

# Stopping the shuffle between families: Six new Colubroid snake families named.

RAYMOND T. HOSER

488 Park Road, Park Orchards, Victoria, 3134, Australia.

Phone: +61 3 9812 3322 Fax: 9812 3355 E-mail: [snakeman@snakeman.com.au](mailto:snakeman@snakeman.com.au)

Received 6 March 2013, Accepted 4 April 2013, Published 29 April 2013.

## ABSTRACT

Recent molecular studies have effectively resolved the phylogeny of most of the modern snakes. Notwithstanding this, the taxonomy at the family level is seen to be inconsistent between major clades, with family level groups of similar divergence times being classified by single authors variously as genera, subfamilies and families within single given papers.

To correct the inconsistencies, some of the lower ranked groups are elevated to match the others already accorded family status.

This also brings the taxonomy and nomenclature of the snakes more into line with other vertebrate groups, including most notably the birds and placental mammals.

For the majority of affected clades there are already available names and each simply converts from subfamily to family.

However, four well-established groups until now have not been formally named. Instead they have been shunted between other family-level groups, sometimes in placements that do not match the evidence. In view of recently published phylogenies which clearly show that these taxa should be placed separately, regardless of their very ancient affinities, they are named herein according to the Zoological Code (Ride *et al.* 1999). A further two groups, until now classified as being within the Pseudoxenodontinae and Colubrinae, both of which are now elevated to family status are removed from these and placed within their own families due to their early divergence.

One of these in turn is divided into two newly named tribes.

**Keywords:** Taxonomy; Snakes; Colubroidea; new families; Charlespiersonserpeniidae; Micrelapiidae; Oxyrhabdiumiidae; Psammodynastiidae; Swileserpeniidae; Thermophiidae; new tribes; Charlespiersonserpenini; Chrysopelini.

## INTRODUCTION

The currently recognized taxonomy of the extant snakes is a synthesis of countless studies over the past two centuries.

Studies of morphology and habits have been complimented by the magnificent new technology of gene sequencing and the like.

With all this information at hand, there have been numerous taxonomies proposed and more recently ever more detailed phylogenies produced using supermatrix generating computer programs.

Over the past decade numerous phylogenies have been produced that have established the relationships of the lesser-known snake genera to other better known genera and computer-generated applications calibrated with known events have been able to accurately establish common ancestry time-lines and the like.

Unfortunately the taxonomy and nomenclature have not kept up with the results produced by molecular biologists, due in part to the relative speed and ease with which large amounts of genetic material can be processed.

A good example of this lag was seen in the paper of Pyron *et al.* 2011, (Fig 2) where most of the major family-level groups of Colubroidea were shown as diverging from the main Colubroidea lineage at similar times and with similar speciation profiles, and yet just three well-known groups were listed as families. These were Elapidae, Viperidae and Homalopsidae.

The remaining 16 groups were listed as subfamilies within two other large family groups, namely Lamprophiidae, and Colubridae.

However the evidence of Pyron *et al.* (2011) showed quite clearly that on the basis of consistency, either the Elapidae should have been subsumed within Lamprophiidae to be consistent with the Colubridae, or

alternatively the rest should have been treated as full families alongside the Elapidae.

Also notable was that Pyron *et al.* (2011) did not recognize the well defined subgroups within the Elapidae as subfamilies, as had been done for the mega-families Lamprophiidae and Colubridae.

Now in fairness to the authors, a detailed taxonomy was not their objective, however it is raised here as argument for the need to have a consistent taxonomy and nomenclature that other herpetologists can use.

In summary, I see it as preferable to elevate the approximately 22 groups of snakes with family level divergences to full family level in nomenclature rather than the subsuming of the majority into what could well be just two or three super-families.

This preference is also noted in view of the fact that increasing numbers of taxonomists are also using the tribe level of nomenclature to identify groups of like genera, thereby in effect allowing for a little used level of grouping between genus and family to further clarify phylogenetic affinities.

In terms of what was seen in Pyron *et al.* (2011), I hereby elevate all subfamilies within their Fig 1, to full family status.

None of these families, as defined as subfamilies in Pyron *et al.* (2011) are formally defined herein.

Instead I rely on the originally published subfamily diagnoses for these same groups by the original authors to in effect become the new diagnosis for each separate family as stated herein.

In the event that none of the 28 listed families below (excluding the six newly named) have not been previously listed as such (in other words only as subfamilies previously), then this paper should be treated as the first formal recognition of these groups as family level taxon groups.

