<i>Amphiosaurus arda</i>	specimen	2003	2000	recent	Ribeiro 2002	Neotropic	Brazil	-10.82	-42.87	NA	Fossorial	Amphibaenidae	Amphibaenia	1.19	346	Colli et al. 2016	NA	NE	extant	
<i>Amphiosaurus bagul</i>	description	2015	2002	recent	Ribeiro et al. 2015	Neotropic	Argentina	-26.18	-58.94	NA	Fossorial	Amphibaenidae	Amphibaenia	1.24	217	Ribeiro et al. 2015	NA	NE	extant	
<i>Amphiosaurus brevis</i>	specimen	2003	2003	recent	Strassmann and Mott 2009	Neotropic	Brazil	-14.96	-55.07	NA	Fossorial	Amphibaenidae	Amphibaenia	0.91	129	Colli et al. 2016	NA	NE	extant	
<i>Amphiosaurus carligami</i>	description	1998	1994	recent	Thomas and Hedges 1998	Neotropic	Cuba	19.86	-77.72	NA	Fossorial	Amphibaenidae	Amphibaenia	0.27	181	Thomas and Hedges 1998	NA	NE	extant	
<i>Amphiosaurus cayennae</i>	description	2006	1971	recent	Thomas and Hedges 2006	Neotropic	Hispánica: Haiti	18.61	-73.72	NA	Fossorial	Amphibaenidae	Amphibaenia	0.74	166	Thomas and Hedges 2006	NA	NE	extant	
<i>Amphiosaurus ceradensis</i>	description	2008	2006	recent	Ribeiro et al. 2008	Neotropic	Brazil	-18.66	-51.87	NA	Fossorial	Amphibaenidae	Amphibaenia	1.71	129	Ribeiro et al. 2008	NA	NE	extant	
<i>Amphiosaurus lewisi</i>	specimen	1994	1991	recent	Thomas and Hedges 2006	Neotropic	Hispánica: Haiti	18.53	-73.78	NA	Fossorial	Amphibaenidae	Amphibaenia	0.74	133	Thomas and Hedges 2006	NA	NE	extant	
<i>Amphiosaurus metallurga</i>	description	2015	2009	recent	Costa et al. 2015	Neotropic	Brazil	-18.90	-43.42	NA	Fossorial	Amphibaenidae	Amphibaenia	0.38	209	Colli et al. 2016	NA	NE	extant	
<i>Amphiosaurus myersi</i>	specimen	1989	1963	early	Hogmoed 1989	Neotropic	Surinam	5.42	-54.98	NA	Fossorial	Amphibaenidae	Amphibaenia	0.47	236	Vanzolini 2002	NA	NE	extant	
<i>Amphiosaurus peraphone</i>	description	2014	2010	recent	Pina et al. 2014	Neotropic	Brazil	-13.88	-45.70	NA	Fossorial	Amphibaenidae	Amphibaenia	0.20	711	Colli et al. 2016	NA	NE	extant	
<i>Amphiosaurus polyzona</i>	specimen	1990	1980 or earlier	early	inferred from date of description	Neotropic	Peru	-11.07	-75.32	NA	Fossorial	Amphibaenidae	Amphibaenia	0.79	213	Vanzolini 2002	DD	unknown	extant	
<i>Amphiosaurus rozei</i>	description	1963	1953	early	Lancieri 1963	Neotropic	Venezuela	5.50	-64.67	NA	Fossorial	Amphibaenidae	Amphibaenia	0.54	3258	Vanzolini 2002	NA	NE	extant	
<i>Amphiosaurus sanctae</i>	specimen	1994	1974	early	Vanzolini 1994	Neotropic	Brazil	-21.70	-47.47	NA	Fossorial	Amphibaenidae	Amphibaenia	0.24	60	Colli et al. 2016	NA	NE	extant	
<i>Amphiosaurus tallegari</i>	description	1922	1922	early	Parham 1922	Neotropic	Guayana	-5.82	-52.12	NA	Fossorial	Amphibaenidae	Amphibaenia	1.40	528	Vanzolini 2002	NA	NE	extant	
<i>Amphiosaurus ulmeri</i>	specimen	1995	1994	recent	Vanzolini 1995a	Neotropic	Brazil	-15.82	-52.17	NA	Fossorial	Amphibaenidae	Amphibaenia	-0.55	273	Colli et al. 2016	NA	NE	extant	
<i>Amphiosaurus tragorhynchus</i>	specimen	1971	1968	recent	Vanzolini 1971	Neotropic	Brazil	-1.77	-55.85	NA	Fossorial	Amphibaenidae	Amphibaenia	-0.47	366	Colli et al. 2016	DD	unknown	extant	
<i>Amphiosaurus urumai</i>	locality	2008	2011	recent	Mot et al. 2011	Neotropic	Brazil	-13.15	-41.40	NA	Fossorial	Amphibaenidae	Amphibaenia	0.22	467	Colli et al. 2016	NA	NE	extant	
<i>Amphiosaurus ulmeri</i>	specimen	1987	1987	early	Harris and Ayala 1987	Neotropic	Colombia	10.68	-73.65	NA	Terrestrial	Gymnophthalmidae	Lacertoides	1.03	1772	Fernando-Castro Herrera	NA	NE	extant	
<i>Anadia hobarti</i>	description	1990	1987	recent	La Marca and Garcia-Perez 1990	Neotropic	Venezuela	9.23	-70.40	NA	NA	Gymnophthalmidae	Lacertoides	1.22	380	La Marca and Garcia-Perez 1990	NA	NE	extant	
<i>Aniella alexanderi</i>	description	2013	2011	recent	Neutric USA	Neotropic	USA	35.21	-119.57	NA	Fossorial	Aniellidae	Diplglossa	0.85	100	Papenfuss and Parham 2013	NA	NE	extant	
<i>Aniella campii</i>	description	2013	2011	recent	Papenfuss and Parham 2013	Neutric	USA	35.63	-117.96	NA	Fossorial	Aniellidae	Diplglossa	0.81	225	Papenfuss and Parham 2013	NA	NE	extant	
<i>Aniella capensis</i>	locality (Small Island)	1900	2006	recent	Lopez-Victoria et al. 2011	Neotropic	Colombia (Malpelo Island)	3.98	-81.00	Diurnal	Saxicolous	Dactyloidae	Pleurodonta	1.48	NA	The Reptile Database	NA	NE	extant	
<i>Aniella difformis</i>	description	1992	1990	recent	Garrido and Hedges 1992	Neotropic	Cuba	20.41	-75.05	Diurnal	Aboveal	Dactyloidae	Pleurodonta	0.00	156	Garrido and Hedges 1992	NA	NE	extant	
<i>Aniella olivacea</i>	locality	1933	1999	recent	vermet	Neotropic	la Isla Ajo-Velo	17.48	-71.64	Diurnal	Aboveal&Saxicolous	Dactyloidae	Pleurodonta	0.35	NA	Schwartz and Henderson 1991	NA	NE	extant	
<i>Aniella olivacea</i>	locality	1989	1989	recent	vermet	Neotropic	Cuba	19.98	-76.47	Diurnal	Aboveal	Dactyloidae	Pleurodonta	0.47	215	The Reptile Database	NA	NE	extant	
<i>Aniella ampligomus</i>	locality	1993	2009	recent	vermet	Neotropic	Honduras	15.43	-87.30	Diurnal	Aboveal&Terrestrial	Dactyloidae	Pleurodonta	0.41	107	McCrane et al. 1992	EN	decreasing	extant	
<i>Aniella bellipennis</i>	description	1996	1995	recent	Myers and Donnelly 1996	Neotropic	Venezuela	5.72	-65.90	Diurnal	Aboveal	Dactyloidae	Pleurodonta	0.86	7110	Myers and Donnelly 1996	NA	NE	extant	
<i>Aniella bicarum</i>	locality	1996	2010	recent	Logan et al. 2013	Neutric	Isla Uta	16.10	-86.52	Diurnal	Aboveal	Dactyloidae	Pleurodonta	2.94	120	Kahler 1996	NA	NE	extant	
<i>Aniella bicarum</i>	description	1990	1980	recent	Campo-Rodriguez and Lopez-Vidal 2007	Neotropic	Cuba	-77.14	-77.14	NA	Dactyloidae	Pleurodonta	0.76	153	Schwartz and Henderson 1991, Schett	NA	NE	extant		
<i>Aniella campbelli</i>	description	2008	1998	recent	Kohler and Smith 2008	Neotropic	Guatemala	16.00	-91.98	Diurnal	Terrestrial	Dactyloidae	Pleurodonta	0.46	288	Kohler and Smith 2008	NA	NE	extant	
<i>Aniella caquetae</i>	specimen	1974	1950	early	vermet	Neotropic	Colombia	0.04	-73.53	Diurnal	Aboveal	Dactyloidae	Pleurodonta	0.61	2634	ZSL, Monika Bohme	DD	unknown	extant	
<i>Aniella carolinensis</i>	specimen	1996	1984	early	Williams et al. 1996	Neotropic	Venezuela	5.20	-62.32	Diurnal	Saxicolous	Dactyloidae	Pleurodonta	0.55	1978	Williams et al. 1996a	NA	NE	extant	
<i>Aniella domes</i>	locality	1864	1966	early	vermet	Neotropic	Mexico	18.64	-96.32	NA	Aboveal	Dactyloidae	Pleurodonta	0.47	306	Fitch 1979	NA	NE	extant	
<i>Aniella dufrenoyi</i>	specimen	1982	1972	early	Garrido 1982	Neotropic	Cuba	21.85	-80.00	Diurnal	Aboveal	Dactyloidae	Pleurodonta	0.68	131	Schwartz and Henderson 1991, Schett	NA	NE	extant	
<i>Aniella demissa</i>	description	1969	1966	early	vermet	Neotropic	le Grande Caverme, Haiti	18.61	-73.79	NA	NA	Dactyloidae	Pleurodonta	0.96	157	Kohler and Hedges 2016	NA	NE	extant	
<i>Aniella desirochensis</i>	locality (Small Island)	1990	2006	recent	vermet	Neotropic	Peru	18.39	-47.48	Diurnal	Aboveal&Saxicolous	Dactyloidae	Pleurodonta	0.59	124	Schwartz and Henderson 1991	NA	NE	extant	
<i>Aniella desirochensis</i>	locality (Small Island)	1964	2012	recent	mainalist	Neotropic	Guadeloupe: La Desirade Island	16.32	-61.05	Diurnal	Aboveal&Saxicolous	Dactyloidae	Pleurodonta	1.02	122	Breuil 2002	NA	NE	extant	
<i>Aniella divisa</i>	description	2016	2013	recent	Kohler and Hedges 2016	Neotropic	Hispánica: Dominican Repul	18.19	-71.56	Diurnal	Aboveal	Dactyloidae	Pleurodonta	0.82	322	Kohler and Hedges 2016	NA	NE	extant	
<i>Aniella emmewilliamsi</i>	locality (Small Island)	1983	2016	recent	http://www.anisomals.org/2016/05/24/carnet-1	Neotropic	British Virgin Islands: Carrot I	18.33	-64.57	Diurnal	Saxicolous	Dactyloidae	Pleurodonta	1.06	280	Lazell 1983	NA	NE	extant	
<i>Aniella kellydoye</i>	description	1978	2009	recent	vermet	Neotropic	Hispánica: Haiti	19.62	-72.43	Diurnal	Saxicolous	Dactyloidae	Pleurodonta	0.99	137	vermet				

<i>Asuccus saffian</i>	description	2009	2008	recent	Afrasiab and Mohamad 2009	Palaearctic	Iraq	36.62	44.75	Nocturnal	Saxicolous	Phyllostactyidae	Gekkota	0.69	251	Afrasiab and Mohamad 2009	NA	NE	extant
<i>Asuccus zagrosicus</i>	description	2011	2008	recent	Torki et al. 2011	Palaearctic	Iran	33.03	48.05	Cathemeral	Saxicolous	Phyllostactyidae	Gekkota	0.62	174	Torki et al. 2011	NA	NE	extant
<i>Gerrhonotus pictus</i> (Small Island)	description	1921	2001	recent	Grismer 2002	Neotropical	Mexico	-111.04	-0.11	Diurnal	Terrestrial	Toxotrypa	Gekkota	1.08	338	Grismer 2002	NA	LC	extant
<i>Asymbaphus nepalensis</i>	description	1998	1991	recent	Eremchenko et al. 1998	Oriental	Nepal	83.87	28.02	Nocturnal	Saxicolous	Scincidae	Scincoidae	0.08	142	Schleich and Kastle 2002	NA	NE	extant
<i>Asymbaphus tragabulense</i>	description	1898	1885	early	Das et al. 1998	Oriental	India	34.48	74.67	Diurnal	NA	Scincidae	Scincoidae	0.53	267	Das et al. 1998	NA	NE	extant
<i>Bachia microneola</i>	description	2007	2001	recent	Rodrigues et al. 2007	Neotropical	Brazil	-84.64	-48.42	Diurnal	Fossorial	Gymnophthalmidae	Lacertoidae	0.56	449	Rodrigues et al. 2007	NA	NE	extant
<i>Bachia monophila</i>	description	2007	2002	recent	Rodrigues et al. 2007	Neotropical	Brazil	-83.03	-48.38	Diurnal	Fossorial	Gymnophthalmidae	Lacertoidae	0.41	117	Rodrigues et al. 2007	NA	NE	extant
<i>Bachia renana</i>	specimen	2016	2005	recent	Ribeiro-Junior et al. 2016	Neotropical	Brazil	2.19	-54.59	Diurnal	Fossorial	Gymnophthalmidae	Lacertoidae	0.58	1450	Ribeiro-Junior et al. 2016	NA	NE	extant
<i>Baikia africana</i>	locality	1865	1963	early	Danger 1964	Afrapric	Nigeria	9.30	5.03	NA	Fossorial	Amphibienidae	Amphibienidae	0.62	174	Danger 1964	DD	DD	unknown
<i>Barkudia melanosticta</i>	locality	1801	1984	recent	Das 1999	Oriental	India	17.72	83.34	Cathemeral	Fossorial	Scincidae	Scincoidae	0.89	24	Das 1999	DD	DD	unknown
<i>Bavayia pulchella</i>	description	1998	1996	recent	vernet	Oceania	New Caledonia	-21.25	165.58	Nocturnal	Aboreal	Diplodactylidae	Acrodactylia	0.37	199	Bauer et al. 1998	NA	NT	extant
<i>Blasodactylus microbrachialis</i>	locality	2015	2016	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.95	49.12	Nocturnal	Saxicolous	Gekkonidae	Gekkotia	1.47	194	Jonas et al. 2015	NA	NE	extant
<i>Blasodactylus victori</i>	specimen	2016	2012	recent	Itzhik et al. 2016	Madagascar	Madagascar	-16.47	45.35	Nocturnal	Aboreal	Gekkonidae	Gekkotia	1.57	354	Itzhik et al. 2016	NA	NE	extant
<i>Brachymedusa dalsoni</i> (Small Island)	description	2011	1972	recent	Davis et al. 2016	Oriental	Taiwan Island	122.10	25.58	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	0.11	364	Davis et al. 2016	NA	NE	extant
<i>Brachymeles isangulidri</i>	specimen	2014	2009	recent	Davis et al. 2014	Oriental	Luzon	15.74	121.58	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	0.18	216	Davis et al. 2014	NA	NE	extant
<i>Brachymeles ligatus</i>	description	2016	2009	recent	Gebeher et al. 2016	Oriental	Luhang Island	13.81	120.14	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	0.49	265	Gebeher et al. 2016	NA	NE	extant
<i>Brachymeles lukiani</i>	description	2010	2008	recent	Siler et al. 2010	Oriental	Luzon	14.04	122.79	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	0.27	396	Siler et al. 2010	NA	NE	extant
<i>Brachymeles wrighti</i>	description	1925	early 1900s	early	IUCN	Oriental	Luzon	120.60	129.60	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	1.02	31	IUCN	DD	DD	unknown
<i>Bradypodion ngomense</i>	description	2009	2004	recent	Tilbury and Tolley 2009	Afrapric	South Africa	-27.82	31.42	NA	Aboreal	Chamaeleonidae	Acrodactylia	1.06	490	Tilbury and Tolley 2009, Tilbury 2010	NA	NE	extant
<i>Branchocela orlovi</i>	specimen	2004	1993	recent	Hallermann 2004	Oriental	Vietnam	14.33	108.60	Diurnal	Aboreal	Agamidae	Acrodactylia	1.65	671	Hallermann 2004, Hallermann 2005	NA	NE	extant
<i>Branchocela laevis</i>	locality	1995	2012	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.51	49.17	Diurnal	Terrestrial	Chamaeleonidae	Acrodactylia	0.57	281	Brown et al. 2014	NT	stable	extant
<i>Branchocela ankararana</i>	locality	1995	2012	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.52	49.16	Diurnal	Terrestrial	Chamaeleonidae	Acrodactylia	0.73	281	Brown et al. 2014	NT	stable	extant
<i>Branchocela bekoloty</i>	specimen	1995	1992	recent	Raxworthy and Nussbaum 1995	Madagascar	Madagascar	-14.05	48.30	Diurnal	Terrestrial	Chamaeleonidae	Acrodactylia	0.11	730	Brown et al. 2014	EN	decreasing	extant
<i>Branchocela bonis</i>	locality	1980	1996	recent	vernet	Madagascar	Madagascar	-16.46	45.34	Diurnal	Terrestrial	Chamaeleonidae	Acrodactylia	0.24	354	Brown et al. 2014	CR	decreasing	extant
<i>Branchocela confinis</i>	description	2012	2008	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.96	49.12	Diurnal	Terrestrial	Chamaeleonidae	Acrodactylia	-0.37	172	Glaw et al. 2012	NT	unknown	extant
<i>Branchocela deprenata</i>	locality	2012	2012	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.47	49.23	Diurnal	Terrestrial	Chamaeleonidae	Acrodactylia	-0.04	134	Brown et al. 2014	CR	decreasing	extant
<i>Branchocela lamprota</i>	description	1970	1921 or earlier	early	Brygo 1971	Madagascar	Madagascar	-18.08	49.50	Diurnal	Terrestrial	Chamaeleonidae	Acrodactylia	0.41	130	Brown et al. 2014	DD	unknown	extant
<i>Branchocela micra</i>	locality	2012	2015	recent	Villaverde 2015, Villaverde 2017	Madagascar	New Hava Island	-12.25	49.01	Nocturnal	Aboreal	Chamaeleonidae	Acrodactylia	0.52	90	Brown et al. 2014	NT	stable	extant
<i>Branchocela tuberculata</i>	locality	1894	2014	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.54	49.17	Diurnal	Terrestrial	Chamaeleonidae	Acrodactylia	-0.42	281	Brown et al. 2014	VU	stable	extant
<i>Caledoniscincus cryos</i>	specimen	1999	1990	recent	Sadlier et al. 1999	Oceania	New Caledonia	-21.57	165.82	Diurnal	NA	Scincidae	Scincoidae	0.21	236	Bauer and Sadlier 2000	DD	unknown	extant
<i>Caledoniscincus (Caledoniscincus) venter</i>	description	2012	2012	recent	Sadlier et al. 2014	Oceania	New Caledonia	-21.57	165.82	Diurnal	Terrestrial	Scincidae	Scincoidae	0.21	236	Sadlier et al. 2014	NA	NE	extant
<i>Caledoniscincus termit</i>	description	1999	1995	recent	Sadlier et al. 1999	Oceania	New Caledonia	-20.40	164.52	Diurnal	Terrestrial	Scincidae	Scincoidae	0.36	560	Bauer and Sadlier 2000	VU	stable	extant
<i>Calotes bhutanensis</i>	specimen	1975	1967	early	Biswas 1975	Oriental	Bhutan	27.17	90.72	Diurnal	NA	Agamidae	Acrodactylia	0.86	463	Bauer and Gunther 1992	NA	NE	extant
<i>Calotes desali</i>	description	2005	2004	recent	Bahr and Madhwaige 2005	Oriental	Sri Lanka	6.41	80.71	Diurnal	Aboreal	Agamidae	Acrodactylia	1.22	221	Somaweera and Somaweera 2009	NA	NE	extant
<i>Calotes monemendrei</i>	specimen	2014	21st century	early	Amunasinghe et al. 2014	Oriental	Sri Lanka	7.62	80.71	Diurnal	Aboreal	Agamidae	Acrodactylia	0.84	209	Amunasinghe et al. 2014a	NA	NE	extant
<i>Calotes nigriplicatus</i>	specimen	2000	1885	recent	Hallermann 2000	Oceania	Anson Island	-3.63	128.14	NA	NA	Agamidae	Acrodactylia	NA	106	Hallermann 2000	NA	NE	extant
<i>Calumma jeyi</i>	description	2006	1996	recent	Raxworthy and Nussbaum 2006	Madagascar	Madagascar	-14.45	49.74	Diurnal	Aboreal&Saxicolous&Terrestrial	Chamaeleonidae	Acrodactylia	1.32	1374	Brown et al. 2014	VU	stable	extant
<i>Glyptommatus sicticus</i>	description	1991	1988	recent	Rodrigues 1991	Neotropical	Brazil	-10.62	-42.59	Nocturnal	Fossorial	Gymnophthalmidae	Lacertoidae	0.34	516	Camacho et al. 2016	NA	NE	extant
<i>Glyptommatus sicutrachinus</i>	specimen	1991	1987	recent	Rodrigues 1991	Neotropical	Brazil	-11.11	-42.73	Nocturnal	Fossorial	Gymnophthalmidae	Lacertoidae	0.37	349	Camacho et al. 2016	NA	NE	extant
<i>Capitulum mariagutense</i>	specimen	1991	1987	early	Hedges and Conn 2012	Neotropical	Guadeloupe: Marie-Galante	15.93	-61.26	NA	NA	Scincidae	Scincoidae	0.99	199	Hedges and Conn 2012	NA	NE	extinct
<i>Capitulum metallicum</i>	description	1879	1879 or earlier	early	inferred from date of description	Neotropical	Martinique	14.66	-61.02	NA	NA	Scincidae	Scincoidae	0.91	10	Hedges and Conn 2012	NA	NE	extinct
<i>Capitulum polyneesianum</i>	description	1879	1875 or earlier	early	U.S. Virgin Islands: St. Croix	Neotropical	Guadalupe	17.73	-64.77	NA	NA	Scincidae	Scincoidae	0.73	109	Hedges and Conn 2012	CR	decreasing	extant
<i>Carlia bomber</i>	description	2006	2002	recent	Zug and Allison 2006	Oceania	New Guinea	-2.45	133.12	Diurnal	Terrestrial	Scincidae	Scincoidae	0.47	2678	GBIF.org	LC	unknown	extant
<i>Carlia nigrauris</i>	description	2010	1990	recent	Zug 2010	Oriental	Pulau Tindil	-6.96	105.79	NA	Terrestrial	Scincidae	Scincoidae	0.58	193	Zug 2010	NA	NE	extant
<i>Carlia sakai</i>	description	2014	1998	early	Zug and Kaiser 2014	Oceania	Pulu Sakur	-8.12	122.13	NA	NA	Scincidae	Scincoidae	0.08	152	Zug and Kaiser 2014	NA	NE	extant
<i>Celestiscus wendholmi</i>	locality	2013	2013	recent	Hobkin 2014	Australia	Australia	-14.28	144.49	Diurnal	Terrestrial	Scincidae	Scincoidae	0.13	719	Hobkin 2014	NA	NE	extant
<i>Celestiscus erycopsis</i>	locality	1910	1992	recent	vernet	Oceania	New Caledonia	-22.59	167.45	Diurnal	Terrestrial	Scincidae	Scincoidae	0.12	NA	vernet	EN	unknown	extant
<i>Celestiscus adersicus</i>	specimen	2008	2000	recent	Savage et al. 2008	Neotropical	Panama	8.67	-80.59	NA	Aboreal	Anguillidae	Diplodactylia	0.79	452	Savage et al. 2008	DD	unknown	extant
<i>Celestiscus anolis</i>	description	1979	1977	recent	Schwartz et al. 1979	Neotropical	Hispainola: Dominican Republ	18.70	-70.24	Nocturnal	Terrestrial	Anguillidae	Diplodactylia	2.78	82	Schwartz and Henderson 1991, Powell	CR	decreasing	extant
<i>Celestiscus baileyi</i>	specimen	1868	2015	recent	IUCN	Neotropical	Nevoosa Island	-75.01	75.01	Diurnal	Terrestrial	Anguillidae	Diplodactylia	1.25	276	Powell 1999	NA	NE	extant
<i>Celestiscus foveatus</i>	description	1971	1970	recent	Schwartz 1971, Corry et al. 2010	Neotropical	Jamaica	18.34	-77.65	Nocturnal	Aboreal	Anguillidae	Diplodactylia	1.27	230	Schwartz and Henderson 1991	DD	NA	extant
<i>Celestiscus macrodon</i>	specimen	1989	1984	recent	Thomas and Hedges 1989	Neotropical	Hispainola: Haiti	18.30	-71.97	NA	NA	Anguillidae	Diplodactylia	0.42	359	Schwartz and Henderson 1991	NA	NE	extant
<i>Celestiscus micropylepis</i>	specimen	1959	1962	recent	Therrien 1959	Neotropical	Jamaica	18.49	-76.97	NA	NA	Anguillidae	Diplodactylia	0.28	124	Schwartz and Henderson 1991	DD	NA	extant
<i>Celestiscus occidens</i>	locality	1802	1840	early	IUCN	Neotropical	Jamaica	18.05	-77.51	NA	Terrestrial	Anguillidae	Diplodactylia	3.04	58	vernet	EX	NA	extinct
<i>Ceratoophora erdelmi</i>	locality	1998	2011	recent	Janzen 2011	Oriental	Sri Lanka	6.41	80.64	Diurnal	Aboreal	Agamidae	Acrodactylia	1.29	266	Janzen 2011	NA	NE	extant
<i>Ceratoophora karu</i>	description	1998	1996	recent	Pethiyagoda and Manamendra-Arachchi 1998	Oriental	Sri Lanka	6.41	80.66	Diurnal	Aboreal&Terrestrial	Agamidae	Acrodactylia	0.29	266	Pethiyagoda and Manamendra-Arachchi	NA	NE	extant
<i>Ceratoophora hypolepis</i>	specimen	2012	1980	recent	Dunn and Lauer 2012	Neotropical	Costa Rica	-73.00	84.00	Diurnal	Terrestrial	Gymnophthalmidae	Lacertoidae	-0.01	261	Dunn and Lauer 2012	DD	DD	unknown
<i>Cercosaura steyerii</i>	specimen	1998	1994	recent	Tedesco 1998	Neotropical	Argentina	-28.13	-57.25	NA	NA	Gymnophthalmidae	Lacertoidae	0.28	1831	Tedesco 1998	NA	NE	extant
<i>Chalcides pentadactylus</i>	specimen	1870	1870 or earlier	early	inferred from date of description	Oriental	India	11.18	75.82	NA	NA	Scincidae	Scincoidae	NA	29	Srinivasulu et al. 2014b	DD	DD	unknown
<i>Chirindia papuensis</i>	description	1932	1929	early	Loveridge 1932	Afrapric	Tanzania	4.35	36.50	NA	Fossorial	Amphibienidae	Amphibienidae	0.34	61	Loveridge 1932	DD	unknown	extant
<i>Chromadactylus</i>	specimen	2017	2007	early	Ikandar et al. 2017	Oriental	Sumatra	96.04	0.67	NA	Aboreal	Gekkonidae	Gekkotia	-0.14	1477	Ikandar et al. 2017	NA	NE	extant
<i>Chromadactylus adis</i>	description	2015	2013	early	Srinivasulu et al. 2015	Oriental	India	15.33	76.47	Diurnal	Saxicolous	Gekkonidae	Gekkotia	0.02	30	Srinivasulu et al. 2015	NA	NE	extant
<i>Chromadactylus amih</i>	description	2007	19th century	early	Manamendra-Arachchi et al. 2007	Oriental	Sri Lanka	NA	NA	NA	NA	Gekkonidae	Gekkotia	-0.05	NA	not mapped	NA	NE	extant
<i>Chromadactylus anandensis</i>	specimen	1965	1935 or earlier	early	Amunasinghe 1964	Oriental	Adamans, Narcondam Island	10.43	84.28	NA	NA	Gekkonidae	Gekkotia	-0.11	NA	Ikandar et al. 2017	NA	NE	extant
<i>Chromadactylus aurastacupes</i>	locality	2007	2014	recent	Zingler et al. 2015	Oriental	Vietnam	10.11	104.89	Nocturnal	Saxicolous	Gekkonidae	Gekkotia	0.64	195	Grismer and Ngo 2007	NA	NE	extant
<i>Chromadactylus australis</i>	specimen	2007	19th century	early	Beddome specimen	Oriental	India	8.61	77.38	NA	NA	Gekkonidae	Gekkotia	-0.15	143	IUCN	DD	unknown	extant
<i>Chromadactylus bayensis</i>	description	2008	2008	recent	Grismer et al. 2008	Oriental	Peninsular Malaysia	5.09	102.22	Diurnal	Saxicolous	Gekkonidae	Gekkotia	0.35	325	Grismer et al. 2008	NA	NE	extant
<i>Chromadactylus bidonensis</i>	specimen	2011	2013	recent	Grismer et al. 2013, Gamble et al. 2015	Oriental	Bidong Island	5.37	103.03	Cathemeral	Aboreal&Saxicolous	Gekkonidae	Gekkotia	0.63					

<i>Cnemidophorus temiahi</i>	description	2014	2010	recent	Grismer et al. 2014b	Oriental	Peninsular Malaysia	4.47	101.38	Diurnal	Arboreal	Gekkonidae	Gekkota	0.14	682	Grismer et al. 2014b	NA	NE	extant
<i>Cnemidophorus thachanensis</i>	description	2017	2016	recent	Wood et al. 2017	Oriental	Thailand	9.55	99.18	Diurnal	Saxicolous	Gekkonidae	Gekkota	0.15	114	Wood et al. 2017	NA	NE	extant
<i>Cnemidophorus tinctus</i>	specimen	1838	1838 or earlier	recent	Rosler et al. 2017	NA	NA	NA	NA	NA	NA	Gekkonidae	Gekkota	0.02	NA	Rosler et al. 2017	NA	NE	extant
<i>Cnemidophorus tucayensis</i>	description	2007	2005	recent	Grismer and Ngo 2007	Oriental	Vietnam	10.38	104.96	Cathemeral	Saxicolous	Gekkonidae	Gekkota	0.47	341	Grismer and Ngo 2007	NA	NE	extant
<i>Cnemidophorus dufrenoyi</i>	description	2013	1964	early	McCrane and Hedges 2013	Neotropic	Panama	8.13	-77.72	Diurnal	Terrestrial	Teiidae	Lacertoides	1.36	410	McCrane and Hedges 2013	NA	NE	extant
<i>Cnemidophorus marmoratus</i>	locality (Small Island)	1891	2012	recent	http://calphotos.berkeley.edu/cgi-bin/query.cgi?verb=detail	Neartic	San Pedro Martin Island	26.37	-112.33	Diurnal	Terrestrial	Teiidae	Lacertoides	1.15	NA	The Reptile Database	NA	NE	extant
<i>Colletes apicicollis</i>	description	1988	1981	recent	vermet	Neartic	Isle San Marcos	27.22	-112.07	Diurnal	Saxicolous	Eulophiidae	Gekkota	1.14	311	Nauerebene, LUCH	LC	stable	extant
<i>Complacina nigripalpis</i>	locality	1991	2004	recent	Das and Lakin 2008	Oriental	Borneo: Sarawak	6.13	116.50	Diurnal	Arboreal	Agamidae	Acrodactylina	1.15	1130	Das and Lakin 2008	NA	NE	extant
<i>Conophagus marthae</i>	description	2009	2014	recent	Gentile et al. 2016	Neotropic	Galapagos (Isabela)	0.04	-91.36	Diurnal	Terrestrial	Iguanidae	Pleurodonta	3.64	NA	Gentile and Snell 2009	CR	unknown	extant
<i>Conophagus pallidus</i>	locality (Small Island)	1903	21st century	recent	Wikipedia	Neotropic	Galapagos (Santa Fe)	-0.82	-90.06	Diurnal	Terrestrial	Iguanidae	Pleurodonta	3.72	1731	Swash and Sill 2005	VU	NA	extant
<i>Copeoglossum marginatum</i>	specimen	2012	1863-1873	early	Hedges and Conn 2012	Neotropic	Isle de Margarita	9.79	-63.87	Diurnal	Arboreal&Terrestrial	Scincidae	Scincoidae	1.60	13	Hedges and Conn 2012	DD	unknown	extant
<i>Corydalis cloetei</i>	description	1994	1993	recent	Monson and Van Wyk 1994	Afrotropic	South Africa	-32.16	21.72	NA	Saxicolous	Corydallidae	Scincoidae	0.06	219	Monson and Van Wyk 1994	NA	NE	extant
<i>Corydalis</i>	locality (Small Island)	1994	21st century	recent	Monson and Van Wyk 1994, Loefer 2010	Afrotropic	South Africa	18.10	28.40	NA	Saxicolous	Corydallidae	Scincoidae	0.01	929	Monson and Van Wyk 1994	NA	NE	extant
<i>Cremasaurus marumensis</i>	description	2012	2010	recent	Greesbaum et al. 2012	Afrotropic	Democratic Republic of the Co	-7.72	29.76	NA	Saxicolous	Iguanidae	Scincoidae	1.33	333	Greesbaum et al. 2012a; Stanley et al. 2	NA	NE	extant
<i>Corylus mecalae</i>	description	2005	2003	recent	Branch et al. 2005	Afrotropic	Mozambique	-12.05	37.64	Diurnal	Saxicolous	Corydallidae	Scincoidae	1.33	336	Branch et al. 2005	EN	unknown	extant
<i>Corytophaga belpensis</i>	locality	2012	2002	recent	Bauer et al. 2012	Oceania	New Caledonia, Ile Art, in the	-15.73	163.67	Nocturnal	Arboreal	Diplodactylidae	Gekkota	1.31	536	Bauer et al. 2012	NA	NE	extant
<i>Cryptoblepharus albi</i>	description	1928	1848	early	Homer 2007	Afrotropic	Ile de Moutoumba	-15.04	40.74	NA	Scincidae	Scincoidae	0.38	77	Homer 2007	NA	NE	extant	
<i>Cryptoblepharus biscaianus</i>	locality (Small Island)	1913	2014	recent	Sanchez and Probst 2015	Afrotropic	Europa Island (Strait of Mozar	-22.35	40.35	Diurnal	Arboreal&Terrestrial	Scincidae	Scincoidae	0.21	667	Sanchez and Probst 2015	NA	NE	extant
<i>Cryptoblepharus caudatus</i>	locality (Small Island)	1918	2015	recent	Sanchez-Pacheco et al. 2015	Afrotropic	Juan de Nova Island	-17.06	42.74	NA	NA	Scincidae	Scincoidae	0.32	616	The Reptile Database	NA	NE	extant
<i>Cryptoblepharus walbe</i>	description	2015	2015	recent	Huener 2007	Afrotropic	Australia	-12.05	132.89	Diurnal	Saxicolous	Scincidae	Scincoidae	0.01	508	Huener 2007a	NA	NE	extant
<i>Ctenosaura lobata</i>	locality (Small Island)	1901	2003	recent	Gutsche and Strich 2009	Neotropic	Isle de Utila	16.09	-86.94	Diurnal	Arboreal	Iguanidae	Pleurodonta	3.13	120	Kohler 2008	CR	decreasing	extant
<i>Ctenosaura nolasensis</i>	locality (Small Island)	1972	2001	recent	Grismer 2002	Neartic	San Pedro Nolasco Island	27.97	-112.23	Diurnal	Arboreal&Saxicolous&Terrestrial	Iguanidae	Pleurodonta	3.00	NA	vernet	VU	stable	extant
<i>Ctenosaurus aphrodite</i>	specimen	1990	1983	recent	Ingram and Czechura 1990	Australia	Australia	-23.77	141.13	NA	Terrestrial	Scincidae	Scincoidae	0.87	867	Ingram and Czechura 1990	NA	NE	extant
<i>Ctenosaurus acutatus</i>	locality	1984	1986	recent	Atlas of Living Australia	Australia	Australia	-26.50	114.24	NA	NA	Scincidae	Scincoidae	0.62	637	Atlas of Living Australia, WAM	VU	NA	extant
<i>Cynisca drygisi</i>	specimen	1941	1888	early	Loveridge 1941	Afrotropic	Sierra Leone	NA	NA	NA	Fossorial	Amphibaenidae	Amphibaenina	-0.52	NA	not mapped	DD	unknown	extant
<i>Cynisca haugi</i>	specimen	1904	1901	early	Gans 1987	Afrotropic	Gabon	-1.11	-0.43	NA	Fossorial	Amphibaenidae	Amphibaenina	-0.26	875	Gans 1987; Pauwels and Vande Weide	NA	NE	extant
<i>Cynisca isoviensis</i>	description	2014	2012	recent	Trappe and Mame 2014	Afrotropic	Ivory Coast	7.06	10.67	NA	Fossorial	Amphibaenidae	Amphibaenina	-0.12	108	Trappe and Mame 2014; Mame and Trappe	NA	NE	extant
<i>Cynisca ligata</i>	description	1968	1967	early	Danger 1968	Afrotropic	Nigeria	9.79	8.54	NA	Fossorial	Amphibaenidae	Amphibaenina	0.29	13	Gans 1987	CR	unknown	extant
<i>Cynisca nigricans</i>	description	1968	1966	early	Danger 1968	Afrotropic	Nigeria	8.87	7.45	NA	Fossorial	Amphibaenidae	Amphibaenina	0.32	197	Gans 1987	VU	unknown	extant
<i>Cynisca schaeferi</i>	specimen	1912	before 1912	early	Gans 1987	Afrotropic	Cameroon	3.98	9.96	NA	Fossorial	Amphibaenidae	Amphibaenina	0.55	312	Chiro and Lefebvre 2007	DD	unknown	extant
<i>Cynisca williamsi</i>	specimen	1963	1968	early	Gans 1987	Afrotropic	Ghana	-2.10	0.10	NA	Fossorial	Amphibaenidae	Amphibaenina	0.10	124	Gans 1987	DD	unknown	extant
<i>Cynodactylus adonis</i>	locality	2011	2010	recent	Shua et al. 2011, Atlas of Living Australia	Australia	Australia	-12.49	143.25	NA	Fossorial	Gekkonidae	Gekkota	1.53	613	Atlas of Living Australia, QM	NA	NE	extant
<i>Cynodactylus aeneus</i>	locality	2003	2008	recent	vernet	Oriental	Burma	-17.43	97.09	Nocturnal	NA	Gekkonidae	Gekkota	1.15	419	Bauer 2003	NA	NE	extant
<i>Cynodactylus agamensis</i>	specimen	1860	1860 or earlier	early	inferred from date of description	Oriental	Sumatra	-2.22	100.17	Nocturnal	NA	Gekkonidae	Gekkota	0.44	104	Rosler et al. 2007	NA	NE	extant
<i>Cynodactylus arcuatus</i>	description	2012	2007	recent	Oliver et al. 2012	Oriental	Papua New Guinea	14.27	151.61	Nocturnal	NA	Gekkonidae	Gekkota	1.18	204	Oliver et al. 2012	NA	NE	extant
<i>Cynodactylus aeneus</i>	description	2005	2004	recent	Grismer 2005	Oriental	Ace Island	-0.46	104.51	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.27	286	Grismer 2005	NA	NE	extant
<i>Cynodactylus auribellatus</i>	description	2010	2008	recent	Sumontha et al. 2010	Oriental	Thailand	16.68	106.09	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.26	606	Sumontha et al. 2010	NA	NE	extant
<i>Cynodactylus badensis</i>	description	2006	2005	recent	Sung et al. 2006	Oriental	Vietnam	11.38	106.17	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.92	129	Bobrov and Semenov 2008; Sang, et	NA	NE	extant
<i>Cynodactylus bannensis</i>	description	2016	2015	recent	Lau et al. 2016	Oriental	Laos	17.45	105.59	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.92	289	Lau et al. 2016	NA	NE	extant
<i>Cynodactylus baiki</i>	description	2011	2009	recent	Ikbandar et al. 2011	Oceania	Sulawesi	-0.67	123.11	NA	Arboreal	Gekkonidae	Gekkota	1.44	628	Ikbandar et al. 2011	NA	NE	extant
<i>Cynodactylus beatus</i>	description	2008	2008	recent	Grismer et al. 2008	Oriental	Beasr Island	2.61	102.33	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.94	41	Grismer et al. 2008	NA	NE	extant
<i>Cynodactylus belianense</i>	description	2009	2008	recent	Ngo and Grismer 2010	Oriental	Vietnam	11.90	103.20	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.35	289	Ngo and Grismer 2010	NA	NE	extant
<i>Cynodactylus beboru</i>	description	2015	2014	recent	Ngyuen et al. 2015	Oriental	Vietnam	20.43	105.34	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.24	183	Ngyuen et al. 2015	NA	NE	extant
<i>Cynodactylus bichardi</i>	locality	2004	2008	recent	Teyrie and David 2010	Oriental	Laos	14.77	106.03	Nocturnal	Arboreal&Terrestrial	Gekkonidae	Gekkota	0.76	196	Teyrie and David 2010	NA	NE	extant
<i>Cynodactylus calami</i>	description	2016	2015	recent	Lau et al. 2016	Oriental	Laos	17.57	105.84	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.14	864	Lau et al. 2016a	NA	NE	extant
<i>Cynodactylus catusmungi</i>	description	2007	2002	recent	Oliver et al. 2007	Oriental	Vietnam	109.12	106.11	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.21	67	Oliver et al. 2007	NA	NE	extant
<i>Cynodactylus chuanensis</i>	locality	2003	2007	recent	Konlek and Lauchinda 2008	Oriental	Thailand	14.70	100.85	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.99	112	Bauer et al. 2003	NA	NE	extant
<i>Cynodactylus chuanshengi</i>	description	2007	2007	recent	Quang et al. 2007	Oriental	Vietnam	21.35	105.20	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.27	273	Bobrov and Semenov 2008	NA	NE	extant
<i>Cynodactylus chrysopterus</i>	specimen	2003	2002	recent	Bauer 2003	Oriental	Burma	19.13	96.34	Nocturnal	NA	Gekkonidae	Gekkota	1.00	399	Bauer 2003	DD	unknown	extant
<i>Cynodactylus coudati</i>	locality (Small Island)	2014	2011	recent	Schneider et al. 2014a	Oriental	Vietnam	19.37	109.37	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.78	81	Schneider et al. 2014a	NA	NE	extant
<i>Cynodactylus czechowensis</i>	description	2011	2008	recent	Ngo and Chan 2011	Oriental	Laos	20.24	105.62	Nocturnal	NA	Gekkonidae	Gekkota	1.23	300	Ngo and Chan 2011	NA	NE	extant
<i>Cynodactylus darevskii</i>	description	2014	2009	recent	Nazarov et al. 2014	Oriental	Laos	17.58	105.74	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.28	243	Nazarov et al. 2014	NA	NE	extant
<i>Cynodactylus davisii</i>	description	2011	2011	recent	Ngo 2013	Oriental	Vietnam	106.90	105.90	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.85	372	Ngo 2013	NA	NE	extant
<i>Cynodactylus derango</i>	description	1973	1969	recent	Brown and Parker 1973	Oceania	Papua New Guinea	-5.41	141.11	NA	NA	Gekkonidae	Gekkota	1.50	5087	Allen Allison and Paul Oliver pers. con	NA	NE	extant