In terms of formal diagnosis within this paper, each family is diagnosed and defined as consisting of all species within the family name genus group that share common ancestry with these species as far back as the family level, including those genera listed within each group as defined as subfamilies by Pyron *et al.* (2011).

Previously named subfamilies within the Elapidae (as listed by Smith *et al.* (1997) and others), not listed or identified by Pyron *et al.* (2011) are also recognized by myself and have been previously defined by the relevant authors at dates preceding this paper's publication in 2013.

Added to the families identified above is another, namely Homoroselapidae from Africa, described by Hoser (2012a) and six others described below.

Thus the complete list of families within the Colubroidea is given below.

Hence I now formally use, resurrect or for the first time ever, erect the following families within the Colubroidea.

These are below.

#### **FAMILIES WITHIN COLUBROIDEA**

**Aparallactidae**

**Atractaspidae**

**Azemiopidae**

**Calamariidae**

**Charlespiersonserpeniidae** *fam. nov.* (this paper, description below)

**Colubridae**

**Crotalidae**

**Dipsadidae**

**Elapidae**

**Grayiidae**

**Homalopsidae**

**Homoroselapidae**

**Micrelapiidae** *fam. nov.* (this paper, description below)

**Lamprophiidae**

**Natricidae**

**Oxyrhabdiumiidae** *fam. nov.* (this paper, description below)

**Pareatidae**

**Prosymnidae**

**Psammodynastiidae** *fam. nov.* (this paper, description below)

**Psammophiidae**

**Pseudaspidae**

**Pseudoxenodontidae**

**Pseudoxyrhopiidae**

**Sibynophiidae**

**Swileserpeniidae** *fam. nov.* (this paper, description below)

**Thermophiidae** *fam. nov.* (this paper, description below)

**Xenodermatidae**

**Viperidae**

With the exception of those six family groups listed above as new, all other groups have at some stage been previously designated as family level groupings by one or more previous author.

In terms of the two families, Charlespiersonserpeniidae *fam. nov.* and Thermophiidae *fam. nov.* I make the following additional comments.

Based on most existing taxonomy's Charlespiersonserpeniidae as defined in this paper (consisting four named genera) would probably be placed as a subfamily within the Colubridae.

However, it is clear from the phylogenies recently produced that this clade diverged from the rest of the Colubridae very early in the piece and in a time period similar to that for other well-defined and accepted families (see for example Fig 1, in Pyron *et al.* 2011 for the relevant family-level relativities).

On that basis I believe it appropriate that this group be accorded family group recognition.

In terms of the Colubridae as now recognized, the next major divergent group in terms of antiquity of divergence was almost certainly the tribe Oligodonini, that is clearly also widely divergent of the rest, both morphologically and genetically.

However it did diverge considerably more recently than the Charlespiersonserpeniidae as defined in this paper,

and so sits outside what I believe should be the antiquity required for full family-level recognition.

The taxonomic recognition of the tribe Oligodonini Hoser, 2012, does in my view give an accurate view of where the group lies in the Linnaean system and therefore I leave the numerous genera within that tribe as defined by Hoser (2012d) as is.

The genus *Thermophis* Malnate, 1953, has been variously placed within either Dipsadidae or Pseudoxenodontidae, and clearly has affinities with both. However the divergence from other members of both is in my view sufficiently archaic as to warrant this genus being placed within its own family.

If any of the new families are later downgraded by other authors to the level of subfamily, the diagnosis for each will remain the same and the diagnosis for family-level groups herein should also be treated as being definitions of subfamily groups as well, to accommodate for the possibility of unaccounted for extinct forms or undiscovered ones.

Hence each diagnosis within this paper should be treated as two; that is one for family and one for subfamily (inae).

As mentioned already the body of evidence relied upon to resolve the current taxonomy of the Colubroidea is immense. However some of the key published studies and relevant papers include the following: Alfaro *et al.* (2008), Cadle (1984, 1985), Chen *et al.* (2013), Collins (2006), Cope (1893), De Queiroz (2006), Dowling (1978), Dowling and Deullman (1978), Günther (1858), Huang *et al.* (2009), Jan (1863), Keller *et al.* (2003), Kelly *et al.* (2003, 2009), Keogh (1998), Laurenti (1768), Lawson *et al.* (2005), Leviton (1968), Liem *et al.* (1971), Nixon *et al.* (2003), Pinau *et al.* (2004), Pyron and Burbrink (2009, 2012), Pyron *et al.* (2011, 2013), Rannala *et al.* (1998), Romer (1956), Vidal *et al.* (2007, 2008, 2009, 2010), Vitt and Caldwell (2009), Wiens (2003), Wiens and Moen (2008), Zaher (1999), Zaher *et al.* (2009, 2012), Zhao and Adler (1993), Zug *et al.* (2001), Zwickl and Hillis (2002), and the sources cited therein, which includes relevant papers not necessarily themselves about snake taxonomy or phylogenetics, but yet deal with other vertebrates in relevant matters.