<i>Cynodactylus doisulhep</i>	description	2014	2008	recent	Kunye et al. 2014	Oriental	Thailand	18.80	98.93	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.16	8	Kunye et al. 2014	NA	NE	extant
<i>Cynodactylus durio</i>	specimen	2010	2010	recent	Grismer et al. 2010	Oriental	Peninsular Malaysia	5.41	100.78	Nocturnal	Arboreal	Gekkonidae	Gekkota	1.28	469	Grismer et al. 2010	NA	NE	extant
<i>Cynodactylus edwardsi</i>	description	2009	2009	recent	Batwita and Bahir 2005	Oriental	Sri Lanka	8.12	81.12	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.22	409	Batwita and Bahir 2005	NA	NE	extant
<i>Cynodactylus eisenmanni</i>	description	2008	2006	recent	Ngo 2008	Oriental	Vietnam: Hon Son Island,	9.80	104.62	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.14	218	Ngo 2008	NA	NE	extant
<i>Cynodactylus erythrops</i>	description	2009	2005	recent	Bauer et al. 2009	Oriental	Thailand	19.61	98.18	Cathemeral	Saxicolous	Gekkonidae	Gekkota	1.01	526	Bauer et al. 2009	NA	NE	extant
<i>Cynodactylus gordongkokoi</i>	description	1993	1992	recent	Das 1993	Oceania	Lombok Island	-8.75	116.50	NA	Saxicolous	Gekkonidae	Gekkota	0.90	388	Das and Leong 2004	DD	unknown	extant
<i>Cynodactylus griseus</i>	description	2008	2005	recent	Ngo 2008	Oriental	Vietnam	19.38	104.96	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.22	341	Ngo 2008	NA	NE	extant
<i>Cynodactylus guianensis</i>	description	2014	2013	recent	Grismer et al. 2014c	Oriental	Peninsular Malaysia	4.76	101.12	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.04	66	Grismer et al. 2014c	NA	NE	extant
<i>Cynodactylus gunungsumensis</i>	description	2016	2015	recent	Grismer et al. 2016	Oriental	Peninsular Malaysia	3.69	102.43	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.93	373	Grismer et al. 2016	NA	NE	extant
<i>Cynodactylus hadronomus</i>	description	2015	2016	recent	Grismer et al. 2016	Oriental	Peninsular Malaysia	5.06	102.14	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.11	349	Grismer et al. 2016	VU	stable	extant
<i>Cynodactylus hutchi</i>	description	2016	2010	recent	Riyanto et al. 2016	Oceania	Sulawesi	-3.65	121.17	NA	Arboreal	Gekkonidae	Gekkota	1.00	1127	Mecke et al. 2016	NA	NE	extant
<i>Cynodactylus hontremis</i>	description	2008	2006	recent	Ngo et al. 2008	Oriental	Vietnam: Hon Tre Island	9.97	104.84	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.14	NA	Ngo et al. 2008	NA	NE	extant
<i>Cynodactylus hunguensis</i>	description	2011	2011	recent	Lau et al. 2011	Oriental	Vietnam	25.58	105.75	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.15	266	Lau et al. 2011	NA	NE	extant
<i>Cynodactylus inthanon</i>	description	2008	2006	recent	Ngo and Bauer 2008	Oriental	Vietnam	107.40	106.19	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.01	119	Ngo and Bauer 2008	NA	NE	

<i>Cyrtodactylus spelaeus</i>	description	2014	2011	recent	Nazarov et al. 2014	Oriental	Laos	18.16	104.51	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.17	344	Nazarov et al. 2014	NA	NE	extant
<i>Cyrtodactylus spinosus</i>	description	2008	2004	recent	Linken et al. 2008	Oceania	Sulawesi	-1.45	119.99	Nocturnal	Arboreal	Gekkonidae	Gekkota	1.06	243	Linken et al. 2008	NA	NE	extant
<i>Cyrtodactylus sumatrensis</i>	specimen	2000	1910	recent	Rodler and Glaw 2008, Harvey et al. 2016	Oceania	Peninsular Malaysia	NA	NA	NA	Arboreal	Gekkonidae	Gekkota	1.22	NA	not mapped	NA	NE	extant
<i>Cyrtodactylus subulatus</i>	description	2005	2004	recent	Batwata and Bahir 2005	Oriental	Sri Lanka	6.42	80.61	Nocturnal	Arboreal	Gekkonidae	Gekkota	1.33	250	Batwata and Bahir 2005	NA	NE	extant
<i>Cyrtodactylus sumathi</i>	locality	2002	2011	recent	Panitvong et al. 2012	Oriental	Thailand	12.88	101.82	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.02	628	Bauer et al. 2009	DD	unknown	extant
<i>Cyrtodactylus samurai</i>	description	2010	2007	recent	Weiten et al. 2010	Oriental	Philippines: Samar	11.82	125.28	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.08	418	Weiten et al. 2010	NA	NE	extant
<i>Cyrtodactylus varius</i>	description	2011	2005	recent	Chan-And and Malachai 2011	Oriental	Surin Islands	9.46	97.49	Nocturnal	Arboreal	Gekkonidae	Gekkota	1.02	381	Chan-And and Malachai 2011	NA	NE	extant
<i>Cyrtodactylus tokamuensis</i>	description	2008	2006	recent	Ngo and Bauer 2008	Oriental	Vietnam	10.83	107.88	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.03	99	Ngo and Bauer 2008	NA	NE	extant
<i>Cyrtodactylus tamaiensis</i>	specimen	1940	1939	recent	Mahony 2009	Oriental	Burma	27.70	97.90	Nocturnal	Arboreal	Gekkonidae	Gekkota	1.15	678	Smith 1940	NA	NE	extant
<i>Cyrtodactylus tambora</i>	description	2017	2015	recent	Ryamoto et al. 2017	Oceania	Sunbawa Island	-8.11	118.01	Nocturnal	Arboreal&Terrestrial	Gekkonidae	Gekkota	0.38	535	Ryamoto et al. 2017	NA	NE	extant
<i>Cyrtodactylus tanganyensis</i>	description	2013	1997	recent	Nyugen et al. 2013	Oriental	Vietnam	14.34	108.48	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.09	285	Nyugen et al. 2013	NA	NE	extant
<i>Cyrtodactylus tereus</i>	locality	2013	2013	recent	Sumarli et al. 2015	Oriental	Peninsular Malaysia	5.00	102.61	Nocturnal	Arboreal	Gekkonidae	Gekkota	1.09	300	Grismer et al. 2013	NA	NE	extant
<i>Cyrtodactylus teneis</i>	locality	2011	2011	recent	Teynie and David 2014	Oriental	Laos	10.17	104.51	Durnal	Saxicolous	Gekkonidae	Gekkota	1.15	412	David et al. 2011	NA	NE	extant
<i>Cyrtodactylus thoshaensis</i>	description	2012	2009	recent	Pauwels et al. 2012	Oriental	Thailand	9.17	101.97	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.01	859	Chan-And et al. 2015	NA	NE	extant
<i>Cyrtodactylus thochernisi</i>	description	2012	2009	recent	Ngo and Grismer 2012	Oriental	Vietnam: Tho Chu Island	9.32	103.48	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.10	298	Ngo and Grismer 2012	NA	NE	extant
<i>Cyrtodactylus thuanangae</i>	description	2014	2013	recent	Phung et al. 2014	Oriental	Vietnam	11.36	106.17	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.98	129	Phung et al. 2014	NA	NE	extant
<i>Cyrtodactylus tigrisoides</i>	description	2003	2002	recent	Bauer et al. 2003	Oriental	Thailand	14.12	99.13	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.09	558	Ellis and Pauwels 2012	NA	NE	extant
<i>Cyrtodactylus trilineatus</i>	description	2014	2013	recent	Grismer et al. 2014a	Oriental	Peninsular Malaysia	5.60	102.61	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.50	300	Grismer et al. 2014a	NA	NE	extant
<i>Cyrtodactylus trilineatus</i>	description	2012	2011	recent	Grismer et al. 2012	Oriental	Peninsular Malaysia	4.41	101.38	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.52	NA	Grismer et al. 2012b	NA	NE	extant
<i>Cyrtodactylus vilgibaghi</i>	description	2014	2013	recent	Schneider et al. 2014b	Oriental	Laos	19.81	102.10	Nocturnal	Arboreal&Saxicolous	Gekkonidae	Gekkota	1.10	55	Schneider et al. 2014b	NA	NE	extant
<i>Cyrtodactylus wangulungulale</i>	specimen	2014	2009	recent	Sumontha et al. 2014	Oriental	Thailand	7.89	99.91	Nocturnal	Arboreal	Gekkonidae	Gekkota	0.92	483	Sumontha et al. 2014	NA	NE	extant
<i>Cyrtodactylus vietnamensis</i>	description	1927	1926	early	Dumér 1927	Oceania	Weze Island	-7.58	126.50	NA	NA	Gekkonidae	Gekkota	0.85	1173	tertint	DD	unknown	extant
<i>Cyrtodactylus yanghyensis</i>	locality	2010	2013	recent	Ngo and Chan 2010	Oriental	Vietnam	12.42	108.34	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.18	374	Ngo and Chan 2010	NA	NE	extant
<i>Cyrtodactylus zhoensis</i>	description	2010	2008	recent	Shi and Zhao 2010	Paleartic	China	29.35	90.17	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.66	370	Shi and Zhao 2010	NA	NE	extant
<i>Cyrtopodan batialeise</i>	locality	2008	2008	recent	Nazarov et al. 2012a	Oriental	Vietnam	10.824	102.61	Nocturnal	Arboreal	Gekkonidae	Gekkota	1.19	507	Nazarov et al. 2008	NA	NE	extant
<i>Cyrtopodan batialeise</i>	locality	1993	2012	recent	Bauer et al. 2013	Oriental	Pakistan	34.67	73.04	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.89	527	Bauer et al. 2013	NA	NE	extant
<i>Cyrtopodan batialeise</i>	description	2011	2003	recent	Nazarov et al. 2011	Paleartic	Pakistan	29.33	66.20	Nocturnal	NA	Gekkonidae	Gekkota	0.20	297	Nazarov et al. 2011	NA	NE	extant
<i>Cyrtopodan formosus</i>	description	1993	1990	recent	Khan 1993	Oriental	Pakistan	26.91	69.98	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.45	217	Khan 2011	LC	unknown	extant
<i>Cyrtopodan galeides</i>	description	2010	2005	recent	Nazarov et al. 2010	Paleartic	Pakistan	27.87	60.10	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.65	224	Nazarov et al. 2010	NA	NE	extant
<i>Cyrtopodan hormagumae</i>	description	2012	2011	recent	Nazarov et al. 2012b	Paleartic	Iran	27.40	56.95	Nocturnal	Terrestrial	Gekkonidae	Gekkota	0.35	146	Nazarov et al. 2012b	NA	NE	extant
<i>Cyrtopodan persopolae</i>	description	2010	2005	recent	Nazarov et al. 2010	Paleartic	Iran	29.93	52.88	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.47	23	Nazarov et al. 2010	NA	NE	extant
<i>Dactylopsilus inaequalis</i>	specimen	1942	1942	recent	BMCA monum	Oriental	Indonesic Republic of the C	22.67	101.67	Nocturnal	Arboreal&Terrestrial	Anguillidae	Diploglossa	1.19	396	Danny Meek and AKA 2014	NA	NE	extant
<i>Dactylopsilus inaequalis</i>	locality	1994	2002	recent	Anaklyus et al. 2013	Paleartic	Turkey	39.16	43.06	Durnal	Saxicolous	Lacertidae	Lacertoidae	0.68	121	Anaklyus et al. 2013	LC	unknown	extant
<i>Davusia jahnshinghi</i>	description	2012	2005	recent	Harkrishnan et al. 2012	Oriental	India	10.67	77.33	Durnal	Arboreal	Scincidae	Scincoidae	1.20	265	Harkrishnan et al. 2012	NA	NE	extant
<i>Dibamus alfredi</i>	description	1962	1961	early	Taylor 1962	Oriental	Thailand	6.87	101.27	NA	Fossorial&Terrestrial	Dibamidae	Dibamidae	0.69	355	Taylor 1962	NA	NE	extant
<i>Dibamus bolivati</i>	description	2003	1989	recent	Das and Yalabak 2003	Oriental	Peninsular Malaysia	101.95	101.95	Cathemeral	Dibamidae	Dibamidae	0.42	238	Das and Yalabak 2003	DD	unknown	extant	
<i>Dibamus dolosensis</i>	description	2011	2009	recent	Neang et al. 2011	Oriental	Cambodia	12.44	103.08	NA	Fossorial	Dibamidae	Dibamidae	0.64	685	Neang et al. 2011b	NA	NE	extant
<i>Dibamus deharvengi</i>	specimen	1999	1995	recent	Iteich 1999	Oriental	Vietnam	10.54	107.54	NA	Fossorial	Dibamidae	Dibamidae	0.31	168	Iteich 1999	NA	NE	extant
<i>Dibamus dewaseni</i>	specimen	2005	1910	early	Das and Lim 2005	Oriental	Nias Island	1.22	97.57	NA	Fossorial	Dibamidae	Dibamidae	0.60	491	Das and Lim 2005	NA	NE	extant
<i>Dibamus ingeni</i>	specimen	2003	1989	recent	Das and Lim 2003	Oriental	Borneo: Sarawak	4.25	115.67	Cathemeral	Dibamidae	Dibamidae	0.35	718	Das and Lim 2003	NA	NE	extant	
<i>Dibamus kondamensis</i>	specimen	2001	1987	recent	Honda et al. 1997	Oriental	Vietnam: Kondao Island	8.71	106.61	NA	Fossorial	Dibamidae	Dibamidae	0.51	328	Bobrov and Semenov 2008	NA	NE	extant
<i>Dibamus montanus</i>	description	1921	1917	early	Smith 1921	Oriental	Vietnam	11.93	108.53	NA	Fossorial	Dibamidae	Dibamidae	0.66	161	Greer 1985, Honda et al. 2001	NA	NE	extant
<i>Dibamus montani</i>	description	1991	1995	recent	Hoadley et al. 1997	Oriental	Thailand	102.03	102.03	Durnal	Dibamidae	Dibamidae	0.46	335	Bauer et al. 1997	NA	NE	extant	
<i>Dibamus rebul</i>	specimen	2009	1913	early	Das and Lim 2009	Oriental	Montavai Archipelago: Pulau	2.48	96.38	NA	Fossorial	Dibamidae	Dibamidae	1.05	802	Das and Lim 2009	NA	NE	extant
<i>Dibamus vorisi</i>	description	2003	1990	recent	Das and Lim 2003	Oriental	Borneo: Sarawak	5.02	118.05	Cathemeral	Fossorial&Terrestrial	Dibamidae	Dibamidae	0.29	982	Das and Lim 2003	NA	NE	extant
<i>Dierogekko booby</i>	specimen	2014	2006	recent	Skipwith et al. 2014	Oceania	New Caledonia, Ile Beaba	-20.07	163.96	Nocturnal	Arboreal	Diplodactylidae	Gekkota	0.00	450	Skipwith et al. 2014	NA	NE	extant
<i>Dierogekko booby</i>	description	2014	2010	recent	Skipwith et al. 2014	Oceania	New Caledonia	-20.05	164.03	Nocturnal	Arboreal	Diplodactylidae	Gekkota	0.08	441	Bauer et al. 2009b	CR	decreasing	extant
<i>Dierogekko kudamensis</i>	description	2006	2002	recent	Bauer et al. 2006	Oceania	New Caledonia	-20.60	164.38	Nocturnal	Arboreal	Diplodactylidae	Gekkota	0.26	429	Bauer et al. 2006b	CR	unknown	extant
<i>Dierogekko poumensis</i>	locality	2006	2007	recent	Skipwith et al. 2014	Oceania	New Caledonia	-20.25	164.03	Nocturnal	Arboreal	Diplodactylidae	Gekkota	0.04	441	Bauer et al. 2006b	CR	stable	extant
<i>Dierogekko thomashabiei</i>	locality	2006	2004	recent	Yennet	Oceania	New Caledonia	-20.78	164.58	Nocturnal	NA	Diplodactylidae	Gekkota	0.25	367	Bauer et al. 2006b	CR	unknown	extant
<i>Diplocladon fulvipes</i>	description	1978	2013	recent	Western Australia Museum	Australia	Australia	-23.34	122.69	Nocturnal	Terrestrial	Diplodactylidae	Gekkota	0.42	998	Western Australia Museum	NA	NE	extant
<i>Diplocladon kemali</i>	specimen	1988	1986	recent	Western Australia Museum	Australia	Australia	-25.58	123.08	Nocturnal	Terrestrial	Diplodactylidae	Gekkota	0.32	2306	Storr 1988	NA	NE	extant
<i>Diploglossus ingridae</i>	description	2004	1979	recent	Weiler and Campbell 2004	Neotropic	Mexico	18.34	-94.89	NA	Arboreal&Terrestrial	Anguillae	Diploglossa	1.27	420	Weiler and Campbell 2004	DD	unknown	extant
<i>Diploglossus microdon</i>	locality	1913	1913	early	inferred from description	Neotropic	Caribbean	NA	NA	NA	Arboreal	Anguillae	Diploglossa	0.74	NA	not mapped	NA	NE	extant
<i>Diploglossus millepunctatus</i>	locality (Small Island)	1874	2006	recent	Lopez-Victoria et al. 2011	Neotropic	Colombia (Malpelo Island)	3.98	-81.58	Durnal	Saxicolous&Terrestrial	Anguillae	Diploglossa	2.75	NA	vermet	LC	stable	extant
<i>Diploglossus monsterratti</i>	locality	1964	2006	recent	Corry et al. 2010	Neotropic	British West Indies: Montserrat	16.76	-62.22	Nocturnal	Fossorial&Terrestrial	Anguillae	Diploglossa	2.08	257	Underwood 1964	CR	NA	extant
<i>Diporiphora convergens</i>	specimen	1974	1972	recent	Stor 1974	Australia	Australia	-14.50	125.78	NA	NA	Agamidae	Acrodontia	0.07	1520	Atlas of Living Australia, WAM	DD	unknown	extant
<i>Dreco sapientissimi</i>	description	2002	2002	recent	Bauer et al. 2004	Oriental	Thailand	14.06	99.12	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.24	136	Bauer et al. 2004	NA	NE	extant
<i>Draconia kawensis</i>	description	2017	2014	recent	Sumontha et al. 2017	Oriental	Thailand	12.14	122.26	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.23	226	Sumontha et al. 2017	NA	NE	extant
<i>Draconia minhle</i>	description	2016	2007	recent	Ziegler et al. 2017	Oriental	Vietnam	15.21	107.06	Nocturnal	Terrestrial	Gekkonidae	Gekkota	0.39	NA	Ziegler et al. 1993	NA	NE	extant
<i>Draconia tui</i>	description	2015	2013	recent	Botov et al. 2015	Oriental	Vietnam: Phu Quy Island	10.53	108.95	Nocturnal	NA	Gekkonidae	Gekkota	0.29	186	Botov et al. 2015	NA	NE	extant
<i>Draconia wagneri</i>	specimen	1959	1958	early	Mertens 1959	Oriental	Sumatra	0.34	100.67	Durnal	Arboreal	Anguillae	Diploglossa	0.26	101	CSL, Morla, Bohme	DD	unknown	extant
<i>Draco barto</i>	locality (Small Island)	1987	1998	recent	vermet	Oriental	Biaro Island	2.10	125.36	Durnal	Arboreal	Agamidae	Acrodontia	0.66	212	GBIF.org	NA	NE	extant
<i>Draco ibakandri</i>	description	2007	1998	recent	Miguiere et al. 2007	Oceania	Sulawesi: Tuhalandang Island	2.32	125.42	Durnal	Arboreal	Agamidae	Acrodontia	0.68	274	McGuire et al. 2007	NA	NE	extant
<i>Draco sapientissimi</i>	description	2007	2001	recent	Miguiere et al. 2007	Oceania	Sulawesi: Tuhalandang Island	2.32	125.42	Durnal	Arboreal	Agamidae	Acrodontia	0.68	274	McGuire et al. 2007	NA	NE	extant
<i>Echinomura sulcatorum</i>	description	2006	1992	recent	Donnelly et al. 2006	Neotropic	Guyana	7.37	-60.49	NA	Semi Aquatic	Gymnophthalmidae	Lacertoidae	0.18	1205	Donnelly et al. 2006	NA	NE	extant