I have no doubt that in the immediate term, there will be howls of protest from the usual quarters in terms of this new classification for the Colubroidea.

Examples of this type of protest are seen in the numerous blogs posted in *Herpetological Review* (e.g. Burbrink *et al.* 2007 and Kaiser *et al.* 2013) or alternatively see Crother *et al.* (2008, 2012), the latter from 2008 rebutted by Pauly *et al.* (2009).

However I also have no doubt that as the various branches of zoological classification become more consistent across classes of vertebrate, that the taxonomy formally proposed herein will become widely adopted as the most sensible choice.

As a matter of formality, each family defined herein is also redefined as a subfamily, in order to account for fossil taxa that may be found, to enable the nominate subfamilial groups to be properly identified from this point in time as well.

**CHARLESPIERSONSERPENIIDAE FAM. NOV.**  
(Terminal Taxon: *Leptophis punctulatus* Gray, 1826)  
Now generally known as *Charlespiersonserpens punctulatus* (Gray, 1826) or previously as *Dendrelaphis punctulatus* (Gray, 1826).

**Diagnosis:** As a family they are found in the South-east Asian region and adjacent places including the Indian subcontinent and a sizeable part of Australasia.

The family is best diagnosed and separated from others by a diagnosis of the four component genera.

Thus the family is defined as being one or other of the following four:

1/ The genus *Dendrelaphis* Boulenger, 1890 are the so-called tree snakes or Bronzebacks.

All are similar in build and habits, being generally slender, slightly laterally compressed with long-whip-like tails, head barely distinct from the neck, large eye with a round pupil. The ventrals exhibit a sharp ridge running down either side presenting an "arch-shape" in cross section which enables traction when climbing trees and the like.

Color varies strongly between species and within wide-ranging species also varies depending on locality.

There is a variable dorsal colour, slightly lighter laterally, but all lack longitudinal black stripes on all or most of their body, labials and throat pale, 13 dorsal mid-body rows, all smooth with apical pits, and arranged obliquely, 156-221 ventrals, divided anal, 118-160 divided subcaudals, loreal present, 8-9 supralabials, with only the fourth supralabial makes contact with the eye, 1 pre-ocular, 2 or 3 postoculars and have a hemipenis that extends past the fifteenth subcaudal.

Note that for *Dendrelaphis*, only the fourth supralabial makes contact with the eye, with numbers 5 and 6 merely coming close, the latter being the configuration for *Charlespiersonserpens* Hoser, 2012.

When threatened, snakes will puff up their neck and fore body, swelling it vertically, often yielding different colored skin between the now parted scales.

The type species, the Striped Bronzeback *Dendrelaphis caudolineatus* (Gray, 1834) is physically quite different from seven Australia/New Guinea species, being of obviously thinner build and glossier scalation, moved to the genus *Charlespiersonserpens* Hoser, 2012 (see below), or:

2/ The diagnosis for the genus *Charlespiersonserpens* Hoser, 2012 is as follows: A group of snakes separated from other *Dendrelaphis* by their generally heavier build (like-for-like) and slightly less glossy dorsal body shields (at same point of shedding cycle).

The following suite of characters identifies this genus: Variable dorsal colour, slightly lighter laterally, but all lack longitudinal black stripes on all or most of their body, labials and throat pale, 13 dorsal mid-body rows, all smooth and arranged obliquely, 156-221 ventrals, divided anal, 118-160 divided subcaudals, loreal present, 8-9 supralabials, with fourth and fifth or fifth and sixth in contact with the eye, 1 pre-ocular, 2 or 3 postoculars and have a medium or short hemipenis that doesn't extend past the fifteenth subcaudal.

Snakes within the genus *Dendrelaphis* have a higher average ventral count than seen in the genus *Charlespiersonserpens* Hoser, 2012.

Furthermore for snakes within the genus *Dendrelaphis* only the fourth supralabial makes contact with the eye, with numbers 5 and 6 merely coming close, as opposed to the configuration given above for *Charlespiersonserpens* Hoser, 2012.

Noteworthy is that two species within this genus, namely *papuenis* (Boulenger, 1895) and *salomonis* (Günther, 1872) were in 1984 resurrected from synonymy with *punctulatus* and/or *calligastra* by McDowell in 1984, and again by Wells and Wellington in 1985, which has been upheld by later studies, or:

3/ The genus *Chrysopelea* Boie, 1826 is diagnosed as follows:

All are long and slender in build, head wider than the neck. The head shape is spatulate and with a depressed snout. The eyes are large and the pupil is round. There are 9 supralabials with the fourth, fifth and sixth touching the eyes. There are 17 mid-body scale rows and the dorsal scales are smooth, except in the species *taprobanica* where they are keeled (subgenus *Wellsserpens* Hoser, 2013). There are 198-234 ventrals, 107-138 subcaudals and the ventral and subcaudal scales have distinctive lateral keels; 20-22 maxillary teeth, 3 and 4 being partly grooved.

The so-called flying snakes from southern Asia are a distinctive group of usually brightly coloured snakes. An individual snake will glide by using its ridge scales along its belly, pushing against rough bark surfaces of tree trunks, allowing it to move vertically up a tree. Upon reaching the end of a tree's branch, the snake continues moving until its tail dangles from the branch's end. It then makes a J-shape bend, leans forward to select the level of inclination it wishes to travel to control its flight path, as well as selecting a desired landing area. Once it decides on a destination, it propels itself by thrusting its body up and away from the tree, sucking in its stomach, flaring out its ribs to turn its body in a "pseudo concave wing" while simultaneously making a continual swaying movement of lateral undulation more-or-less parallel to the ground to stabilize its direction in midair flight so as to safely land. The combination of sucking in its stomach and making a motion of lateral undulation in the air allows the snake to glide in the air, where it also manages to save energy compared to travel by crawling on the ground and to potentially avoid terrestrial predators. The concave wing that a snake creates in sucking its stomach, flattens its body to up to twice its width from back of the head to the anal vent, which is close to the end of the snake's tail, causes the cross section of the snake's body to resemble the cross section of a flying disc. The cross sectional concavity causes increased air resistance under the centre of the snake, causing lift for the snake to glide (or "fly"). The snake continuously moves in lateral undulation to create an enhanced effect of increased air pressure underneath its arched body to glide. While the ultimate destination of the snake is best predicted by ballistics they do have some control over where they go and land, determined by in air movement. These snakes are mildly venomous colubrids, not

regarded as dangerous to humans.

Five species from the genus have been described, although one of these is only known from a single specimen, or:

4/ The genus *Ahaetulla* Link, 1807, is diagnosed as follows: All are characterized by thin, elongated bodies, with extremely long tails and a sharply triangular shaped head. They are primarily green in color, but can vary quite a bit to include or be yellows, oranges, greys and browns. They may have black and/or white patterning, or can be solid in color. Their eyes are apparently unique in the reptile world, having keen binocular vision and very distinctive keyhole shaped pupils.

The genus *Ahaetulla* is further diagnosed and separated from other genera as follows: Maxillary teeth 12 to 15, one or two in the middle much enlarged, fang-like, and followed by an interspace, after which the teeth are very small; one or two posterior grooved fangs, situated below the posterior border of the eye; mandibular teeth increasing in length to the third or fourth, which is very large, fang-like; the posterior small. Head elongate, distinct from neck, with strong canthus rostralis and concave lores; eye rather large, with horizontal pupil; nostril in the posterior part of a single nasal; frontal narrow, more or less bell-shaped. Body much elongate and compressed; scales smooth, without apical pits, in 15 rows, disposed obliquely, vertebral row slightly enlarged; ventrals rounded. Tail long; subcaudals in two rows (Boulenger, 1896).

**Comments:** Previously published accounts for the genera *Charlespiersonserpens* Hoser, 2012 and *Dendrelaphis* Boulenger, 1890 include those listed by Hoser (2012c) and sources cited therein.