<i>Emoia campbelli</i>	description	1986	1983	recent	Brown and Gibbons 1986	Oceania	Viti Levu	-17.78	178.05	Durnal	Arboreal	Scincidae	Scincoidae	1.30	1226	Morrison 2003	EN	decreasing	extant
<i>Emoia cagari</i>	description	1991	1963	early	Brown 1991	Oceania	Papua New Guinea	-5.87	146.92	NA	NA	Scincidae	Scincoidae	0.36	1327	vermet	DD	unknown	extant
<i>Emoia crenata</i>	description	1991</																	

<i>Gekko russellii</i>	description	2009	2006	recent	Brown et al. 2009	Oriental	Calayan Island	19.32	121.43	Nocturnal	Adorbale&Saxicolous	Gekkonidae	Gekkota	1.37	401	Brown et al. 2009	NA	NE	extant
<i>Gekko russellii</i>	description	2009	2007	recent	Ngo et al. 2009	Oriental	Vietnam	10.94	107.37	Nocturnal	Adorbale	Gekkonidae	Gekkota	1.06	119	Ngo et al. 2009	NA	NE	extant
<i>Gekko sanghaewongsi</i>	description	2015	2014	recent	Lau et al. 2015b	Oriental	Laos	17.32	105.69	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.97	331	Lau et al. 2015b	NA	NE	extant
<i>Gekko takahashi</i>	description	2009	2010	recent	Ngo and Gamble 2010	Oriental	Vietnam	10.91	107.90	Nocturnal	Adorbale&Saxicolous	Gekkonidae	Gekkota	1.36	99	Ngo and Gamble 2010	NA	NE	extant
<i>Gekko takahashi</i>	description	2014	2014	recent	Lau et al. 2014b	Oriental	Laos	17.46	104.90	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.00	181	Lau et al. 2014b	NA	NE	extant
<i>Gekko truongi</i>	description	2011	2011	recent	Phung and Ziegler 2011	Oriental	Vietnam	12.49	109.13	Nocturnal	NA	Gekkonidae	Gekkota	1.23	257	Phung and Ziegler 2011	NA	NE	extant
<i>Gekko venenensis</i>	description	2010	2008	recent	Sang 2010	Oriental	Vietnam	10.38	104.96	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.17	341	Sang 2010	NA	NE	extant
<i>Gekko venenensis</i>	description	2008	2006	recent	Zhou and Wang 2008	China	Palaeartic	21.85	104.77	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.65	1360	Zhou and Wang 2008	NA	NE	extant
<i>Gerrhonotus hardwigeri</i>	description	1976	1976	recent	Bolme 1976	Oceania	New Caledonia	-11.34	165.44	NA	NA	Scincidae	Scincoidae	1.49	260	RUCN	CR	unknown	extant
<i>Gerrhonotus farreri</i>	specimen	2010	2006	recent	Bryson and Graham 2010	Neartic	Mexico	22.82	-99.88	Diurnal	NA	Anguillae	Diplglossa	1.33	219	Bryson and Graham 2010	NA	NE	extant
<i>Gerrhonotus luscini</i>	specimen	2017	2010	recent	Banda-Led et al. 2017	Neartic	Mexico	25.67	-100.67	Diurnal	Terrestrial	Anguillae	Diplglossa	NA	98	Banda-Led et al. 2017	NA	NE	extant
<i>Glyptomerophis chanditana</i>	description	2014	after 2002	recent	Conrad Hoskin, pers. comm.	Australia	Australia	-13.74	148.98	NA	Fossorial&Terrestrial	Scincidae	Diplglossa	0.47	464	Atlas of Living Australia, QM	NA	NE	extant
<i>Glyptomerophis chanditana</i>	description	2014	after 2002	recent	Hoskin and Cooper 2014	Australia	Australia	-13.74	143.33	NA	Terrestrial	Scincidae	Scincoidae	0.46	500	Hoskin and Cooper 2014	NA	NE	extant
<i>Glyptomerophis schellerae</i>	description	2014	2013	recent	Hoskin and Cooper 2014	Australia	Australia	-14.29	144.50	Diurnal	Saxicolous&Terrestrial	Scincidae	Scincoidae	1.23	710	Hoskin and Cooper 2014	NA	NE	extant
<i>Gonadodes doulei</i>	locality (Small island)	2005	2011	recent	Betta et al. 2011	Neotropic	Union Island	12.60	-61.48	Diurnal	Saxicolous	Sphaerodactylidae	Gekkota	0.12	318	Betta et al. 2011	CR	stable	extant
<i>Gonadodes infernalis</i>	description	2008	2007	recent	Rivas and Schragel 2008	Neotropic	Venezuela	6.58	-66.82	Diurnal	Saxicolous	Sphaerodactylidae	Gekkota	0.81	690	Hoskin and Cooper 2010	NA	NE	extant
<i>Gonadodes lichenosus</i>	description	2010	2009	recent	Rojas-Ruiz et al. 2010	Neotropic	Venezuela	10.04	-72.81	Diurnal	Adorbale	Sphaerodactylidae	Gekkota	0.34	894	RUCN	DD	unknown	extant
<i>Gonadodes timidis</i>	description	2011	2011	recent	Kok 2011	Neotropic	Guyana	4.33	-58.80	Diurnal	Saxicolous	Sphaerodactylidae	Gekkota	0.53	609	RUCN	LC	unknown	extant
<i>Goniatosaurus basileusis</i>	description	2008	2003	recent	Oliver et al. 2008	Oriental	Vietnam	10.88	106.38	Nocturnal	Saxicolous&Terrestrial	Eublepharidae	Gekkota	1.54	241	Oliver et al. 2008	NA	NE	extant
<i>Goniatosaurus kakoderus</i>	description	2015	2014	recent	Yang and Chan 2015	Oriental	China	23.60	108.30	Nocturnal	Saxicolous	Eublepharidae	Gekkota	1.54	102	Meiri 2016	NA	NE	extant
<i>Goniatosaurus kwangensis</i>	description	2015	2013	recent	Yang and Chan 2015	Oriental	China	23.60	108.30	Nocturnal	NA	Eublepharidae	Gekkota	1.43	102	Yang and Chan 2015	NA	NE	extant
<i>Goniatosaurus lybicus</i>	description	2013	2010	recent	Wang et al. 2013	Oriental	China	25.24	108.05	Nocturnal	Adorbale&Saxicolous	Eublepharidae	Gekkota	1.45	390	Wang et al. 2013	NA	NE	extant
<i>Goniatosaurus lybicus</i>	description	1994	2004	recent	http://www.researchgate.net/publication/257162916	Oriental	Archipelago: Baya Is	12.74	127.97	Nocturnal	Adorbale	Eublepharidae	Gekkota	1.07	147	Giri and Maeda 2004	NA	NE	extant
<i>Goniatosaurus yindensis</i>	description	2010	2009	recent	Wang et al. 2010	Oriental	China	24.41	113.31	Nocturnal	Saxicolous	Eublepharidae	Gekkota	1.25	285	Wang et al. 2010	NA	NE	extant
<i>Goniatosaurus zhangji</i>	description	2014	2013	recent	Wang et al. 2013	Oriental	China	24.41	113.11	Nocturnal	Saxicolous	Eublepharidae	Gekkota	1.21	181	Wang et al. 2014	NA	NE	extant
<i>Goniatosaurus zhangji</i>	description	1991	2009	recent	Manthey and Denzler 1991	Oriental	Sumatra	1.34	98.54	Nocturnal	Adorbale	Agamidae	Acrodactyla	0.67	631	ZSL, Monksell Bolme	DD	2 unknown	extant
<i>Gonocophus nigratus</i>	specimen	1925	1924 or earlier	early	Smith 1925	Oriental	Borneo: Sarawak	3.92	115.33	Diurnal	Adorbale	Agamidae	Acrodactyla	1.35	NA	Das 2004	NA	NE	extant
<i>Huachuapensis nigra</i>	description	1982	1959	early	Greer and Haeck 1982	Afrotropic	Somalia	4.00	47.00	NA	Fossorial	Scincidae	Scincoidae	0.40	585	Lanza 1983	NA	NE	extant
<i>Harpeururus emicoides</i>	specimen	1913	1912	early	Wermer 1913	Afrotropic	Nias Island	1.13	97.55	Diurnal	NA	Agamidae	Acrodactyla	0.84	493	Manthey 2010	NA	NE	extant
<i>Homocercus medius</i>	specimen	1933	1933 or earlier	early	Vivignier 1933	Afrotropic	Senegal	14.26	99.11	Diurnal	Adorbale	Scincidae	Scincoidae	1.27	214	ZSL, Monksell Bolme	NA	NE	extant
<i>Hemidactylus nebulosus</i>	locality	1995	2004	recent	Costantinos and Mouton 2006	Afrotropic	South Africa	-30.04	19.00	Diurnal	Saxicolous	Cordylidae	Scincoidae	1.10	218	Bates et al. 2013	VU	NA	extant
<i>Hemidactylus orbatus</i>	description	1996	1903 or earlier	early	Leonardo Fox specimen; Boulenger 1906	Afrotropic	Amnion Island	3.49	8.69	NA	NA	Gekkonidae	Gekkota	0.54	223	Oliver Pawels	NA	NE	extant
<i>Hemidactylus arnoldi</i>	description	1978	1933	early	Lanza 1978	Afrotropic	Somalia	11.00	43.00	Nocturnal	Terrestrial	Gekkonidae	Gekkota	1.04	453	Lanza 1978	DD	unknown	extant
<i>Hemidactylus assemitus</i>	description	2015	2011	recent	Snell et al. 2011	Afrotropic	Yemen	15.92	39.91	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.56	228	Meiri 2016	NA	NE	extant
<i>Hemidactylus beniensis</i>	description	2006	2010	recent	Jean-François Trape	Afrotropic	Benin	7.73	2.18	Nocturnal	Saxicolous	Gekkonidae	Gekkota	1.01	269	Bauer 2006	LC	unknown	extant
<i>Hemidactylus dhakali</i>	description	2017	2014	recent	Mirza and Raju 2017	Oriental	India	22.49	78.45	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.92	236	Mirza and Raju 2017	NA	NE	extant
<i>Hemidactylus dactylocheilus</i>	description	1999	2007	recent	Razzeri et al. 2011	Afrotropic	Senegal	14.26	99.11	Nocturnal	Saxicolous&Terrestrial	Gekkonidae	Gekkota	0.54	138	Razzeri et al. 2011	CR	decreasing	extant
<i>Hemidactylus endophis</i>	specimen	2012	1885	early	Caranata, pers. comm.	Palaeartic	Iran	NA	NA	NA	Gekkonidae	Gekkota	0.65	NA	not mapped	NA	NE	extant	
<i>Hemidactylus grani</i>	locality	1899	2014	recent	Martin et al. 2017	Afrotropic	Senegal	14.26	99.11	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.98	1320	Razzeri et al. 2011	VT	unknown	extant
<i>Hemidactylus gujaratisi</i>	description	2009	2007	recent	Giri et al. 2009c	Oriental	India	21.52	70.48	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.76	13	Giri et al. 2009c	NA	NE	extant
<i>Hemidactylus kishinouyei</i>	description	2015	2014	recent	Danilge and Tople 2015	Oriental	India	19.92	80.10	Nocturnal	Adorbale&Saxicolous&Terrestrial	Gekkonidae	Gekkota	1.10	141	Danilge and Tople 2015	CR	1 unknown	extant
<i>Hemidactylus klausneri</i>	specimen	1948	1931	early	Scortecci 1948	Afrotropic	Somalia	0.49	42.78	NA	NA	Gekkonidae	Gekkota	0.15	79	Lanza 1983, 1990	NA	NE	extant
<i>Hemidactylus lepechlovi</i>	description	2008	1997	recent	Arnold et al. 2008	Afrotropic	Cape Verde Islands (Fogo)	15.02	-24.39	NA	NA	Gekkonidae	Gekkota	0.18	364	Arnold et al. 2008	DD	NA	extant
<i>Hemidactylus macleodensis</i>	description	2006	2001	recent	Bauer et al. 2006	Afrotropic	Cameroon	6.88	10.15	NA	Adorbale	Gekkonidae	Gekkota	1.28	807	Bauer et al. 2006	DD	unknown	extant
<i>Hemidactylus newtoni</i>	description	1997	1997 or earlier	early	inferred from date of description	Afrotropic	Amnion Island	3.49	5.62	NA	Adorbale	Gekkonidae	Gekkota	0.44	247	Oliver Pawels	NA	NE	extant
<i>Hemidactylus principis</i>	description	2012	2015	recent	inferred from date of description	Afrotropic	Principe Island	1.64	7.40	Nocturnal	Adorbale	Gekkonidae	Gekkota	0.78	418	Miller et al. 2012	NA	NE	extant
<i>Hemidactylus rosenblatti</i>	specimen	2011	2007	recent	Torki 2011	Palaeartic	Iran	33.27	47.58	Nocturnal	NA	Gekkonidae	Gekkota	0.87	126	Hosseiniadeh et al. 2014	NA	NE	extant
<i>Hemidactylus sauteri</i>	description	2014	2012	recent	Mirza et al. 2013	Oriental	India	21.62	73.85	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.76	136	Giri and Band 2008	VU	unknown	extant
<i>Hemidactylus schmidti</i>	description	2014	2013	recent	Ngo et al. 2014	Oriental	Vietnam	15.99	100.00	Nocturnal	Adorbale&Saxicolous	Gekkonidae	Gekkota	0.47	732	Ngo et al. 2014	NA	NE	extant
<i>Hemiphyllodactylus bangensis</i>	description	2015	2015	recent	Grismer et al. 2015	Oriental	Peninsular Malaysia	5.60	102.60	Nocturnal	Adorbale	Gekkonidae	Gekkota	0.07	300	Grismer et al. 2015a	NA	NE	extant
<i>Hemiphyllodactylus bangensis</i>	description	2014	21st century	recent	http://www.flickr.com/photos/hemiphyllodactylus/	Oriental	Thailand	18.80	99.00	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.22	10	Grismer et al. 2014	NA	NE	extant
<i>Hemiphyllodactylus bangensis</i>	description	2016	2016	recent	Lee Grismer, pers. observation	Oriental	Prong Island	1.42	109.27	Nocturnal	Adorbale	Gekkonidae	Gekkota	0.11	17	Cohen et al. 2016	NA	NE	extant
<i>Hemiphyllodactylus emgonensis</i>	description	2014	2013	recent	Grismer et al. 2014g	Oriental	Enggano	-5.35	102.28	Nocturnal	Adorbale	Gekkonidae	Gekkota	0.10	459	Grismer et al. 2014g	NA	NE	extant
<i>Hemiphyllodactylus kizianii</i>	description	2014	2013	recent	Nguyen et al. 2014	Oriental	Laos	19.81	102.10	Nocturnal	Adorbale&Saxicolous	Gekkonidae	Gekkota	0.21	55	Nguyen et al. 2014	NA	NE	extant
<i>Hemiphyllodactylus kizianii</i>	specimen	2013	2010	recent	Grismer et al. 2013	Oriental	Peninsular Malaysia	5.60	102.60	Nocturnal	Adorbale	Gekkonidae	Gekkota	0.19	300	Grismer et al. 2013	NA	NE	extant
<i>Hemiphyllodactylus kizianii</i>	specimen	2013	2013	recent	Nguyen et al. 2013	Oriental	Vietnam	15.99	100.00	Nocturnal	Adorbale&Saxicolous	Gekkonidae	Gekkota	0.38	344	Nguyen et al. 2013	NA	NE	extant
<i>Heterodactylus septentrionalis</i>	description	2009	2007	recent	Rodrigues et al. 2009	Neotropic	Brazil	-13.16	-41.40	Diurnal	Terrestrial	Gymnophthalmidae	Lacertoidae	0.49	467	Carvalho et al. 2016	NA	NE	extant
<i>Homonota rapicola</i>	description	2007	21st century	recent	Cacciali et al. 2007	Neotropic	Paraguay	-25.52	-57.05	Nocturnal	Terrestrial	Phyllodactylidae	Gekkota	1.00	106	Cacciali et al. 2007	NA	NE	extant
<i>Hypsiglena torquata</i>	specimen	1853-1886	1886	early	Bauer and Bauer 1986	Oceania	New Zealand North Island	36.27	168.32	Nocturnal	Adorbale	Phyllodactylidae	Gekkota	0.15	156	Charles Donnell Johnson 2016	EX	3 unknown	extant
<i>Hypsiglena torquata</i>	specimen	1874	1874 or earlier	early	inferred from date of description	Oceania	New Guinea	-3.44	152.35	NA	NA	Agamidae	Acrodactyla	2.65	751	Allen Allison pers. comm.	DD	unknown	extant
<i>Hypsiglena torquata</i>	specimen	2006	1989	recent	Manthey and Denzler 2006	Oceania	Papua New Guinea	-6.58	142.83	NA	NA	Agamidae	Acrodactyla	2.11	2212	Allen Allison pers. comm.	DD	unknown	extant
<i>Hypsiglena torquata</i>	specimen	2006	21st century	recent	Manthey and Denzler 2006	Oceania	New Guinea	NA	NA	Diurnal	Adorbale	Agamidae	Acrodactyla	2.08	NA	not mapped	DD	unknown	extant
<i>Ichnosaurus micropodidae</i>	description	1919	1919	early	RMCA museum	Afrotropic	Angola	-12.46	15.16	NA	NA	Lacertidae	Lacertoidae	0.52	605	The Reptile Database	NA	NE	extant
<i>Ichnosaurus micropodidae</i>	description	1956	1956	early	Marx 1956	Afrotropic	Angola	-12.46	15.16	NA	NA	Lacertidae	Lacertoidae	0.52	605	The Reptile Database	NA	NE	extant
<i>Ichnosaurus micropodidae</i>	specimen	1917	1896 or earlier	early	Boulenger 1917	Afrotropic	Lake Tanganyika coast	-4.16	30.21	NA	NA	Lacertidae	Lacertoidae	0.21	261	Spawls et al. 2002	DD	unknown	extant
<i>Inulaspis transiens</i>	description	2010	2007	recent	Linkem et al. 2010	Oriental	Palawan	8.81	117.66	NA	NA	Scincidae	Scincoidae	0.45	755	Linkem et al. 2010	NA	NE	extant
<i>Japalura indica</i>	description	2016	2015	recent	Schleich and Kersch 2016	Oriental	Palawan	8.81	117.66	NA	Adorbale&Saxicolous	Agamidae	Acrodactyla	0.93	469	Schleich and Kersch 2016	DD	unknown	extant
<i>Japalura laevis</i>	description	2016	2013	recent	Wang et al. 2016a	Oriental	China	28.37	98.87	Diurnal	Terrestrial	Agamidae	Acrodactyla	0.94	676	Wang et al. 2016a	NA	NE	extant
<i>Japalura laevis</i>	description	2016	2013	recent	Wang et al. 2016a	Oriental	China	30.10	107.23	Diurnal	Terrestrial								

<i>Leptosiaphys fuhni</i>	specimen	1973	1957	early	Perret 1973	Afrotrropic	Cameroon	3.98	13.18	NA	NA	Scincidae	Scincoidae	0.21	465	Chirio and Leffebvre 2007	NA	NE	extant
<i>Leptosiaphys hylophilus</i>	description	1982	1955	recent	Laurent 1982	Afrotrropic	Democratic Republic of the Co	0.88	18.07	NA	NA	Scincidae	Scincoidae	-0.03	510	Laurent 1982, RMCA, Danny Meire	NA	NE	extant
<i>Leptosiaphys mabouia</i>	specimen	2001	2001	recent	Jeune et al. 2001	Afrotrropic	Cameroon	6.32	14.23	NA	NA	Fossorial&Terrestrial	Scincidae	0.13	76	Jeune et al. 2001	NA	NE	extant
<i>Leptosiaphys rhomboidalis</i>	specimen	1989	1982	recent	Broadley 1989	Afrotrropic	Tanzania	-7.92	3.88	NA	Terrestrial	Scincidae	Scincoidae	0.47	583	Spawls et al. 2002	DD	unknown	extant
<i>Lerista banghangle</i>	locality	1991	2014	recent	Lloyd 2015	Australia	Australia	-17.49	128.38	Nocturnal	Fossorial	Scincidae	Scincoidae	0.31	852	Atlas of Living Australia, WAM	NA	NE	extant
<i>Lerista ingrami</i>	locality	1991	1996	recent	Atlas of living Australia	Australia	Australia	-15.10	145.24	Diurnal	Fossorial&Terrestrial	Scincidae	Scincoidae	-0.36	243	Atlas of Living Australia	NA	NE	extant
<i>Lerista profundicola</i>	specimen	1986	1982	recent	Western Australia Museum	Australia	Australia Kingball Island	-16.08	123.42	Nocturnal	Afrotrropic	Scincidae	Scincoidae	0.35	NA	Atlas of Living Australia, WAM	NA	NE	extant
<i>Lerista quadrivincula</i>	specimen	1991	1980	recent	Atlas of living Australia	Australia	Australia	-21.02	116.80	NA	NA	Scincidae	Scincoidae	0.03	1102	Storr 1990	NA	NE	extant
<i>Lerista robusta</i>	description	1990	1989	recent	Storr 1990	Australia	Australia	-18.93	125.07	Nocturnal	Fossorial&Terrestrial	Scincidae	Scincoidae	0.26	1066	Storr 1990	NA	NE	extant
<i>Lerista ulipinu</i>	specimen	1991	1981	recent	Storr 1991a	Australia	Australia	-22.68	114.02	NA	NA	Scincidae	Scincoidae	-0.36	791	Storr 1991a	NA	NE	extant
<i>Lerista villosa</i>	locality	1991	2013	recent	Atlas of living Australia	Australia	Australia	-31.55	119.10	Diurnal	Terrestrial	Scincidae	Scincoidae	0.21	379	Storr 1991b	NA	NE	extant
<i>Liburniscus secretis</i>	locality	1980	2011	recent	Atlas of living Australia	Australia	Australia	-15.66	145.23	Diurnal	Saxicolous	Scincidae	Scincoidae	0.83	289	ZSL, Monika Bohme	LC	unknown	extant
<i>Liolaemus antiumalgen</i>	description	2010	2005	recent	Avila et al. 2010	Neotropic	Argentina	-36.65	-70.33	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.62	452	Avila et al. 2010	LC	stable	extant
<i>Liolaemus barnardii</i>	description	2011	2007	recent	Avila et al. 2012	Neotropic	Argentina	-37.23	-70.30	Diurnal	Saxicolous&Terrestrial	Liolaemidae	Pleurodonta	1.30	315	Avila et al. 2012b	NA	NE	extant
<i>Liolaemus capensis</i>	description	2011	2008	recent	Breitman et al. 2011	Neotropic	Argentina	-72.05	-72.05	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	0.81	522	Breitman et al. 2011b	LC	stable	extant
<i>Liolaemus cheique</i>	description	2010	2008	recent	Abdala et al. 2010	Neotropic	Argentina	-36.37	-69.80	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.38	366	Abdala et al. 2010	LC	stable	extant
<i>Liolaemus cinereus</i>	description	2006	2005	recent	Mogollano et al. 2006	Neotropic	Argentina	-29.52	-69.19	NA	NA	Liolaemidae	Pleurodonta	0.89	300	Daniel Pincheira-Donoso	DD	unknown	extant
<i>Liolaemus concolor</i>	description	2006	2004	recent	Gonzalez-Gaitierrez 2015	Neotropic	Chile	-34.78	-71.56	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	0.94	335	Daniel Pincheira-Donoso	NA	NE	extant
<i>Liolaemus cranwelli</i>	description	2015	2009	recent	Avila et al. 2015	Neotropic	Argentina	-37.72	-68.90	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.42	575	Avila et al. 2015	NA	NE	extant
<i>Liolaemus cranwelli</i>	specimen	1973	1961	early	Donoso-Barros 1973	Neotropic	Bolivia	-17.32	-63.55	NA	NA	Liolaemidae	Pleurodonta	0.77	457	Etheridge 2006, Dirksen and De la Riva	CR	decreasing	extant
<i>Liolaemus cayanbaui</i>	specimen	2009	2006	recent	Avila et al. 2009	Neotropic	Argentina	-38.20	-69.00	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	0.87	151	Avila et al. 2009	CR	unknown	extant
<i>Liolaemus diagaia</i>	description	2011	2010	recent	Abdala et al. 2011	Neotropic	Argentina	-25.82	-65.09	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	0.58	420	Abdala et al. 2011	LC	stable	extant
<i>Liolaemus disjunctus</i>	specimen	1990	probably before 1963	early	Laurent 1990	Neotropic	Peru	-7.82	-78.05	Diurnal	NA	Liolaemidae	Pleurodonta	1.40	232	Daniel Pincheira-Donoso	NA	NE	extant
<i>Liolaemus duellmani</i>	description	1978	1974	recent	Cei 1978	Neotropic	Argentina	-36.35	-69.83	NA	NA	Liolaemidae	Pleurodonta	1.27	357	Daniel Pincheira-Donoso	DD	unknown	extant
<i>Liolaemus erivani</i>	specimen	1984	1962	early	Nunez and Yanez 1984	Neotropic	Chile	-23.32	-67.81	Diurnal	NA	Liolaemidae	Pleurodonta	0.96	448	Daniel Pincheira-Donoso	DD	unknown	extant
<i>Liolaemus exploratum</i>	description	1984	1896	early	Cei 1986	Neotropic	Argentina	-46.64	-71.31	NA	NA	Liolaemidae	Pleurodonta	0.71	457	Daniel Pincheira-Donoso	DD	unknown	extant
<i>Liolaemus forsteri</i>	specimen	1982	1979	recent	Laurent 1982	Neotropic	Bolivia	-16.37	-68.14	NA	NA	Liolaemidae	Pleurodonta	1.56	338	Daniel Pincheira-Donoso	NA	NE	extant
<i>Liolaemus fressati</i>	locality	2007	21st century	recent	Demangel 2016	Neotropic	Chile	-33.94	-70.96	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.39	472	Daniel Pincheira-Donoso	NA	NE	extant
<i>Liolaemus garfieldi</i>	description	2017	2014	recent	Vernazza et al. 2017	Neotropic	Uruguay	-31.98	-55.52	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	0.58	395	Vernazza et al. 2017	NA	NE	extant
<i>Liolaemus halanotus</i>	description	2010	2007	recent	Lobo et al. 2010	Neotropic	Argentina	-25.07	-67.64	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	1.07	429	Daniel Pincheira-Donoso	NA	NE	extant
<i>Liolaemus huayra</i>	description	2008	2006	recent	Abdala et al. 2008	Neotropic	Argentina	-26.38	-66.07	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.44	222	Abdala et al. 2008	LC	stable	extant
<i>Liolaemus jayakumar</i>	description	2016	2016	recent	Troncoso-Palacios et al. 2016	Neotropic	Chile	-31.20	-71.73	Diurnal	Ashore&Saxicolous	Liolaemidae	Pleurodonta	1.30	229	Troncoso-Palacios et al. 2016	NA	NE	extant
<i>Liolaemus lefrantii</i>	description	2016	2016	recent	Troncoso-Palacios et al. 2016	Neotropic	Chile	-38.20	-71.75	Diurnal	Ashore&Saxicolous	Liolaemidae	Pleurodonta	1.25	360	Troncoso-Palacios et al. 2016	NA	NE	extant
<i>Liolaemus longimembris</i>	description	2015	2013	recent	Huerta et al. 2015	Neotropic	Chile	-38.39	-71.63	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.03	231	Huerta et al. 2015	NA	NE	extant
<i>Liolaemus lapei</i>	specimen	2005	1992	recent	Barru-Vidal 2005	Neotropic	Chile	-19.63	-68.63	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	0.97	647	Daniel Pincheira-Donoso	LC	stable	extant
<i>Liolaemus melanostomus</i>	specimen	2005	2002	recent	Pincheira-Donoso and Nunez 2005	Neotropic	Chile	-20.41	-71.36	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	1.00	31	Daniel Pincheira-Donoso	LC	stable	extant
<i>Liolaemus melanopleurus</i>	specimen	1860	1860 or earlier	early	inferred from date of description	Neotropic	Chile	NA	NA	Diurnal	NA	Liolaemidae	Pleurodonta	1.05	NA	not mapped	NA	NE	extant
<i>Liolaemus montezoni</i>	description	2006	2005	recent	Cabrera and Mogollano 2006	Neotropic	Argentina	-29.54	-69.22	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	0.92	300	Daniel Pincheira-Donoso	DD	unknown	extant
<i>Liolaemus nigrocoraleus</i>	description	2014	2012	recent	Marumbio-Alfaro and Troncoso-Palacios 2014	Neotropic	Chile	-27.45	-70.84	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	0.74	138	Marumbio-Alfaro and Troncoso-Palac	LC	stable	extant
<i>Liolaemus pachae</i>	description	2013	2013	recent	Hernandez et al. 2013	Neotropic	Argentina	-26.67	-65.82	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.00	312	Hernandez et al. 2013	LC	stable	extant
<i>Liolaemus pachae</i>	description	2007	2003	recent	Avila et al. 2007	Neotropic	Argentina	-36.64	-69.82	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	1.36	358	Avila et al. 2007	LC	stable	extant
<i>Liolaemus ramonensis</i>	locality	1932	2010	recent	Daniel Pincheira-Donoso	Neotropic	Chile	-33.48	-70.43	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.45	199	Daniel Pincheira-Donoso	LC	stable	extant
<i>Liolaemus roosei</i>	description	2016	2016	recent	Demangel 2016	Neotropic	Chile	-31.72	-69.36	Diurnal	Saxicolous&Terrestrial	Liolaemidae	Pleurodonta	1.36	381	Demangel 2016	NA	NE	extant
<i>Liolaemus telapapua</i>	description	2004	2000	recent	Avila et al. 2004	Neotropic	Argentina	-29.73	-67.75	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.31	536	Avila et al. 2004	LC	unknown	extant
<i>Liolaemus tollucae</i>	description	2016	2014	recent	Demangel 2016	Neotropic	Chile	-38.22	-71.74	Diurnal	Saxicolous&Terrestrial	Liolaemidae	Pleurodonta	1.02	229	Demangel 2016	NA	NE	extant
<i>Liolaemus tingensis</i>	description	2007	2006	recent	Pincheira-Donoso and Scolaro 2007	Neotropic	Argentina	-37.82	-71.10	Diurnal	NA	Liolaemidae	Pleurodonta	1.38	342	Daniel Pincheira-Donoso	NA	NE	extant
<i>Liolaemus tollucae</i>	description	2007	2007	recent	Quintana et al. 2008	Neotropic	Argentina	-37.72	-67.98	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.04	331	Quintana et al. 2008	LC	stable	extant
<i>Liolaemus uniformis</i>	description	2016	2012	recent	Troncoso-Palacios et al. 2016	Neotropic	Chile	-32.26	-70.50	Diurnal	Saxicolous	Liolaemidae	Pleurodonta	1.36	825	Troncoso-Palacios et al. 2016	NA	NE	extant
<i>Liolaemus yungai</i>	description	2014	2009	recent	Abdala et al. 2014	Neotropic	Argentina	-47.69	-68.01	Diurnal	Terrestrial	Liolaemidae	Pleurodonta	0.85	387	Abdala et al. 2014	LC	stable	extant
<i>Liocincus vivax</i>	description	2004	2003	recent	Sadlier et al. 2004	Oceania	New Caledonia	-21.17	165.03	Diurnal	Terrestrial	Scincidae	Scincoidae	0.49	349	Sadlier et al. 2004	CR	unknown	extant
<i>Lipinia miamensis</i>	specimen	1910	1981	early	Werner 1910	Oriental	Puluu-Miang	0.72	118.01	NA	NA	Scincidae	Scincoidae	0.01	344	Das 2004	DD	unknown	extant
<i>Lipinia sekayensis</i>	description	2014	2016	recent	Grismer et al. 2016e	Oriental	Peninsular Malaysia	5.00	102.97	Diurnal	Fossorial&Terrestrial	Scincidae	Scincoidae	0.13	291	Grismer et al. 2016a, Grismer et al. 201	NA	NE	extant
<i>Lipinia rambongensis</i>	specimen	1963	1959	early	Vermet	Oriental	Midnau	8.31	123.61	NA	NA	Scincidae	Scincoidae	0.20	507	GBIF, CAS	DD	stable	extant
<i>Lipinia rhyacialis</i>	description	2007	2007	recent	Grismer et al. 2007	Oceania	New Caledonia	127.09	165.03	Diurnal	Terrestrial	Scincidae	Scincoidae	0.17	253	GBIF, CAS	DD	unknown	extant
<i>Lowergale phylidensis</i>	description	1899	1899 or earlier	early	inferred from date of description	Afrotrropic	Tanzania	-4.94	29.01	NA	Fossorial	Amphibians&Reptiles	Amphibians	0.53	71	Gass and Krakau 1989	DD	unknown	extant
<i>Loxopholis hoogmoedi</i>	specimen	2008	2007	recent	Kok 2008	Neotropic	Guyana	5.22	-60.59	Diurnal	Ashoreal	Gymnophthalmidae	Lacertoidae	0.68	968	Kok 2008	LC	stable	extant
<i>Luperosaurus galat</i>	specimen	2010	2007	recent	Brown et al. 2010a	Oriental	Palawan	8.81	117.65	Nocturnal	Ashoreal	Gekkonidae	Gekkotia	1.03	364	Brown et al. 2010a	NA	NE	extant
<i>Luperosaurus islandicus</i>	specimen	2009	1998	recent	Brown et al. 2009	Oriental	Palawan	12.04	123.02	Diurnal	Ashoreal	Gekkonidae	Gekkotia	0.84	201	Brown et al. 2010	DD	unknown	extant
<i>Luperosaurus kahl</i>	specimen	2007	2003	recent	Brown et al. 2007	Oriental	Luzon	16.34	121.73	Nocturnal	Ashoreal	Gekkonidae	Gekkotia	1.34	311	Brown et al. 2007	DD	unknown	extant
<i>Luperosaurus palawanensis</i>	description	1978	1961	early	Brown and Alcala 1978	Oriental	Palawan	9.97	118.62	Nocturnal	Ashoreal	Gekkonidae	Gekkotia	0.50	616	GBIF, CAS	DD	unknown	extant
<i>Luperosaurus yuasai</i>	specimen	1996	1994	recent	Ota et al. 1996	Oriental	Borneo: Kalimantan	-0.97	117.05	Nocturnal	NA	Gekkonidae	Gekkotia	0.15	124	Ota et al. 1996	NA	NE	extant
<i>Lygodactylus blanchi</i>	specimen	1967	2008	recent	Pompe et al. 2009	Madagascar	Madagascar	-16.12	47.02	Diurnal	Saxicolous	Gekkonidae	Gekkotia	0.16	207	Brown et al. 2014	YU	unknown	extant
<i>Lygodactylus expectatus</i>	locality	1967	2016	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.94	49.12	Diurnal	Ashoreal&Saxicolous	Gekkonidae	Gekkotia	-0.12	172	Brown et al. 2014	NT	stable	extant
<i>Lygodactylus grandioratus</i>	locality	1962	1962	early	Vermet	Afrotrropic	Kenya	4.25	-40.81	NA	NA	Gekkonidae	Gekkotia	-0.27	883	Spawls et al. 2002	DD	unknown	extant
<i>Lygodactylus inexpectatus</i>	locality	1962	1962	early	Vermet	Afrotrropic	Tanzania	-6.40	-37.77	Nocturnal	Ashoreal&Terrestrial	Gekkonidae	Gekkotia	-0.06	115	Spawls et al. 2002	DD	unknown	extant
<i>Lygodactylus insularis</i>	locality (Small Island)	1913	2015	recent	Sanchez-Pacheco et al. 2015	Afrotrropic	Juan de Nova Island	-17.06	42.74	NA	NA	Gekkonidae	Gekkotia	-0.34	616	The Reptile Database	NA	NE	extant
<i>Lygodactylus mirabilis</i>	locality	1962	2006	recent	Chiant et al. 2009	Madagascar	Madagascar	-19.34	47.25	Diurnal	Saxicolous	Gekkonidae	Gekkotia	-0.19	117	Brown et al. 2014	CR	unknown	extant
<i>Lygodactylus ornatus</i>	locality	1965	1996	recent	Vermet	Madagascar	Madagascar	-15.83	48.83	Diurnal	Saxicolous	Gekkonidae	Gekkotia	-0.26	369	Brown et al. 2014	EN	unknown	extant
<i>Lygodactylus padillani</i>	locality	1991	1996	recent	Vermet	Madagascar	Madagascar	-46.36	46.36	Diurnal	Saxicol								

<i>Pachylactylus boehmei</i>	description	2010	2006	recent	Bauer 2010	Afrotrropic	Namibia	-19.55	17.24	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.31	412	Bauer 2010	NA	NE	extant
<i>Pachylactylus eunata</i>	description	2011	2007	recent	Branch et al. 2011	Afrotrropic	Namibia	-24.78	15.89	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.31	972	Branch et al. 2011	NA	NE	extant
<i>Pachylactylus fuscus</i>	description	2009	2004	recent	Bauer et al. 2006	Afrotrropic	Namibia	-19.38	17.24	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.27	412	Bauer et al. 2006	NA	NE	extant
<i>Pachylactylus tsodiloensis</i>	locality	1966	21st century	recent	Barts et al. 2005	Afrotrropic	Botswana	-18.70	21.75	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.67	1358	ZSL, Monika Bohme	NT	unknown	extant
<i>Papusius amanoensis</i>	locality (Small Island)	1972	2007	recent	Soares 2015	Afrotrropic	Amoebon Island	-1.43	5.62	NA	Terrestrial	Scincidae	Scincoidae	0.15	507	Oliver Pauwels	CR	unknown	extant
<i>Papusius burgoni</i>	specimen	1933	1932	early	de Witte 1933	Afrotrropic	Democratic Republic of the Co	-0.33	29.80	NA	NA	Scincidae	Scincoidae	0.54	127	de Witte 1933, RMCA, Danny Meire	NA	NE	extant
<i>Papusius duranum</i>	specimen	1949	1947	early	Musard 1948	Afrotrropic	Cameroun	-7.87	13.62	NA	NA	Scincidae	Scincoidae	0.21	63	Christo and Lefebvre 2007	NA	NE	extant
<i>Papusius helleri</i>	specimen	1932	1925	early	Lowridge 1932	Afrotrropic	Democratic Republic of the Co	-0.33	29.80	NA	NA	Scincidae	Scincoidae	0.66	196	ZSL, Monika Bohme	LC	unknown	extant
<i>Papusius wilsoni</i>	specimen	1914	1914	early	Werner 1914	Afrotrropic	Sudan	10.63	30.38	Diurnal	NA	Scincidae	Scincoidae	-0.61	592	The Reptile Database	DD	unknown	extant
<i>Papuscissurus rodriguezi</i>	specimen	2009	2007	recent	Kok 2009	Neotropic	Guyana	5.20	-46.59	Diurnal	Terrestrial	Gymnophthalmidae	Lacertoidae	0.65	968	Kok 2009	NA	NE	extant
<i>Papuscissurus burgersi</i>	specimen	1932	1913	early	Vogt 1932	Oceania	Papua New Guinea	NA	NA	NA	NA	Scincidae	Scincoidae	0.62	NA	not mapped	DD	unknown	extant
<i>Papuscissurus phareles</i>	specimen	1932	1913	early	Vogt 1932	Oceania	Papua New Guinea	NA	NA	NA	NA	Scincidae	Scincoidae	0.21	NA	not mapped	DD	unknown	extant
<i>Paracantius ampyoensis</i>	description	2016	2012	recent	Miralles et al. 2016	Madagascar	Madagascar	-16.32	46.81	NA	Terrestrial	Scincidae	Scincoidae	-0.07	232	Miralles et al. 2016	NA	NE	extant
<i>Paracantius killeenii</i>	specimen	2010	2007	recent	Kohler et al. 2010	Madagascar	Madagascar	-12.27	49.40	Diurnal	Fossorial	Scincidae	Scincoidae	-0.29	130	Brown et al. 2014	CR	decreasing	extant
<i>Paracantius kinkuna</i>	specimen	2009	2008	recent	Kohler et al. 2009	Madagascar	Madagascar	-17.30	48.70	NA	Fossorial	Scincidae	Scincoidae	-0.13	205	Kohler et al. 2009, IUCN	VU	decreasing	extant
<i>Paracantius mahumavo</i>	description	2016	2013	recent	Miralles et al. 2016	Madagascar	Madagascar	-15.49	46.65	NA	NA	Scincidae	Scincoidae	-0.09	126	Miralles et al. 2016	NA	NE	extant
<i>Paracantius manlyi</i>	specimen	2002	2001	recent	Andreone and Greer 2002	Madagascar	Madagascar	-14.04	48.78	NA	NA	Scincidae	Scincoidae	NA	1799	Andreone and Greer 2002	DD	unknown	extant
<i>Paracantius rothschildi</i>	locality	1905	2007	recent	Kohler et al. 2010	Madagascar	Madagascar	-12.30	49.40	Diurnal	Fossorial	Scincidae	Scincoidae	-0.20	130	Kohler et al. 2010	CR	unknown	extant
<i>Paracantius tsararano</i>	specimen	2002	1996	recent	Andreone and Greer 2002	Madagascar	Madagascar	-14.91	49.69	Nocturnal	Terrestrial	Scincidae	Scincoidae	-0.02	1674	Andreone and Greer 2002	DD	unknown	extant
<i>Paracantius vermauxi</i>	description	2011	2009	recent	Miralles et al. 2011	Madagascar	Madagascar	-15.43	49.12	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	-0.11	987	Brown et al. 2014	DD	unknown	extant
<i>Paragehyra azzoni</i>	description	2014	2005	recent	Crotini et al. 2015	Madagascar	Madagascar	-24.54	46.69	NA	Cathemeral	Gekkonidae	Gekkota	0.67	544	Crotini et al. 2015	NA	NE	extant
<i>Paragehyra feliciae</i>	locality	2014	2014	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-21.85	46.84	Cathemeral	Saxicolous	Gekkonidae	Gekkota	0.79	90	Crotini et al. 2015	NA	NE	extant
<i>Paralipinia rura</i>	specimen	1997	1995	recent	Darevsky and Orlov 1997	Oriental	Vietnam	14.33	108.60	Diurnal	Aboveal	Scincidae	Scincoidae	0.93	306	Darevsky and Orlov 1997	NA	NE	extant