These include: Anderson (1871), Auffenberg (1980), Auliya (2006), Baier (2005), Bergman (1955), Boie (1827), Boulenger (1886, 1888, 1890, 1894a, 1895a, 1895b, 1897), Bourret (1935), Cohn (1905), Das (1999), Das and De Silva (2005), Daudin (1803), David and Vogel (1996), de Lang and Vogel (2005), de Rooij (1917), Deuve (1970), Devan-Song and Brown (2012), Doria (1817), Duméril *et al.* (1854), Flower (1897, 1899), Frith (1977), Gadow (1909), Garman (1901), Gray (1825, 1826, 1835, 1841, 1842), Grismer *et al.* (2008), Günther (1867, 1872), How and Kitchner (1997), How *et al.* (1996), Iskandar and Colijn (2002), Janzen *et al.* (2007), Koch (2011), Kuhl (1820), Lazell (2002), Lazell and Wu (1990), Leviton (1970), Lidth De Jeude (1911), Lim and Cheong (2011), Lim and Lim (1992), Lim and Ng (1999), Loveridge (1948), Macleay (1875, 1877, 1878, 1884), Malkmus *et al.* (2002), Manthey and Grossmann (1997), McCoy (2006), McDowell (1984), McKay (2006), Meise and Hennig (1932), Mertens (1926, 1927, 1930), Obst (1977), Schmidt (1932), Sharma (2004), Smith (1943), Stejneger (1933), Sudasinghe (2010), Taylor (1950), Thompson and Thompson (2008), Tiwari and Biswass (1973), Tweedie (1983), van Rooijen and van Rooijen (2007), van Rooijen and Vogel (2008a, 2008b, 2008c, 2009, 2010), Vijayakumar and David (2006), Vogel (1995, 2010), Vogel and van Rooijen (2007, 2008, 2011a, 2011b, 2011c), Wall (1908c, 1910c, 1913, 1921a, 1921b), Wells and Wellington (1985), Werner (1893), Whitaker *et al.* (1982), Zhao and Adler (1993), Ziegler and Vogel (1999).

Previously published accounts for the genus *Chrysopelea* Boie, 1826 include those listed by Hoser (2013) and sources cited therein and include: Auliya (2006), Boie (1827), Boistel *et al.* (2001), Bong Heang (1987), Boulenger (1890, 1894a), Brongersma (1933), Brown *et al.* (1996), Bulian (1997), Chanard *et al.* (1999), Cox *et al.* (1998), David and Vogel (1996), de Lang and Vogel (2005), Devan-Song and Brown (2012), Dowling and Jenner (1998), Duméril *et al.* (1854), Ferner *et al.* (2000), Fischer (1880), Gaulke (1986, 1994, 2011, 2012), Geissler *et al.* (2001), Grismer, *et al.* (2002, 2007, 2008, 2010), Grossmann and Schäfer (2001), Grossmann and Tillack (2001a, 2001b, 2004), Ingle (2010) Iskander and Erdelen (2006), Kannan (2006), Karunarathna Suranjan and Thasun Amarasinghe (2011), Kopstein (1926), Leviton (1964a), Lim and Ng (1999), Linnaeus (1758), Mahony *et al.* (2009), Malkmus (1985), Malkmus *et al.* (2002), Manthey and Grossmann (1997), Murthy (2010), Pauwels *et al.* (2000, 2003), Purkayastha *et al.* (2011), Pyron *et al.* (2011, 2013), Quah *et al.* (2011), Sang *et al.* (2009), Schmidt (2012), Sharma (2004), Shaw (1802), Smith (1943), Stuart and Emmett (2006), Taylor (1965), Teo and Rajathurai (1997), Thompson (1913), Tillack (2006), Tweedie (1950, 1954), van Rooijen and van Rooijen (2007), Vyas (2007), Wall (1907a, 1908d, 1921a) Wanger *et al.* (2011), Werner (1925), Whitaker and Captain (2004), Zhao and Adler (1993), Ziegler *et al.* (2007) and Zug *et al.* (1998).

Previously published accounts for the genus *Ahaetulla* Link, 1807 include the following: Avadhani (2005), Bergman (1956), Boie (1827), Bonnaterre (1790), Boulenger (1890, 1896a, 1896b, 1897), Cochran (1930), Cox *et al.* (1998), Das and De Silva (2005), David and Dubois (2005), Dowling and Jenner (1988), Duméril *et al.* (1854), Fischer (1885a), Gaulke (1994, 2011), Golder (1989), Grismer *et al.* (2008), Günther (1858, 1859, 1864), Hien *et al.* (2001), ICZN (1987, 2005), Janzen *et al.* (2007), Karunarathna and Amarasinghe (2009), Lacepède (1789), Link (1807), Linnaeus (1758), Manthey and Grossmann (1997), Khaire and Khaire (1993), Midtgaard (2011), Miralles and David (2010), Nabhitabhata *et al.* (2000), Neumann-Denzau and Neumann-Denzau (2010), Sajdak (2010), Sang *et al.* (2009), Schlegel (1837), Sharma (2004), Smedley (1932), Smith (1930, 1943), Stejneger (1933), Taylor (1953, 1965), Tweedie (1950), van Rooijen and van Rooijen (2002), Venkatraman *et al.* (1997), Wall (1905a, 1905b, 1905c, 1906, 1908a, 1908b, 1910a, 1910b, 1921a), Whitaker and Captain (2004), and sources cited therein.