<i>Paroedura hardesi</i>	locality	2014	2016	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.32	49.34	Nocturnal	Saxicolous	Gekkonidae	Gekkota	0.63	130	Glaw et al. 2014	NA	NE	extant
<i>Paroscincus azzoni</i>	description	2016	2015	recent	Sabat-Mahero et al. 2016	Palestic	Iran	27.86	56.31	Nocturnal	Terrestrial	Gekkonidae	Gekkota	0.15	483	Sabat-Mahero et al. 2016	NA	NE	extant
<i>Paroscincus agstorum</i>	specimen	2013	2009	recent	Linkem and Brown 2013	Oriental	Luzon	15.65	121.51	NA	Terrestrial	Scincidae	Scincoidae	0.21	439	Linkem and Brown 2013	NA	NE	extant
<i>Paroscincus banahaoensis</i>	description	2013	2001	recent	Linkem and Brown 2013	Oriental	Luzon	14.06	121.51	NA	Terrestrial	Scincidae	Scincoidae	0.22	171	Linkem and Brown 2013	NA	NE	extant
<i>Paroscincus dowerdanum</i>	specimen	2014	2011	recent	Siler et al. 2014	Oriental	Luzon	18.44	120.88	Diurnal	Semi Aquatic	Scincidae	Scincoidae	NA	562	Meit 2016	NA	NE	extant
<i>Paroscincus igneus</i>	specimen	2010	2001	recent	Brown et al. 2010b	Oriental	Luzon	17.44	121.08	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	0.56	NA	Brown et al. 2010b	NA	NE	extant
<i>Paroscincus pallidus</i>	description	2013	2007	recent	Linkem and Brown 2013	Oriental	Luzon	16.44	121.22	NA	Terrestrial	Scincidae	Scincoidae	0.02	235	Linkem and Brown 2013	NA	NE	extant
<i>Paroscincus palawanensis</i>	description	1961	1961	recent	Brown and Alcala 1961	Oriental	Palawan	9.64	118.58	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	-0.14	616	GBIF, CAS	DD	unknown	extant
<i>Paroscincus siamensis</i>	description	1997	2002	recent	Ferrer et al. 1997	Oriental	Phay Island	122.15	-11.15	Diurnal	Fossorial&Terrestrial	Scincidae	Scincoidae	-0.08	508	Ferrer et al. 1997	VU	stable	extant
<i>Petracois angustatus</i>	description	2015	2007	recent	Echevarria and Venegas 2015	Neotropic	Peru	-6.04	-77.89	NA	NA	Gymnophthalmidae	Lacertoidae	0.24	364	Echevarria and Venegas 2015	NA	NE	extant
<i>Petracois labioocularis</i>	description	2004	1998	recent	Kohler and Lebe 2004	Neotropic	Peru	-9.83	-75.89	NA	NA	Gymnophthalmidae	Lacertoidae	0.81	1246	IUCN	DD	unknown	extant
<i>Phaeosincus ouanensis</i>	specimen	2014	2003	recent	Sadlier et al. 2014	Oceania	New Caledonia	-22.00	166.47	NA	Terrestrial	Scincidae	Scincoidae	NA	547	Sadlier et al. 2014	NA	NE	extant
<i>Phaeosincus tucumanensis</i>	specimen	2014	2006	recent	Sadlier et al. 2014	Oceania	New Caledonia	-20.78	164.58	NA	Terrestrial	Scincidae	Scincoidae	NA	367	Sadlier et al. 2014	NA	NE	extant
<i>Phelsuma edwardnewtoni</i>	locality	1884	1917	early	Austin et al. 2004	Afrotrropic	Rodriguez Island	-19.71	63.42	Diurnal	Aboveal	Gekkonidae	Gekkota	1.37	1122	Austin et al. 2004	NA	NE	extinct
<i>Phelsuma goudii</i>	specimen	2011	2009	recent	Crotini et al. 2011	Madagascar	Madagascar	-18.85	46.84	Diurnal	Aboveal	Gekkonidae	Gekkota	0.33	90	Crotini et al. 2011	DD	unknown	extant
<i>Phelsuma hely</i>	description	2004	2000	recent	Schneemelker et al. 2004	Madagascar	Madagascar	-21.60	49.25	Diurnal	Aboveal	Gekkonidae	Gekkota	-0.05	101	Brown et al. 2014	DD	NA	extant
<i>Phelsuma roosei</i>	locality	2010	2016	recent	Frank Glaw, pers. obs.	Madagascar	Madagascar	-12.96	49.12	NA	Terrestrial	Gekkonidae	Gekkota	0.12	194	Glaw et al. 2014	CR	unknown	extant
<i>Pholidobolus hillisi</i>	description	2014	2012	recent	Torres-Carvajal et al. 2014	Neotropic	Ecuador	-3.97	-79.08	Diurnal	Terrestrial	Gymnophthalmidae	Lacertoidae	0.59	162	Torres-Carvajal et al. 2014, Echevarria	NA	NE	extant
<i>Pholidobolus atratus</i>	locality (Small Island)	1887	2012	recent	Bell and Dalby 2012	Neotropic	Redonda Island	16.93	-62.35	Diurnal	Terrestrial	Teiidae	Lacertoidae	2.02	NA	vernet	NA	NE	extant
<i>Pholidobolus carinatus</i>	locality (Small Island)	2010	2009	recent	Edler and Edler 2014	Neotropic	Guadalupe, Little Scrub Island	19.31	-62.96	Diurnal	Terrestrial&Terrestrial	Lacertoidae	Lacertoidae	1.85	200	Edler and Edler 2014, Garrison et al. 2	VU	unknown	extant
<i>Pholidobolus carinus</i>	locality (Small Island)	1861	1997	recent	vernet	Neotropic	Anguilla, Sumboro Island	18.60	-63.43	Diurnal	Terrestrial	Teiidae	Lacertoidae	1.86	NA	Lazell 1964	VU	stable	extant
<i>Phrynoscephalus luteus</i>	description	2015	2014	recent	Kamali and Anderson 2015	Palestic	Iran	30.45	59.35	Diurnal	Terrestrial	Agamidae	Acrodontia	1.14	1763	Kamali and Anderson 2015	NA	NE	extant
<i>Phyllodactylus berringtonensis</i>	locality (Small Island)	1912	21st century	recent	IUCN	Neotropic	Galapagos (Barrington)	-0.82	-90.05	Nocturnal	Terrestrial	Phyllodactylidae	Gekkota	0.27	1731	Swash and Still 2005	LC	unknown	extant
<i>Phyllodactylus leopoldensis</i>	locality (Small Island)	1962	2001	recent	Grismer 2002	Neotropic	Isla Santa Catalina	-25.63	-110.79	NA	Fossorial	Phyllodactylidae	Gekkota	0.82	312	Grismer 2002	LC	stable	extant
<i>Phyllodactylus duncanensis</i>	locality (Small Island)	1912	2012	recent	Omar Torres-Carvajal, pers. Obs.	Neotropic	Galapagos (Pinzon)	-0.61	-90.67	Nocturnal	NA	Phyllodactylidae	Gekkota	0.14	1851	Torres-Carvajal et al. 2014	NA	NE	extant
<i>Phyllodactylus gilberti</i>	locality (Small Island)	1903	1974	recent	vernet	Neotropic	Galapagos (Pinzon)	1.38	-91.82	Nocturnal	Saxicolous	Phyllodactylidae	Gekkota	0.65	NA	Swash and Still 2005	NA	NE	extant
<i>Phyllodactylus papenfussi</i>	description	2009	2001	recent	Murphy et al. 2009	Neotropic	Mexico	17.80	-99.57	NA	NA	Phyllodactylidae	Gekkota	0.12	76	Murphy et al. 2009	NA	NE	extant
<i>Phyllodactylus parietalis</i>	locality (Small Island)	1966	2001	recent	Grismer 2002	Neotropic	Island Petalid Norte	20.89	-113.04	Nocturnal	Saxicolous	Phyllodactylidae	Gekkota	0.90	358	Swash and Still 2005	LC	stable	extant
<i>Phyllodactylus transversalis</i>	locality (Small Island)	1975	2009	recent	Lopez-Victoria et al. 2013	Neotropic	Colombia (Maleno Island)	3.98	-81.60	Nocturnal	Aboveal&Saxicolous	Phyllodactylidae	Gekkota	1.07	NA	The Reptile Database	LC	stable	extant
<i>Phyllura amica</i>	locality	2000	1998	recent	Atlas of Living Australia	Australia	Australia	-19.48	146.99	Nocturnal	Aboveal&Saxicolous	Carphodactylidae	Gekkota	1.39	464	Atlas of Living Australia	NA	NE	extant
<i>Phyllura gisela</i>	locality	2000	2010	recent	Atlas of Living Australia	Australia	Australia	-23.31	146.49	Nocturnal	Aboveal&Saxicolous	Carphodactylidae	Gekkota	1.19	274	Atlas of Living Australia	CR	unknown	extant
<i>Phyllura sis</i>	locality	1993	21st century	recent	Patrick Couper, Stewart McDonald, pers. comm	Australia	Australia	-21.01	145.95	Nocturnal	Saxicolous&Terrestrial	Carphodactylidae	Gekkota	1.26	319	Atlas of Living Australia	NA	NE	extant
<i>Phyllura kabikabi</i>	description	2008	1997	recent	Couper et al. 2008	Australia	Australia	-26.14	152.31	Nocturnal	Saxicolous	Carphodactylidae	Gekkota	1.05	213	Atlas of Living Australia	NA	NE	extant
<i>Phymaturus aguanzae</i>	description	2013	2007	recent	Lobo et al. 2013	Neotropic	Argentina	-30.38	-69.57	Diurnal	Aboveal&Saxicolous	Liaemidae	Pleuronotia	1.58	367	IUCN	LC	unknown	extant
<i>Phymaturus carolinensis</i>	description	2014	2012	recent	Trosceno-Palacios and Esquerre 2014	Neotropic	Chile	-31.42	-70.43	Diurnal	Saxicolous	Liaemidae	Pleuronotia	1.52	54	Trosceno-Palacios and Esquerre 2014	LC	unknown	extant
<i>Phymaturus allichaense</i>	description	2010	2005	recent	Nunes et al. 2010	Neotropic	Chile	-32.26	-70.48	Diurnal	Saxicolous	Pleuronotia	Pleuronotia	1.68	825	Daniel Pincheira-Donoso	NA	NE	extant
<i>Phymaturus cavioti</i>	description	2015	21st century	recent	Lobo and Nenda 2015	Neotropic	Argentina	-40.51	-69.71	NA	NA	Liaemidae	Pleuronotia	1.59	215	Lobo and Nenda 2015	NA	NE	extant
<i>Phymaturus castillemsi</i>	description	2010	2008	recent	Scalano and Pincheira-Donoso 2010	Neotropic	Argentina	-45.13	-69.18	Diurnal	Saxicolous&Terrestrial	Liaemidae	Pleuronotia	1.52	315	Corbalan et al. 2016	LC	stable	extant
<i>Phymaturus carolinensis</i>	description	2016	2014	recent	Scalano et al. 2016	Neotropic	Argentina	-42.45	-70.07	Diurnal	Saxicolous	Liaemidae	Pleuronotia	1.57	499	Scalano et al. 2016	LC	stable	extant
<i>Phymaturus defheii</i>	description	2011	21st century	recent	Avila et al. 2011	Neotropic	Argentina	-36.98	-69.98	Diurnal	Saxicolous	Liaemidae	Pleuronotia	1.53	398	Avila et al. 2011	LC	unknown	extant
<i>Phymaturus denotatus</i>	locality	2012	2012	recent	IUCN	Neotropic	Argentina	-26.57	-69.66	Diurnal	Saxicolous	Liaemidae	Pleuronotia	1.77	470	Daniel Pincheira-Donoso	LC	stable	extant
<i>Phymaturus denotatus</i>	locality	2012	2012	recent	Scalano and Tappari 2012	Neotropic	Argentina	-41.34	-69.15	Diurnal	Saxicolous&Terrestrial	Liaemidae	Pleuronotia	1.14	262	Daniel Pincheira-Donoso	DD	unknown	extant
<i>Phymaturus carolinensis</i>	locality	2012	2014	recent	Ramallo et al. 2017	Neotropic	Argentina	-39.95	-69.09	Diurnal	Saxicolous	Liaemidae	Pleuronotia	1.66	903	Daniel Pincheira-Donoso	LC	stable	extant
<i>Phymaturus ruahensis</i>	description	2016	21st century	recent	Marin et al. 2016	Neotropic	Argentina	-39.39	-70.73	Diurnal	Saxicolous	Liaemidae	Pleuronotia	1.53	304	Marin et al. 2016	NA	NE	extant
<i>Phymaturus siti</i>	locality	2011	2015	recent	instanulst	Neotropic	Argentina	-37.72	-68.89	Diurnal	Saxicolous	Liaemidae	Pleuronotia	1.49	575	Avila et al. 2011			

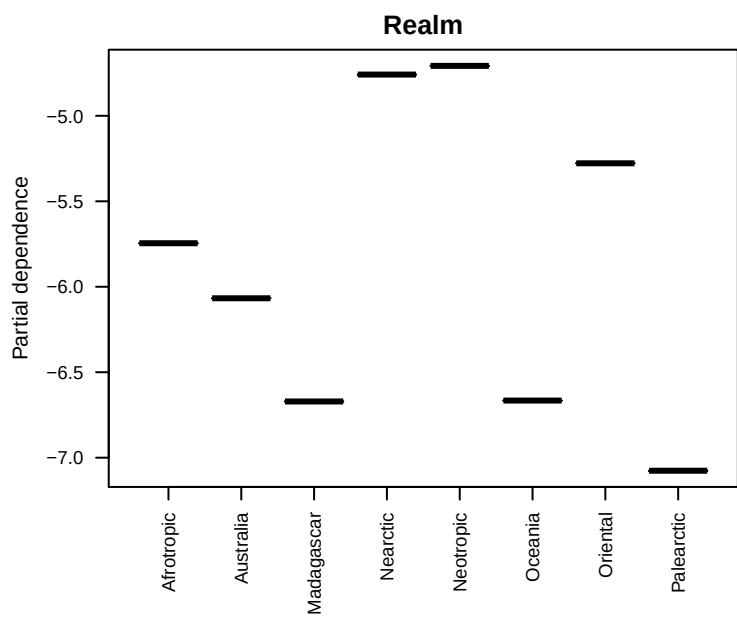
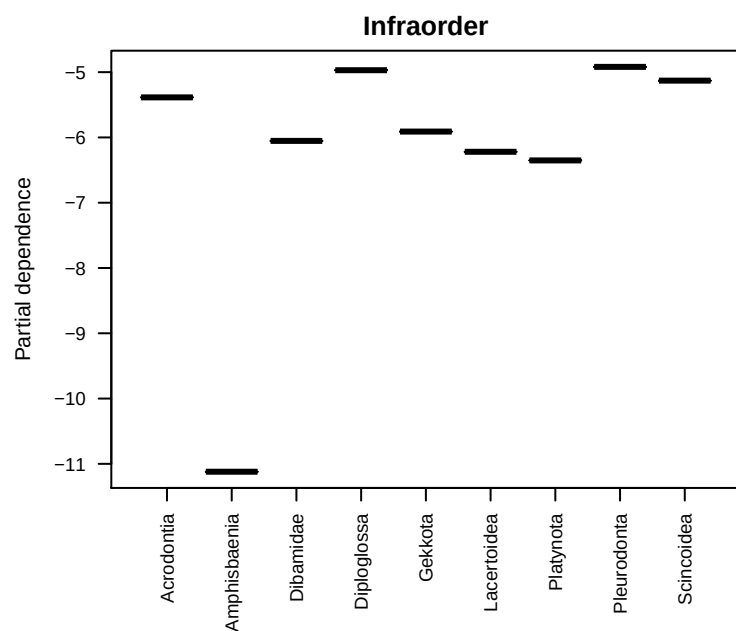
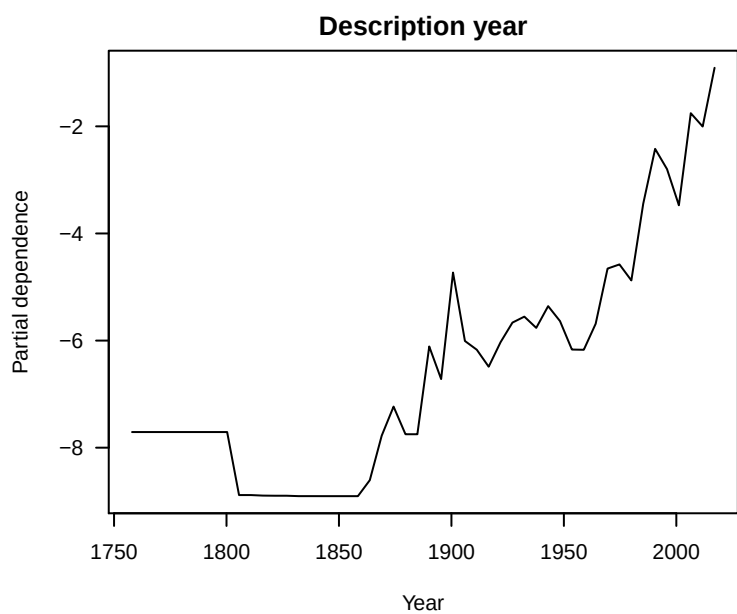
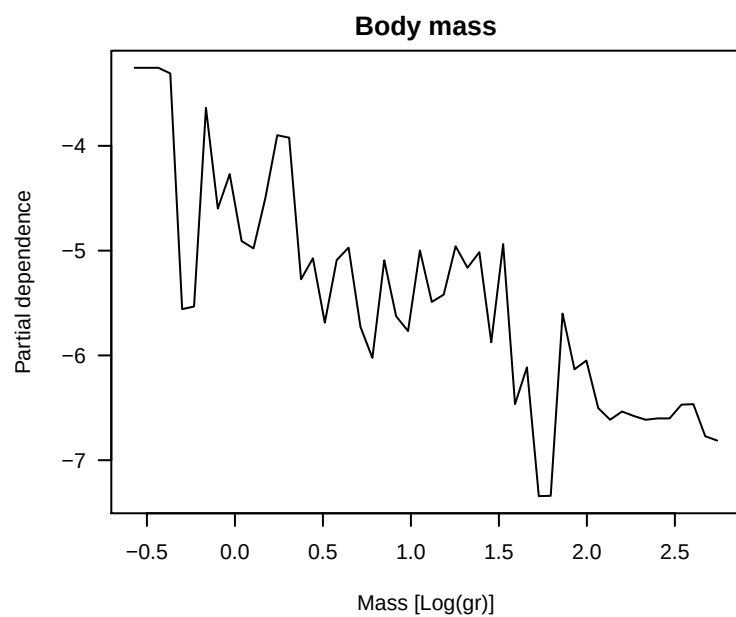
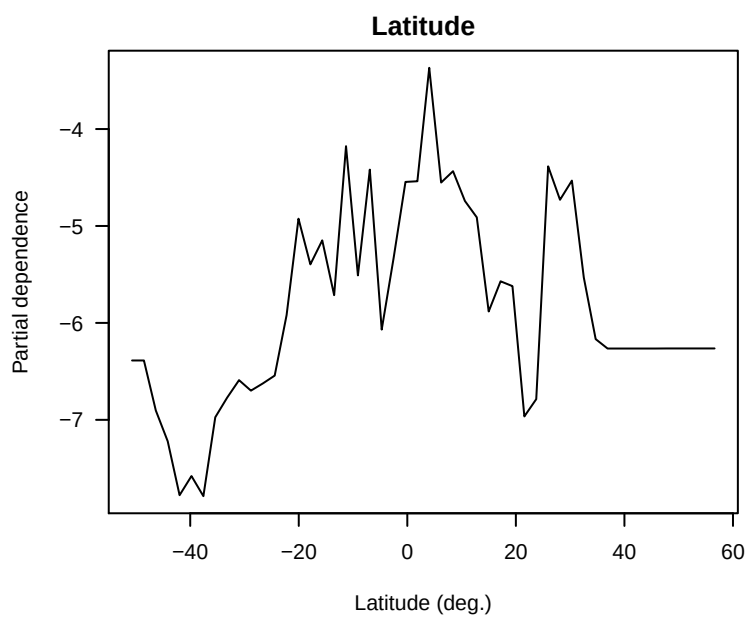
<i>Rhampholen magnificus</i>	description	2014	2009	recent	Branch et al. 2014	Afrotrropic	Mozambique	-16.29	36.40	Diurnal	Arboreal	Chamaeleonidae	Acrodontia	0.88	737	Branch et al. 2014	NT	stable	extant
<i>Rhampholen nebulosus</i>	description	2014	2008	recent	Branch et al. 2014	Afrotrropic	Mozambique	-16.51	35.73	NA	NA	Chamaeleonidae	Acrodontia	0.53	762	Branch et al. 2014	VU	unknown	extant
<i>Rhampholen ruficeps</i>	description	2014	2007	recent	Branch et al. 2014	Afrotrropic	Mozambique	-16.43	37.63	Diurnal	Arboreal	Chamaeleonidae	Acrodontia	0.84	631	Branch et al. 2014	CR	endangered	extant
<i>Riama afrania</i>	description	2010	1989	recent	Arredondo and Sanchez-Pacheco 2010	Neotropic	Colombia	6.38	-76.07	Diurnal	Fossorial&Terrestrial	Gymnophthalmidae	Lacertoides	1.19	89	Arredondo and Sanchez-Pacheco 2010	DD	unknown	extant
<i>Riama inanis</i>	description	2003	1983	recent	Doan and Schargel 2003	Neotropic	Venezuela	9.38	-69.87	NA	NA	Gymnophthalmidae	Lacertoides	0.47	252	Doan and Schargel 2003	DD	unknown	extant
<i>Riama rodolagesi</i>	description	2005	2002	recent	Rivas et al. 2005	Neotropic	Venezuela	10.71	-62.46	NA	NA	Gymnophthalmidae	Lacertoides	0.35	307	Rivas et al. 2005	NA	NE	extant
<i>Riama scellus</i>	description	2010	1986	recent	Sanchez-Pacheco 2010	Neotropic	Colombia	1.14	-77.88	Diurnal	Terrestrial	Gymnophthalmidae	Lacertoides	0.43	537	Sanchez-Pacheco 2010	DD	unknown	extant
<i>Riama sunborum</i>	description	2014	2010	recent	Aguirre-Penaflor et al. 2014	Neotropic	Ecuador	0.12	-78.60	NA	Terrestrial	Gymnophthalmidae	Lacertoides	0.67	135	Aguirre-Penaflor et al. 2014	NA	NE	extant
<i>Rioluma insipiatu</i>	description	2015	2012	recent	Kok 2015	Neotropic	Venezuela	5.87	-62.07	Diurnal	Terrestrial	Gymnophthalmidae	Lacertoides	0.21	1860	Kok 2015	NA	NE	extant
<i>Rioluma luridiverticis</i>	description	2004	1992	recent	Esguerra et al. 2004	Neotropic	Venezuela	3.77	-65.48	Diurnal	NA	Gymnophthalmidae	Lacertoides	0.17	7300	Esguerra et al. 2004	LC	stable	extant
<i>Rioluma urazelli</i>	description	2003	1992	recent	Molina and Sotoca 2003	Neotropic	Venezuela	3.82	-65.45	NA	NA	Gymnophthalmidae	Lacertoides	0.14	7155	Molina et al. 2003	LC	stable	extant
<i>Salvia gularis</i>	specimen	1854	1843 or earlier	early	inferred from date of description	Oriental	India	NA	NA	Diurnal	NA	Agamidæ	Acrodontia	1.78	NA	not mapped	NA	NE	extant
<i>Saluaricus eximius</i>	description	2013	2013	recent	Hoskin and Cooper 2013	Australasia	Australia	-14.28	144.49	Nocturnal	Saxicolous	Carphodactylidae	Gekkkota	1.45	599	Hoskin and Cooper 2013	NA	NE	extant
<i>Scaphiopus lineatus</i>	description	2004	2004	recent	Cooper et al. 2004	Australasia	Australia	-22.18	144.49	Diurnal	Saxicolous	Carphodactylidae	Gekkkota	1.36	549	Cooper et al. 2004	NA	NE	extant
<i>Supracynops saltus</i>	locality	2013	after 2013	recent	Conrad Hoskin, pers. comm.	Australasia	Australia	-14.28	144.49	Diurnal	Saxicolous	Scincoidae	Scincoidae	0.15	826	Atlas of Living Australia, QM	NA	NE	extant
<i>Suriana superba</i>	description	2016	2014	recent	Deepak et al. 2016	Oriental	India	17.58	73.82	Diurnal	Terrestrial	Agamidæ	Acrodontia	1.15	316	Deepak et al. 2016a	NA	NE	extant
<i>Suramulus klausneri</i>	locality (Small island)	1941	2001	recent	Grismer 2002	Neurtic	Santa Catalina Island	25.65	-110.79	Diurnal	Saxicolous	Iguanidae	Pleurodontia	2.50	312	verret	NA	NE	extant
<i>Sceloporus lineatus</i>	locality (Small island)	1919	2001	recent	Grismer 2002	Neurtic	Isla Santa Catalina	25.65	-110.79	NA	Terrestrial	Phrynosomatidae	Pleurodontia	1.66	312	verret	LC	stable	extant
<i>Scelotes duttoni</i>	description	1990	1990	recent	Broaddley 1990	Afrotrropic	Benguezu Island, Mozambique	-21.86	35.41	NA	Fossorial&Terrestrial	Scincidae	Scincoidae	0.26	356	Downs and Wirmingham 1997	NA	NE	extant
<i>Scelotes guentheri</i>	specimen	1887	1887 or earlier	early	inferred from date of description	Afrotrropic	South Africa	-29.86	31.00	NA	NA	Scincidae	Scincoidae	0.74	62	Bates et al. 2014	VU	NA	extant
<i>Scelotes poensis</i>	description	1995	1893 or earlier	early	inferred from date of description	Afrotrropic	Biko	3.59	8.76	NA	NA	Scincidae	Scincoidae	0.14	223	Olivier Parvelli	NA	NE	extant
<i>Scincella dorenski</i>	specimen	2010	2002	recent	Nyugen et al. 2010	Oriental	Vietnam	21.57	103.48	Diurnal	Terrestrial	Scincidae	Scincoidae	1.16	405	Nyugen et al. 2010	NA	NE	extant
<i>Scincella inornspicua</i>	specimen	1894	1894 or earlier	early	inferred from date of description	Oceania	Sulawesi	0.50	123.68	NA	NA	Scincidae	Scincoidae	0.52	895	The Reptile Database	NA	NE	extant
<i>Scincella macrotis</i>	specimen	1867	1867 or earlier	early	inferred from date of description	Oriental	Great Nicobar Island	6.97	93.82	NA	NA	Scincidae	Scincoidae	-0.67	465	Indraneil Das	NA	NE	extant
<i>Scincella przewalskii</i>	specimen	1912	1880	early	Bechtag 1912	Palerctic	China	35.80	102.20	Diurnal	Terrestrial	Scincidae	Scincoidae	0.15	1026	Yuehan Wang	NA	NE	extant
<i>Stigolaps balus</i>	description	2014	2009	recent	Sadlier et al. 2014c	Oceania	New Caledonia	-21.88	166.41	NA	NA	Scincidae	Scincoidae	0.36	380	Sadlier et al. 2014c	NA	NE	extant
<i>Stima fusca</i>	description	1998	1996	recent	Schleich and Kastle 2002	Oriental	Nepal	26.99	85.20	Diurnal	Terrestrial	Agamidæ	Acrodontia	0.53	97	Schleich and Kastle 1998	NA	NE	extant
<i>Stima schleichi</i>	description	2002	2001	recent	Schleich and Kastle 2002	Oriental	Nepal	28.79	80.22	Diurnal	Terrestrial	Agamidæ	Acrodontia	0.27	150	Schleich and Kastle 2002	NA	NE	extant
<i>Sphaerodactylus becki</i>	locality (Small island)	1919	1998	recent	verret	Neotropic	Nassau Island	-91.01	-75.01	Cathemeral	Saxicolous&Terrestrial	Sphaerodactylidae	Gekkkota	-0.13	276	Schwartz and Henderson 1991, Powell	NA	NE	extant
<i>Sphaerodactylus bromelorum</i>	locality	1977	2005	recent	harriga and Gonzalez 2015	Neotropic	Cuba	20.31	-74.45	NA	Arboreal	Sphaerodactylidae	Gekkkota	-0.26	270	Schwartz and Henderson 1991	NA	NE	extant
<i>Sphaerodactylus cochranæ</i>	locality	1946	2008	recent	verret	Neotropic	Hispainia: Dominican Republ	19.06	-69.47	Nocturnal	Saxicolous&Terrestrial	Sphaerodactylidae	Gekkkota	-0.17	147	Scantlebury 2014	NA	NE	extant
<i>Sphaerodactylus elasmorhynchus</i>	specimen	1966	1966	recent	Thomas 1966	Neotropic	Hispainia: Dominican Republ	18.47	-74.67	NA	Terrestrial	Sphaerodactylidae	Gekkkota	-0.18	171	Schwartz and Henderson 1991	NA	NE	extant