There is a strong case both phylogenetically and morphologically to divide *Ahaetulla* Link, 1807 three ways, either into three genera or alternatively, three subgenera. There are already available names for the phylogenetic groups.

The genera *Charlespiersonserpens* Hoser, 2012 and *Dendrelaphis* Boulenger, 1890 are herein placed in a new tribe, Charlespiersonini, using the same diagnosis as given here for the two genera.

The genera *Chrysopelea* Boie, 1826 and *Ahaetulla* Link, 1807 are herein placed in a new tribe, Ahaetulliini, using the same diagnosis as given here for the two genera.

**Content:** *Charlespiersonserpens* Hoser, 2012;

*Dendrelaphis* Boulenger, 1890; *Chrysopelea* Boie, 1826; *Ahaetulla* Link, 1807.

#### CHARLESPIERSONSERPENIINAE SUBFAM. NOV.

(Terminal Taxon: *Leptophis punctulatus* Gray, 1826)

Now generally known as *Charlespiersonserpens punctulatus* (Gray, 1826) or previously as *Dendrelaphis punctulatus* (Gray, 1826).

**Diagnosis:** As for the family Charlespiersonserpiidae as defined in this paper.

**Content:** *Charlespiersonserpens* Hoser, 2012; *Dendrelaphis* Boulenger, 1890; *Chrysopelea* Boie, 1826; *Ahaetulla* Link, 1807.

#### CHARLESPIERSONSERPENINI TRIBE NOV.

(Terminal Taxon: *Leptophis punctulatus* Gray, 1826)

Now generally known as *Charlespiersonserpens punctulatus* (Gray, 1826) or previously as *Dendrelaphis punctulatus* (Gray, 1826).

**Diagnosis:** The new tribe Charlespiersonini *tribe nov.* is best diagnosed by a diagnosis of the two component genera.

Thus the tribe is defined and separated from others as being one or other of the following two:

1/ The genus *Dendrelaphis* Boulenger, 1890 are the so-called tree snakes or Bronzebacks.

All are similar in build and habits, being generally slender, slightly laterally compressed with long-whip-like tails, head barely distinct from the neck, large eye with a round pupil. The ventrals exhibit a sharp ridge running down either side presenting an "arch-shape" in cross section which enables traction when climbing trees and the like.

Color varies strongly between species and within wide-ranging species also varies depending on locality.

There is a variable dorsal colour, slightly lighter laterally, but all lack longitudinal black stripes on all or most of their body, labials and throat pale, 13 dorsal mid-body rows, all smooth with apical pits, and arranged obliquely, 156-221 ventrals, divided anal, 118-160 divided subcaudals, loreal present, 8-9 supralabials, with only the fourth supralabial makes contact with the eye, 1 pre-ocular, 2 or 3 postoculars and have a hemipenis that extends past the fifteenth subcaudal.

Note that for *Dendrelaphis*, only the fourth supralabial makes contact with the eye, with numbers 5 and 6 merely coming close, the latter being the configuration for *Charlespiersonserpens* Hoser, 2012.

When threatened, snakes will puff up their neck and fore body, swelling it vertically, often yielding different colored skin between the now parted scales.

The type species, the Striped Bronzeback *Dendrelaphis caudolineatus* (Gray, 1834) is physically quite different from seven Australia/New Guinea species, being of obviously thinner build and glossier scalation, moved to the genus *Charlespiersonserpens* Hoser, 2012 (see below), or:

2/ The diagnosis for the genus *Charlespiersonserpens* Hoser, 2012 is as follows: A group of snakes separated from other *Dendrelaphis* by their generally heavier build (like-for-like) and slightly less glossy dorsal body shields (at same point of shedding cycle).

The following suite of characters identifies this genus: Variable dorsal colour, slightly lighter laterally, but all lack longitudinal black stripes on all or most of their body, labials and throat pale, 13 dorsal mid-body rows, all smooth and arranged obliquely, 156-221 ventrals, divided anal, 118-160 divided subcaudals, loreal present, 8-9 supralabials, with fourth and fifth or fifth and sixth in contact with the eye, 1 pre-ocular, 2 or 3 postoculars and have a medium or short hemipenis that doesn't extend past the fifteenth subcaudal.

Snakes within the genus *Dendrelaphis* have a higher average ventral count than seen in the genus *Charlespiersonserpens* Hoser, 2012.

Furthermore for snakes within the genus *Dendrelaphis* only the fourth supralabial makes contact with the eye, with numbers 5 and 6 merely coming close, as opposed to the configuration given above for *Charlespiersonserpens* Hoser, 2012.

Noteworthy is that two species within this genus, namely *papuenis* (Boulenger, 1895) and *salomonis* (Günther, 1872) were in 1984 resurrected from synonymy with *punctulatus* and/or *calligastra* by McDowell in 1984, and again by Wells and Wellington in 1985, which has been upheld by later studies.

The tribe is distributed within southern Asia and Australasia.

**Content:** *Charlespiersonserpens* Hoser, 2012; *Dendrelaphis* Boulenger, 1890.

#### TRIBE AHAETULLIINI TRIBE NOV.

**(Terminal Taxon: *Coluber mycterizans* Linnaeus, 1758)**

**Currently most widely known as *Ahaetulla mycterizans* (Linnaeus, 1758).**

**Diagnosis:** Tribe Ahaetulliini is best diagnosed by defining the two component genera.

That is the tribe is herein defined and separated from other snakes as one or other of:

1/ The genus *Ahaetulla* Link, 1807, is diagnosed as follows: All are characterized by thin, elongated bodies, with extremely long tails and a sharply triangular shaped head. They are primarily green in color, but can vary quite a bit to include or be yellows, oranges, greys and browns. They may have black and/or white patterning, or can be solid in color. Their eyes are apparently unique in the reptile world, having keen binocular vision and very distinctive keyhole shaped pupils.

The genus *Ahaetulla* is further diagnosed and separated from other snake genera as follows: Maxillary teeth 12 to 15, one or two in the middle much enlarged, fang-like, and followed by an interspace, after which the teeth are very small; one or two posterior grooved fangs, situated below the posterior border of the eye; mandibular teeth increasing in length to the third or fourth, which is very large, fang-like; the posterior small. Head elongate, distinct from neck, with strong canthus rostralis and concave lores; eye rather large, with horizontal pupil; nostril in the posterior part of a single nasal; frontal narrow, more or less bell-shaped. Body much elongate and compressed; scales smooth, without apical pits, in 15 rows, disposed obliquely, vertebral row slightly enlarged; ventrals rounded. Tail long; subcaudals in two rows (Boulenger, 1896), or:

2/ The genus *Chrysopelea* Boie, 1826 is diagnosed as follows:

All are long and slender in build, head wider than the neck. The head shape is spatulate and with a depressed snout. The eyes are large and the pupil is round. There are 9 supralabials with the fourth, fifth and sixth touching the eyes. There are 17 mid-body scale rows and the dorsal scales are smooth, except in the species *taprobanica* where they are keeled (subgenus *Wellsserpens* Hoser, 2013). There are 198-234 ventrals, 107-138 subcaudals and the ventral and subcaudal scales have distinctive lateral keels. 20-22 maxillary teeth, 3 and 4 being partly grooved.

The so-called flying snakes from southern Asia are a distinctive group of usually brightly coloured snakes. An individual snake will glide by using its ridge scales along its belly, pushing against rough bark surfaces of tree trunks, allowing it to move vertically up a tree. Upon reaching the end of a tree's branch, the snake continues moving until its tail dangles from the branch's end. It then makes a J-shape bend, leans forward to select the level of inclination it wishes to travel to control its flight path, as well as selecting a desired landing area. Once it decides on a destination, it propels itself by thrusting its body up and away from the tree, sucking in its stomach, flaring out its ribs to turn its body in a "pseudo concave wing" while simultaneously making a continual swaying movement of lateral undulation more-or-less parallel to the ground to stabilize its direction in midair flight so as to safely land. The combination of sucking in its stomach and making a motion of lateral undulation in the air allows the snake to glide in the air, where it also manages to save energy compared to travel by crawling on the ground and to potentially avoid terrestrial predators. The concave wing that a snake creates in sucking its stomach, flattens its body to up to twice its width from back of the head to the anal vent, which is close to the end of the snake's tail, causes the cross section of the snake's body to resemble the cross section of a flying disc. The cross sectional concavity causes increased air resistance under the centre of the snake, causing lift for the snake to glide (or "fly"). The snake continuously moves in lateral undulation to create an enhanced effect of increased air pressure underneath its arched body to glide. While the ultimate destination of the snake is best predicted by ballistics they do have some control over where they go and land, determined by in air movement. These snakes are mildly venomous colubrids, not regarded as dangerous to humans.

Five species from the genus have been described, although one of these is only known from a single specimen.

The tribe is distributed within southern Asia

**Content:** *Ahaetulla* Link, 1807; *Chrysopelea* Boie, 1826.

#### MICRELAPIIDAE FAM. NOV.

**(Terminal taxon: *Micrelaps muelleri* Boettger, 1880).**

**Diagnosis:** At the present time, this family as defined, is monotypic for the genus *Micrelaps* Boettger, 1880. Therefore the family diagnosis is the same as for the genus as presently recognized.