<i>Sphaerodactylus epirus</i>	description	1993	1991	recent	Thomas and Hedges 1993	Neotropic	Hispainia: Dominican Republ	18.70	-68.88	NA	NA	Sphaerodactylidae	Gekkkota	-0.41	105	Scantlebury 2014	NA	NE	extant
<i>Sphaerodactylus esul</i>	locality (Small island)	1914	2012	recent	verret	Neotropic	Swan Island	17.42	-83.94	NA	NA	Sphaerodactylidae	Gekkkota	-0.46	618	Schwartz and Henderson 1991	NA	NE	extant
<i>Sphaerodactylus gilvitorques</i>	specimen	1862	1862 or earlier	early	inferred from date of description	Neotropic	Jamaica	NA	NA	NA	NA	Sphaerodactylidae	Gekkkota	-0.31	NA	not mapped	NA	NE	extant
<i>Sphaerodactylus hesperis</i>	specimen	2012	2011	recent	McCrane and Hedges 2012	Neotropic	Isla de Guana	16.48	-85.85	Diurnal	Terrestrial	Sphaerodactylidae	Gekkkota	-0.13	276	McCrane and Hedges 2012	NA	NE	extant
<i>Sphaerodactylus laevis</i>	specimen	1968	1960	recent	Shreve 1968	Neotropic	Hispainia: Haiti	19.73	-72.19	NA	NA	Sphaerodactylidae	Gekkkota	-0.13	87	Schwartz and Henderson 1991	NA	NE	extant
<i>Sphaerodactylus lewini</i>	locality (Small island)	1968	2009	recent	RJCN	Neotropic	Puerto Rico: Isla Desecho	18.39	-67.48	Diurnal	Terrestrial	Sphaerodactylidae	Gekkkota	-0.26	124	Schwartz and Henderson 1991	NA	NE	extant
<i>Sphaerodactylus microphreus</i>	description	1977	2005	recent	RJCN	Neotropic	Puerto Rico: Isla Mona	18.16	-67.95	NA	NA	Sphaerodactylidae	Gekkkota	0.06	NA	Schwartz and Henderson 1991	EN	NA	extant
<i>Sphaerodactylus monensis</i>	locality (Small island)	1901	2002	recent	verret	Neotropic	Puerto Rico: Isla Mona	18.09	-67.89	Terrestrial	Terrestrial	Sphaerodactylidae	Gekkkota	-0.17	191	Schwartz and Henderson 1991	LC	stable	extant
<i>Sphaerodactylus mycteropus</i>	specimen	1977	1971	recent	verret	Neotropic	Hispainia: Haiti	18.24	-73.34	NA	Terrestrial	Sphaerodactylidae	Gekkkota	-0.63	121	Schwartz and Henderson 1991	NA	NE	extant
<i>Sphaerodactylus pacificus</i>	locality (Small island)	1903	1978	recent	verret	Neotropic	Cocos Island	5.53	87.06	Nocturnal	Terrestrial	Sphaerodactylidae	Gekkkota	0.46	NA	Harris and Kluge 1984	LC	stable	extant
<i>Sphaerodactylus perissodactylus</i>	description	1980	1985	recent	Thomas and Hedges 1980	Neotropic	Hispainia: Dominican Republ	18.34	-68.88	NA	NA	Sphaerodactylidae	Gekkkota	-0.12	151	Schwartz and Henderson 1991	NA	NE	extant
<i>Sphaerodactylus phoenixi</i>	description	1992	1991	recent	Thomas and Hedges 1992	Neotropic	Hispainia: Dominican Republ	17.99	-71.60	Diurnal	Terrestrial	Sphaerodactylidae	Gekkkota	-0.57	131	Scantlebury 2014	NA	NE	extant
<i>Sphaerodactylus poindesseri</i>	description	2013	2012	recent	McCrane and Hedges 2013	Neotropic	Isla de Uila	16.10	-86.88	NA	Terrestrial	Sphaerodactylidae	Gekkkota	-0.19	NA	McCrane and Hedges 2013	NA	NE	extant
<i>Sphaerodactylus schuberti</i>	description	1998	1996	recent	Thomas and Hedges 1998	Neotropic	Hispainia: Dominican Republ	18.60	-71.76	NA	Arboreal&Terrestrial	Sphaerodactylidae	Gekkkota	-0.05	267	Scantlebury 2014	NA	NE	extant
<i>Sphaerodactylus somneri</i>	locality	2002	2002	recent	Fong and Diaz 2004	Neotropic	Cuba	-75.73	-80.81	Terrestrial	Terrestrial	Sphaerodactylidae	Gekkkota	-0.08	64	Fong and Diaz 2004	NA	NE	extant
<i>Sphaerodactylus somneri</i>	locality	1981	1985	recent	verret	Neotropic	Hispainia: Haiti	19.50	-72.77	Nocturnal	Terrestrial	Sphaerodactylidae	Gekkkota	0.03	115	Schwartz and Henderson 1991	NA	NE	extant
<i>Sphaerodactylus williamsi</i>	specimen	1983	1978	recent	Thomas and Schwartz 1983	Neotropic	Hispainia: Haiti	19.49	-72.77	Nocturnal	NA	Sphaerodactylidae	Gekkkota	-0.57	48	Schwartz and Henderson 1991	CR	unknown	extant
<i>Sphenomorphus apuleipetus</i>	description	2013	2010	recent	Datta-Roy et al. 2013	Oriental	India	25.45	91.74	Diurnal	Terrestrial	Scincidae	Scincoidae	0.12	101	Datta-Roy et al. 2013	NA	NE	extant
<i>Sphenomorphus lucidus</i>	recent	2003	1986	recent	reptile database	Oriental	Vietnam	22.15	105.83	Diurnal	NA	Scincidae	Scincoidae	0.12	192	Terrancebuck 2003	NA	NE	extant
<i>Sphenomorphus laevis</i>	specimen	1905	1884	early	Lidb of Judee 1905	Oriental	Borneo: Kalimantan	0.15	113.20	NA	Terrestrial	Scincidae	Scincoidae	-0.14	5043	Das 2004	NA	NE	date of the Dutch Scientific Expedition to Central Borneo
<i>Sphenomorphus capillatus</i>	specimen	2008	1923	early	Shea and Michels 2008	Oceania	Kai Besar	-5.65	132.65	NA	NA	Scincidae	Scincoidae	1.03	823	Shea and Michels 2008	NA	NE	extant
<i>Sphenomorphus hugoboni</i>	specimen	1980	2001	recent	Burner Sarawak	Oriental	Borneo: Sarawak	115.70	101.29	NA	Terrestrial	Scincidae	Scincoidae	1.15	789	Iger et al. 2001	NA	NE	extant
<i>Sphenomorphus grandisonae</i>	specimen	1962	1935 or earlier	early	Taylor 1962	Oriental	Thailand	19.61	100.34	NA	NA	Scincidae	Scincoidae	-0.36	262	Taylor 1962	NA	NE	extant
<i>Sphenomorphus heleneae</i>	specimen	1927	1923	early	Cochran 1927	Oriental	Thailand	13.86	100.51	NA	NA	Scincidae	Scincoidae	NA	43	verret	NA	NE	extant
<i>Sphenomorphus malacini</i>	specimen	1937	1937 or earlier	early	Resnail 1937	Oriental	Burma	NA	NA	NA	NA	Scincidae	Scincoidae	0.20	NA	not mapped	NA	NE	extant
<i>Sphenomorphus medialis</i>	locality	1894	1884 or earlier	early	inferred from date of description	Oriental	Mount Island, Sipura	-2.23	99.68	NA	NA	Scincidae	Scincoidae	0.08	285	NA	NE	extant	
<i>Sphenomorphus muradensis</i>	locality	1925	1999	recent	Indraneil Das	Oriental	Borneo: Sarawak	3.92	115.33	NA	NA	Scincidae	Scincoidae	0.37	NA	Das 2004	NA	NE	extant
<i>Sphenomorphus sanamus</i>	description	1926	1912	early	Kopstein 1926	Oceania	Sula Island	-4.22	125.96	NA	NA	Scincidae	Scincoidae	-0.26	284	Kopstein 1926	NA	NE	extant
<i>Sphenomorphus abou</i>	specimen	2013	2012	recent	Nyugen et al. 2013	Oriental	Vietnam	-14.62	108.50	NA	Terrestrial	Scincidae	Scincoidae	-0.13	208	Nyugen et al. 2013	NA	NE	extant
<i>Sphenomorphus shufeldti</i>	specimen	1900	before 1900	early	inferred from date of description	Oriental	Borneo: Sarawak	110.23	110.23	Diurnal	Terrestrial	Scincidae	Scincoidae	0.83	204	Das 2004	NA	NE	extant
<i>Sphenomorphus teniusculus</i>	specimen	1890	1890 or earlier	early	inferred from date of description	Oriental	Borneo: Sarawak	5.97	116.53	Diurnal	Terrestrial	Scincidae	Scincoidae	0.62	NA	Das 2004	NA	NE	extant
<i>Sphenomorphus transversus</i>	specimen	1971	1962	early	Greer and Parker 1971	Oceania	Solomon Islands: Bougainville	-5.83	154.83	NA	NA	Scincidae	Scincoidae	0.79	1725	Greer and Parker 1971	DD	unknown	extant
<i>Sphenomorphus williamsi</i>	specimen	1931	1914	early	Boulenger 1914	Oceania	Papa New Guinea	-4.57	136.60	NA	NA	Scincidae	Scincoidae	0.19	2926	Alfred Allen	DD	unknown	date of Williston expedition
<i>Sphenomorphus zimmeri</i>	specimen	1933	1932	early	Bauer et al. 2003	Oceania	Sulawesi	-3.58	121.25	NA	NA	Scincidae	Scincoidae	0.85	1260	The Reptile Database	NA	NE	extant
<i>Spinydurus anegadæ</i>	description	2012	1968	recent	Hedges and Conn 2012	Neotropic	Anguilla, British Virgin Islands	18.73	-64.32	Diurnal	Saxicolous	Scincidae	Scincoidae	0.84	348	Hedges and Conn 2012	NA	NE	extant
<i>Spinydurus bailliei</i>	description	2012	1857-1858	early	Hedges and Conn 2012	Neotropic	Hispainia: Haiti	18.60	-74.16	NA	NA	Scincidae	Scincoidae	1.11	157	Hedges and Conn 2012	NA	NE	extant
<i>Spiny</i>																			

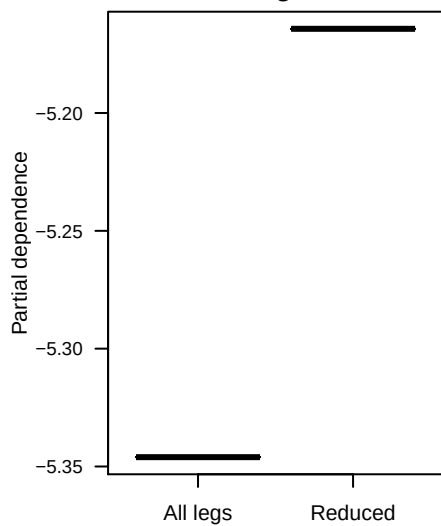
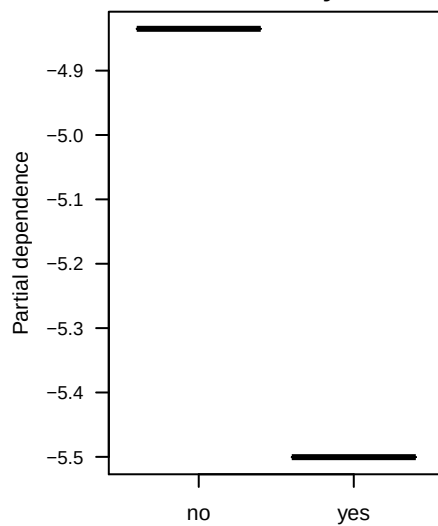
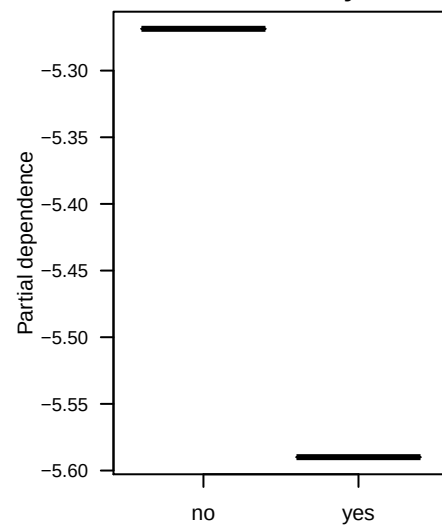
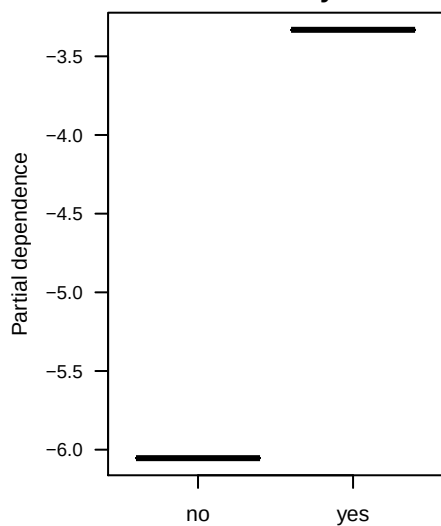
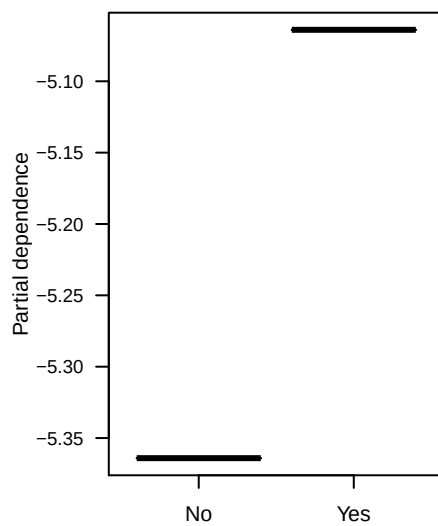
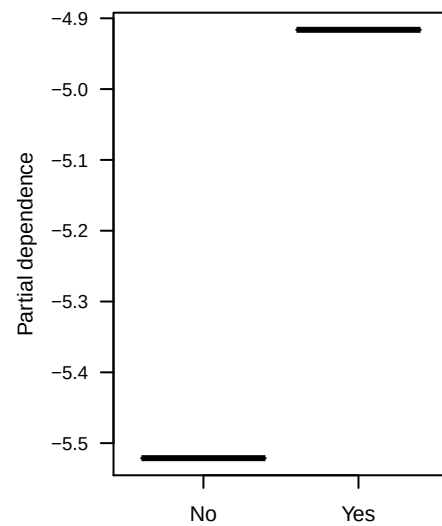
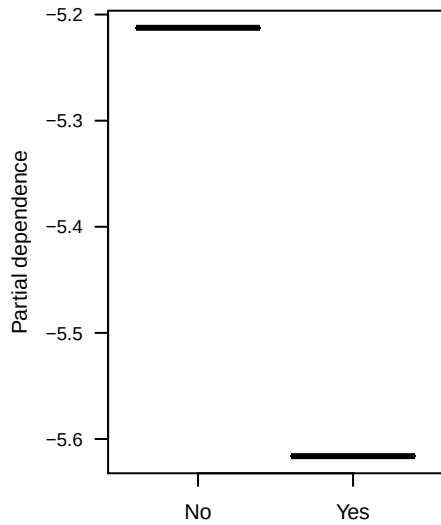
<i>Trapidophorus mutsui</i>	specimen	2002	1996	recent	Hikida et al. 2002	Oriental	Thailand	15.88	104.30	NA	Saxicolous	Scincidae	Scincoidae	1.25	171	Hikida et al. 2002	NA	NE	extant
<i>Trapidophorus murphyi</i>	description	2002	1998	recent	Hikida et al. 2002	Oriental	Vietnam	22.64	105.92	Nocturnal	Saxicolous	Scincidae	Scincoidae	1.28	251	Nguyen et al. 2009	NA	NE	extant
<i>Trapidophorus nagaii</i>	locality	2005	2007	recent	Ziegler et al. 2007	Oriental	Vietnam	18.17	106.17	Nocturnal	Saxicolous	Scincidae	Scincoidae	1.47	178	Nguyen et al. 2009	NA	NE	extant
<i>Trapidophorus seti</i>	description	2017	2015	recent	Pui et al. 2017	Oriental	Borneo: Sarawak	1.59	113.79	NA	Semi Aquatic	Scincidae	Scincoidae	1.12	5074	Pui et al. 2017	NA	NE	extant
<i>Trapidurus imitaba</i>	description	2013	2011	recent	Kunz and Borges-Martins 2013	Neotropic	Brazil	-28.24	-48.65	Diurnal	NA	Tropiduridae	Pleurodonta	1.83	76	Kunz and Borges-Martins 2013	NA	NE	extant
<i>Trapidurus lagunablanca</i>	description	2016	2013	recent	Carvalho 2016	Neotropic	Paraguay	-23.81	-56.29	Diurnal	Ashoreal	Tropiduridae	Pleurodonta	1.70	706	Carvalho 2016	NA	NE	extant
<i>Trapidurus toyamai</i>	description	2016	2013	recent	Carvalho 2016	Neotropic	Paraguay	-26.05	-56.83	Diurnal	Saxicolous	Tropiduridae	Pleurodonta	1.49	433	Carvalho 2016	NA	NE	extant
<i>Trapidurus vanthochilus</i>	description	1998	1995	recent	Harvey and Gutherlet 1998	Neotropic	Bolivia	-14.75	-61.00	Diurnal	Ashoreal	Tropiduridae	Pleurodonta	1.82	650	Harvey and Gutherlet 1998	NA	NE	extant
<i>Trapicolates wolfgangboehmei</i>	description	2010	2001	recent	Wilms et al. 2010	Palaearctic	Saudi Arabia	25.27	46.62	Nocturnal	NA	Gekkonidae	Gekkota	-0.19	245	Wilms et al. 2010	DD	unknown	extant
<i>Tympanocryptis peninsulana</i>	description	2014	2005	recent	Museum Victoria	Australia	Queensland	-18.11	140.88	Diurnal	NA	Agamidae	Acrodonia	0.81	NA	Méville et al. 2014	NA	NE	extant
<i>Typhlocuntia rubicincta</i>	specimen	1997	1956	early	Hackie 1987	Afrotropic	Angola	-14.27	12.38	NA	NA	Scincidae	Scincoidae	0.19	371	mapped by Aaron Bauer	NA	NE	extant
<i>Typhlosaurus batupangah</i>	description	2016	2014	recent	Karin et al. 2016	Oriental	Borneo: Sarawak	1.12	110.23	Diurnal	Terrestrial	Scincidae	Scincoidae	-0.21	587	Karin et al. 2016	NA	NE	extant
<i>Typhlosaurus ishiki</i>	description	2006	2004	recent	Grismer 2006	Oriental	Tioman Island	2.77	104.17	Diurnal	Terrestrial	Scincidae	Scincoidae	0.36	466	Grismer 2006	NA	NE	extant
<i>Typhlosaurus leprosaularis</i>	description	2016	2014	recent	Karin et al. 2016	Oriental	Borneo: Sarawak	1.12	110.22	Diurnal	Terrestrial	Scincidae	Scincoidae	-0.20	587	Karin et al. 2016	NA	NE	extant
<i>Typhlosaurus panchorensis</i>	specimen	2006	2013	recent	Grismer et al. 2016	Oriental	Peninsular Malaysia	5.15	100.55	NA	Terrestrial	Scincidae	Scincoidae	-0.12	60	Grismer et al. 2016a	NA	NE	extant
<i>Typhlosaurus perhentianensis</i>	specimen	2009	2007	recent	Grismer et al. 2009	Oriental	Pehentian Island	5.90	102.75	Diurnal	Terrestrial	Scincidae	Scincoidae	-0.36	NA	Grismer et al. 2009, Grismer 2011	NA	NE	extant
<i>Urocyonodon rasmusseni</i>	specimen	2006	2004	recent	Bauer and Menegon 2006	Afrotropic	Tanzania	-7.60	36.63	NA	Ashoreal	Gekkonidae	Gekkota	0.24	592	Bauer and Menegon 2006	NA	NE	extant
<i>Urosaurus clariensis</i>	locality (Small island)	1890	21st century	recent	http://www.reptilebase.org/species/overviews.html	Neotropic	Revillagigedo Islands: Clarion	18.36	-114.73	Diurnal	Saxicolous	Phrynosomatidae	Pleurodonta	1.00	NA	vermet	VU	unknown	extant
<i>Uta encantadae</i>	locality (Small island)	1994	2001	recent	Lee Grismer, pers. observation	Neurtic	Isla Encantada	30.02	-114.47	Diurnal	Saxicolous	Phrynosomatidae	Pleurodonta	1.07	NA	NatureServe, IUCN	VU	stable	extant
<i>Uta lowei</i>	locality (Small island)	1994	2009	recent	Lazcano et al. 2011	Neurtic	Isla El Muerto	30.09	-114.54	Diurnal	Saxicolous	Phrynosomatidae	Pleurodonta	1.02	NA	vermet	VU	unknown	extant
<i>Uta nolocensis</i>	locality (Small island)	1921	2001	recent	Grismer 2002	Neurtic	Isla San Pedro Nolasco	27.97	-111.38	Diurnal	Saxicolous	Phrynosomatidae	Pleurodonta	0.80	NA	vermet	LC	stable	extant
<i>Uta palmeri</i>	locality (Small island)	1890	2007	recent	Sanmiguel-Herrera et al. 2009	Neurtic	Isla San Pedro Martir	28.38	-112.32	Diurnal	Ashoreal&Saxicolous	Phrynosomatidae	Pleurodonta	1.28	183	Hew 1993	VU	stable	extant
<i>Uta tumidirostra</i>	locality (Small island)	1994	21st century	recent	http://herpetiles.sduhawaii.org/species/overview/view	Neurtic	Isla Colorado	30.05	-114.50	Diurnal	Saxicolous&Terrestrial	Phrynosomatidae	Pleurodonta	1.15	289	Grismer 2002	VU	unknown	extant
<i>Varanus aellenbergi</i>	locality	1999	2005	recent	Canto 2007	Oriental	Roti Island	-10.91	122.84	Diurnal	Ashoreal	Varanidae	Platynota	2.18	317	Del Canto 2007	NA	NE	extant
<i>Varanus boehmei</i>	locality	2003	2012	recent	youbabe	Oceania	New Guinea: Waigeo Island	-0.17	131.04	Diurnal	Ashoreal	Varanidae	Platynota	2.66	771	Meiri 2016	DD	unknown	extant
<i>Varanus retzingeri</i>	locality	2005	2016	recent	youbabe	Oceania	Misool Island	-1.89	130.08	Diurnal	Ashoreal	Varanidae	Platynota	2.62	635	Meiri 2016	DD	unknown	extant
<i>Varanus semotus</i>	description	2016	2012	recent	Weijola et al. 2016	Oceania	St. Matthias group: Mussau Isl.	-1.51	149.70	Diurnal	Ashoreal&Terrestrial	Varanidae	Platynota	3.12	1290	Fred Kraus	NA	NE	extant
<i>Varanus telemeistes</i>	specimen	1991	early 1910s	early	Koch et al. 2014	Oceania	Rosed Island	-11.36	154.14	Diurnal	Ashoreal	Varanidae	Platynota	2.26	1297	Allen Allison	DD	unknown	extant
<i>Varanus rugosus</i>	specimen	2005	1980	recent	Bohne and Ziegler 2005	Oceania	Halmahera Island	1.10	127.49	Diurnal	Terrestrial	Varanidae	Platynota	NA	1645	Bohne and Ziegler 2005	NA	NE	extant
<i>Vietnascincus rugosus</i>	description	1994	1987	recent	Damvsky and Orlov 1994	Oriental	Vietnam	14.27	108.58	Diurnal	Ashoreal&Terrestrial	Scincidae	Scincoidae	1.05	509	Nguyen et al. 2009	DD	unknown	extant
<i>Vozitakovia molybdick</i>	description	2012	2004	recent	Miralles et al. 2012	Madagascar	Madagascar	-15.65	47.58	Nocturnal	Fossorial&Terrestrial	Scincidae	Scincoidae	0.36	253	Miralles et al. 2012	NA	NE	extant
<i>Xantusia grevillei</i>	locality	1986	2014	recent	ianuaristi	Neurtic	USA	33.28	-116.14	Nocturnal	Saxicolous&Terrestrial	Xantusiidae	Scincoidae	0.85	354	Lovich 2001	VU	unknown	extant
<i>Xenosaurus pexai</i>	description	2000	1995	recent	Perez-Ramos et al. 2000	Neotropic	Mexico	16.93	-98.31	NA	Saxicolous	Xenosauridae	Diploglossa	1.48	352	de Oca et al. 2017	LC	stable	extant
<i>Zonosaurus maramaino</i>	specimen	2006	1996	recent	Raselimanana et al. 2006	Madagascar	Madagascar	-18.67	44.80	NA	Ashoreal	Gerrhosauridae	Scincoidae	1.63	468	Raselimanana et al. 2006	DD	unknown	extant

reference

Abdala et al. 2008
Abdala et al. 2010
Abdala et al. 2011
Abdala et al. 2014
Afrasiab and Mohamad 2009
Aguirre-Penafield et al. 2014
Allen Allison
Al-Safadi 1989
Alvarez and Valentin 1988
Amarasinghe et al. 2014
Amarasinghe et al. 2014a
Amarasinghe et al. 2015
Amarasinghe et al. 2015a
Ananjeva et al. 2007
Ananjeva et al. 2011
Ananjeva et al. 2017
Anderson and Leviton 1966
Andreone and Greer 2002
Annandale 1904
Aplin et al. 1993
Arakelyan et al. 2013
Ariano-Sanchez et al. 2011
Arnold et al. 2008
Arosemena and Ibanez 1993
Arredondo and Sanchez-Pacheco 2010
Asela et al. 2012
Atlas of living Australia
Austin et al. 2004
Avila et al. 2004
Avila et al. 2007
Avila et al. 2009
Avila et al. 2010
Avila et al. 2011
Avila et al. 2012
Avila et al. 2012b
Avila et al. 2014
Avila et al. 2015
Avila-Pires and Hoogmoed 2000
Ayala and Harris 1984
Ayala et al. 1984
Bahir and Maduwage 2005
Baig and Masroor 2006
Banda-Leal et al. 2017
Barbour and Loveridge 1928
Barts et al. 2001
Bates et al. 2014
Batista et al. 2015
Batuwita and Batuwita 2005
Batuwita and Udugampala 2017
Bauer 2003
Bauer 2006
Bauer 2010
Bauer and Doughty 2012
Bauer and Gunther 1992
Bauer and Menegon 2006
Bauer and Russell 1986
Bauer and Sadlier 2000
Bauer et al. 1998
Bauer et al. 2003
Bauer et al. 2004
Bauer et al. 2006
Bauer et al. 2006b
Bauer et al. 2006c
Bauer et al. 2006f

source
Abdala, C. S., Quinteros, A. S. and Espinoza, R. E. 2008. Two new species of *Liolaemus* (Iguania: Liolaemidae) from the Puna of Northwestern Argentina. *Herpetologica*, 64: 458-471.
Abdala, C. S., Quinteros, A. S., Scrocchi, G. J. and Stazzonelli, J. C. 2010. Three new species of the *Liolaemus elongatus* group (Iguania: Liolaemidae) from Argentina. *Cuadernos de Herpetologia*, 24: 93-109.
Abdala, C. S., Quinteros, A. S., Arias, F., Portelli, S. and Palavecino, A. 2011. A new species of the *Liolaemus darwini* group (Iguania: Liolaemidae) from Salta Province, Argentina. *Zootaxa* 2968: 26-38.
Abdala, C. S., Procopio, D. E., Stellatelli, O. A., Travaini, A., Rodriguez, A. and Monachesi, M. R. R. 2014. New Patagonian species of *Liolaemus* (Iguania: Liolaemidae) and novelty in the lepidosis of the southernmost lizard of the world: *Liolaemus magellanicus*. *Zootaxa* 3866: 526-542.
Afrasiab, S. I. and Mohamad, S. I. 2009. A study on cave-dwelling geckos in Iraq, with the description of a new species from Saffine mountain (Reptilia: Gekkonidae). *Zoology in the Middle East* 47: 49-56.
Aguirre-Penafield, V., Torres-Carvajal, O., Nunes, P. M. S., Peck, M. R. and Maddock, S. T. 2014. A new species of *Riama* Gray, 1858 (Squamata: Gymnophthalmidae) from the tropical Andes. *Zootaxa* 3866: 246-260.
Hawaii Biological Survey, Bishop Museum, Honolulu, HI 96817, USA.
Al-Safadi, M. M. 1989. A new species of semaphore gecko (Pristurus: Gekkonidae) from Yemen Arab Republic. *Proceedings of the Egyptian Academy of Sciences* 39: 9-15.
Alvarez, T. and Valentin, N. 1988. Description de una nueva especie de Lepidophyma (Reptilia: Xantusiidae) de Chiapas, Mexico. *Anales De La Escuela Nacional De Ciencias Biologicas Mexico* 32: 123-130.
Amarasinghe, A. A. T., Karunaratna, D. M. S. S., Hallermann, J., Fujinuma, J., Grillitsch, H. and Campbell, P. D. A new species of the genus *Calotes* (Squamata: Agamidae) from high elevations of the Knuckles Massif of Sri Lanka. *Zootaxa* 3785: 59-78.
Amarasinghe, T. A. A. Karunaratna, D. M. S. S. and Fujinuma, J. 2014. A new *Calotes* species from Sri Lanka with a redescription of *Calotes iolepis* Boulenger, 1885. *Herpetologica*, 70: 323-338.
Amarasinghe, A. A. T., Karunaratna, D. M. S. S., Campbell, P. D. and Ineich, I. 2015. Systematics and ecology of *Oligodon sublineatus* Dumeril, Bibron & Duméril, 1854, an endemic snake of Sri Lanka, including the designation of a lectotype. *Zoosystematics and Evolution* 91: 71-80.
Amarasinghe, A. A. T., Harvey, M. B., Riyanto, A. and Smith, E. N. 2015. A new species of *Cnemaspis* (Reptilia: Gekkonidae) from Sumatra, Indonesia. *Herpetologica*, 71: 160-167.
Ananjeva, N. B., Orlov, N. L., Truong, N. Q. and Nazarov, R. A. 2007. A new species of *Pseudocophotis* (Agamidae: Acrodonta: Lacertilia: Reptilia) from central Vietnam. *Russian Journal of Herpetology* 14: 153-160.
Ananjeva, N. B., Orlov, N. L., Nguyen, T. T. and Ryabov, S. A. 2011. A new species of *Acanthosaura* (Agamidae: Sauria) from northwest Vietnam. *Russian Journal of Herpetology* 18: 195-202.
Ananjeva, N. B., N. L. and Nguyen, T. T. 2017. A new species of *Japalura* (Agamidae: Lacertilia: Reptilia) from central highland, Vietnam. *Asian Herpetological Research* 8: 14-21.
Anderson, S. C. and Leviton, A. E. 1966. A review of the genus *Ophionorus* (Sauria: Scincidae), with descriptions of three new forms. *Proceedings of the California Academy of Sciences* 33: 499-534.
Andreone, F. and Greer, A. E. 2002. Malagasy scincid lizards: descriptions of nine new species, with notes on the morphology, reproduction and taxonomy of some previously described species (Reptilia, Squamata: Scincidae). *Journal of Zoology* 258: 139-181.
Annandale, N. 1904. Contributions to Oriental herpetology I. The lizards of the Adamans, with the description of a new gecko and a note on the reproduced tail in *Ptychozoon homalocephalum*. *Journal of the Asiatic Society of Bengal*, 73: 12-22.
Aplin, K. P., How, R. A. and Boeadi. 1993. A new species of the *Glaphyromorphus-isolepis* species group (Lacertilia Scincidae) From Sumba Island, Indonesia. *Records of the Western Australian Museum* 16: 235-242.
Arakelyan, M., Petrosyan, R., Ilgaz, C., Kumlutas, Y., Durmus, S. H., Tayhan, Y. and Danielyan, F. 2013. A skeletochronological study of parthenogenetic lizards of genus *Darevskia* from Turkey. *Acta Herpetologica* 8: 99-104.
Ariano-Sanchez, D., Torres-Almazan, M. and Urbina-Aguilar, A. 2011. Rediscovery of *Abronia frosti* (Sauria: Anguinae) from a cloud forest in Cuchumatanes Highlands in northwestern Guatemala: habitat characterization and conservation status. *Herpetological Review*, 42: 196-198.
Arnold, E. N., Vasconcelos, R., Harris, D. J., Mateo, J. A. and Carranza, S. 2008. Systematics, biogeography and evolution of the endemic *Hemidactylus* geckos (Reptilia, Squamata, Gekkonidae) of the Cape Verde Islands: based on morphology and mitochondrial and nuclear DNA sequences. *Zoologica Scripta*, 37: 619-636.
Arosemena, F. A. and Ibanez, D. R. 1993. Una especie nueva de *Anolis* (Squamata: Iguanidae) del grupo *fuscouratus* de Fortuna, Panama. [A new species of *Anolis* (Squamata: Iguanidae) of the *fuscouratus* group from Fortuna, Panama]. *Revista de Biología Tropical* 41: 267- 272.
Arredondo, J. C. and Sanchez-Pacheco, S. J. 2010. New endemic species of *Riama* (Squamata: Gymnophthalmidae) from northern Colombia. *Journal of Herpetology*, 44: 610-617.
Asela, M. D. C., Ukuwela, K. D. B., Bandara, I. N., Kandambi, H. K. D., Surasinghe, T. D. and Karunaratna, D. M. S. S. 2012. Natural history and current distribution patterns of *Calotes iolepis* Boulenger, 1885 (Reptilia: Agamidae: Draconinae) in Sri Lanka. *Herpetotropicos* 8: 39-48.
Atlas of living Australia
Austin, J. J., Arnold, E. N. and Jones, C. G. 2004. Reconstructing an island radiation using ancient and recent DNA: the extinct and living day geckos (Phelsuma) of the Mascarene islands. *Molecular Phylogenetics and Evolution* 31: 109-122.
Avila, L. J., Perez, C. H. F., Morando, M. and Sites, J. W. 2004. Phylogenetic relationships of lizards of the *Liolaemus petrophilus* group (Squamata, Liolaemidae), with description of two new species from western Argentina. *Herpetologica* 60: 187-203.
Avila, L. J., Frutos, N., Perez, C. H. F. and Morando, M. 2007. Reptilia, Iguania, Liolaemidae, *Liolaemus somuncrae*: Distribution extension. *Check List* 3: 11-13.
Avila, L. J., Morando, M., Perez, D. R. and Sites, J. W. 2009. A new species of *Liolaemus* from Anelo sand dunes, northern Patagonia, Neuquen, Argentina, and molecular phylogenetic relationships of the *Liolaemus wiegmanni* species group (Squamata, Iguania, Liolaemini). *Zootaxa* 2234: 39-55.
Avila, L. J., Perez, C. H. F., Morando, M. and Sites, J. W. 2010. A new species of *Liolaemus* (Reptilia: Squamata) from southwestern Rio Negro province, northern Patagonia, Argentina. *Zootaxa* 2434: 47-59.
Avila, L. J., Perez, C. H. F., Perez, D. R. and Morando, M. 2011. Two new mountain lizard species of the *Phymaturus* genus (Squamata: Iguania) from northwestern Patagonia, Argentina. *Zootaxa* 2924: 1-21.
Avila, L. J., Perez, C. H. F., Minoli, I. and Morando, M. 2012. A new species of *Homomota* (Reptilia: Squamata: Gekkota: Phyllodactylidae) from the Ventania mountain range, Southeastern Pampas, Buenos Aires Province, Argentina. *Zootaxa* 3431: 19-36.
Avila, L. J., Perez, C. H. F., Medina, C. D., Sites, J. W. and Morando, M. 2012. A new species of lizard of the *Liolaemus elongatus* clade (Reptilia: Iguania: Liolaemini) from Curí Leuvu River Valley, northern Patagonia, Neuquen, Argentina. *Zootaxa* 3325: 37-52.
Avila, L. J., Perez, C. H. F., Minoli, I. and Morando, M. 2014. A new lizard of the *Phymaturus* genus (Squamata: Liolaemidae) from Sierra Grande, northeastern Patagonia, Argentina. *Zootaxa* 3793: 99-118.
Avila, L. J., Medina, C. D., Perez, C. H. F., Sites, J. W. and Morando, M. 2015. Molecular phylogenetic relationships of the lizard clade *Liolaemus elongatus* (Iguania: Liolaemini) with the description of a new species from an isolated volcanic peak in northern Patagonia. *Zootaxa* 3947: 67-84.
Avila-Pires, T. C. S. and Hoogmoed, M. S. 2000. On two new species of *Pseudogonotodes* Ruthven, 1915. (Reptilia: Squamata: Gekkonidae), with remarks on the distribution of some other sphaerodactyl lizards. *Zoologische Mededelingen* 73: 209-223.
Ayala, S. C. and Harris, D. M. 1984. A new microteiid lizard (*Alopoglossus*) from the Pacific rainforest of Colombia. *Herpetologica* 40: 154-158.
Ayala, S. C., Harris, D. M. and Williams, E. E. 1984. *Anolis menta*, sp. n. (Sauria, Iguanidae), a new *tigrinus* group anole from the west side of Santa Marta Mountains, Colombia. *Papeis Avulsos de Zoologia* 35: 135-145.
Bahir, M. M. and Maduwage, K. P. 2005. *Calotes desilvai*, a new species of agamid lizard from Morningside forest, Sri Lanka. *Raffles Bulletin of Zoology, Supplement* 12: 381-392
Baig, K. J. and Masroor, R. 2006. A new species of *Eremias* (Sauria: Lacertidae) from Cholistan Desert, Pakistan. *Russian Journal of Herpetology* 13: 167-174
Banda-Leal, J., los Reyes, M. N. and Bryson, R. W. 2017. A new species of pygmy alligator lizard (Squamata: Anguinae) from Nuevo Leon, Mexico. *Journal of Herpetology*, 51: 223-226.
Barbour, T. and Loveridge, A. 1928. New skinks of the genus *Scelotes* from Mozambique and Madagascar. *Proceedings of the New England Zoological Club* 10: 63-65.
Barts, M., Boone, J. and Hulbert, F. 2001. Die dickfingergeckos des südlichen Afrikas. Teil I. Die haltung und vermehrung des Tsodilo-geckos, *Pachydactylus tsodiloensis* Haacke, 1966. *Sauria*, 23: 15-19.
Bates, M. F., Branch, W. R., Bauer, A. M., Burger, M., Marais, J., Alexander, G. J. and de Villiers, M. S. editors. 2014. Atlas and red list of the reptiles of South Africa, Lesotho and Swaziland. *Suricata* 1. South African National Biodiversity Institute, Pretoria.
Batista, A., Ponce, M., Vesely, M., Mebert, K., Hertz, A., Kohler, G., Carrizo, A. and Lotzkat, S. 2015. Revision of the genus *Lepidoblepharis* (Reptilia: Squamata: Sphaerodactylidae) in Central America, with the description of three new species. *Zootaxa* 3984: 187-221.
Batuwita, S. and Bahir, M. M. 2005. Description of five new species of *Cyrtodactylus* (Reptilia: Gekkonidae) from Sri Lanka. *Raffles Bulletin of Zoology Supplement* No. 12: 351-380.
Batuwita, S. and Udugampala, S. 2017. Description of a new species of *Cnemaspis* (Squamata: Gekkonidae) from Knuckles Range of Sri Lanka. *Zootaxa* 4254: 82-90.
Bauer, A. M. 2003. Descriptions of seven new *Cyrtodactylus* (Squamata: Gekkonidae) with a key to the species of Myanmar (Burma). *Proceedings of the California Academy of Sciences* 54: 463-498.
Bauer, A. M. 2006. A review of the gekkonid lizards of Benin, with the description of a new species of *Hemidactylus* (Squamata : Gekkonidae). *Zootaxa* 1242: 1-20.
Bauer, A. M. 2010. A new species of *Pachydactylus* (Squamata: Gekkonidae) from the Otavi Highlands of northern Namibia. *Bonn Zoological Bulletin* 57: 257-266.
Bauer, A. M. and Doughty, P. 2012. A new bent-toed gecko (Squamata: Gekkonidae: Cyrtodactylus) from the Kimberley region, Western Australia. *Zootaxa* 3187: 32-42.
Bauer, A. M. and Gunther, R. 1992. A preliminary report of the reptile fauna of the kingdom of Bhutan with the description of a new species of scincid lizard (Reptilia: Scincidae). *Asiatic Herpetological Research* 4: 23-36.
Bauer, A. M. and Menegon, M. 2006. A new species of prehensile-tailed gecko, *Urocyrtedon* (Squamata: Gekkonidae), from the Udzungwa Mountains, Tanzania. *African Journal of Herpetology* 55: 13-22.
Bauer, A. M. and Russell, A. P. 1986. *Hoplodactylus delcourti* n. sp. (Reptilia: Gekkonidae), the largest known gecko. *New Zealand Journal of Zoology* 13: 141-148.
Bauer, A. M. and Sadlier, R. A. 2000. The herpetofauna of New Caledonia. Society for the Study of Amphibians and Reptiles, St. Louis.
Bauer, A. M., Whitaker, A. H. and Sadlier, R. A. 1998. Two new species of the genus *Bavayia* (Reptilia: Squamata: Diplodactylidae) from New Caledonia, Southwest Pacific. *Pacific Science* 52: 342-355.
Bauer, A. M., Sumontha, G. M. and Pauwels, O. S. G. 2003. Two new species of *Cyrtodactylus* (Reptilia: Squamata: Gekkonidae) from Thailand. *Zootaxa* 376: 1-18.
Bauer, A. M., Sumontha, M., Grossmann, W., Pauwels, O. S. G. and Vogel, G. 2004. A new species of *Dixonius* (Squamata: Gekkonidae) from Kanchanaburi Province, Western Thailand. *Current Herpetology* 23: 17-26.
Bauer, A. M., Barts, M. and Hulbert, F. 2006. A new species of the *Pachydactylus weberi* group (Reptilia: Squamata: Gekkonidae) from the Orange River, with comments on its natural history. *Salamandra* 42: 83-92.
Bauer, A. M., Jackman, T., Sadlier, R. A. and Whitaker, A. H. 2006. A revision of the *Bavayia validiclavus* group (Squamata: Gekkota: Diplodactylidae), a clade of New Caledonian geckos exhibiting microendemism. *Proceedings of the California Academy of Sciences* 57: 503-547.
Bauer, A. M., LeBreton, M., Chirio, L., Ineich, I. and Kouete, M. T. 2006. New species of *Hemidactylus* (Squamata: Gekkonidae) from Cameroon. *African Journal of Herpetology* 55: 83-93.
Bauer, A. M., Lamb, T. and Branch, W. R. 2006. A revision of the *Pachydactylus serval* and *P. weberi* groups (Reptilia: Gekkota: Gekkonidae) of Southern Africa, with the description of eight new species. *Proceedings of the California Academy of Sciences* 57: 505-590.



Legs**Diurnality****Nucturnality****Insularity****Fossorial****Saxicolous****Arboreal****Terrestrial**