The family is herein defined and separated from others as follows: maxillary very short, with two or three teeth

followed, after an interspace, by one [two] very large grooved fang[s] situated below the eye; anterior mandibular teeth longest. Head small, not distinct from neck; eye minute, with round or vertically subelliptic pupil; nostril in a single nasal; no loreal [very rarely 1], no preocular; prefrontal entering the eye.

Body cylindrical; scales smooth, without apical pits, in 15 rows; ventrals rounded. Tail short; subcaudals in two rows. An elongated venom gland has been reported in at least one specimen (Greene 1997).

These snakes occur in the Middle-East and Africa.

**Comments:** In his study of African colubrids Bogert (1940) associated *Micrelaps* with *Xenocalamus* Günther 1868, *Chilorhinophis* Werner, 1907 and *Macrelaps* Boulenger, 1896 all opisthogyphous genera lacking hypapophyses on the posterior vertebrae and having undivided hemipenes in which the sulcus spermaticus is also undivided.

Parker (1949) noticed that *Micrelaps muelleri* and *M. boettgeri* had deeply bifurcated hemipenes and thought that the genus should rather be placed in Bogert's (1940) Group VII, being most comparable with *Calamelaps* Günther 1866 (= *Amblyodipsas* Peters 1856).

In a recent treatment of Atractaspididae (Underwood and Kochva 1993) *Micrelaps* was considered the sister group of *Brachyophis* Mocquard 1888 from Somalia.

Notwithstanding these findings, Vidal *et al.* (2007) placed *Micrelaps* within the Elapoidea, but sufficiently divergent from the rest to be placed in its own family, although these authors did not make any such designation.

There is a considerable body of published studies relating to the genus *Micrelaps* Boettger, 1880. Important publications include: Angel (1925), Amr *et al.* (1997), Bar and Haimovitch (2012), Bischoff and Schmidtler (1997), Boettger (1880, 1893), Bogert (1940), Boulenger (1896b), Broadley (1993), Broadley and Howell (1991), de Witte and Laurent (1947), Disi (1885), Disi *et al.* (2001), Hraoui-Bloquet *et al.* (2002), Lanza (1983, 1990), Largen and Rasmussen (1993), Loveridge (1956), Mocquard (1888), Pyron *et al.* (2013), Rasmussen (2002, 2003), Spawls *et al.* (2001), Sternfeld (1908, 1910), Underwood and Kochva (1993), Venchi and Sindaco (2006), Vidal *et al.* (2007), Werner *et al.* (2006) and the sources cited therein.

There is a strong case both phylogenetically and morphologically to divide the genus *Micrelaps* Boettger, 1880 two ways, either into two genera or alternatively, two subgenera. There are already available names for the phylogenetic groups.

Until now, most authors have placed the genus *Micrelaps* Boettger, 1880 within the Atractaspididae, however the divergence from the nominate genus for the family is archaic and therefore warrants a family level division.

**Content:** *Micrelaps* Boettger, 1880.

#### MICRELAPIINAE SUBFAM. NOV.

**(Terminal taxon: *Micrelaps muelleri* Boettger, 1880).**

**Diagnosis:** As for the preceding family description.

These snakes occur in the Middle-East and Africa.

**Content:** *Micrelaps* Boettger, 1880.

#### OXYRHABDIUMIIDAE FAM. NOV.

**(Terminal taxon: *Sténognathe modestus* Duménil, 1853).**

**Generally known as *Oxyrhabdium modestum* (Duménil, 1853).**

**Diagnosis:** This family is diagnosed and separated from other snake families by the following suite of characters: Maxillary teeth 30 to 35, small, equal; mandibular teeth equal. Head is not very distinct from the neck; eye small, with vertically subelliptic pupil; nostril pierced between two small nasals; a pair of small internasals; no praeocular; loreal and prefrontal entering the eye. Body cylindrical; scales smooth, in 15 rows, without apical pits; ventrals rounded. Tail moderate, subcaudals divided. Hypapophyses developed throughout the vertebral column (Boulenger 1893). Hemipenes are deeply forked and spinose.

The family is known only from two species, both found in the Philippine Islands and both assigned to the genus *Oxyrhabdium* Boulenger, 1893.

**Comments:** Many molecular studies, including that of Pyron *et al.* (2011) were effectively unable to place *Oxyrhabdium* within any existing families.

Leviton (1964b) wrote: "The presence of hypapophyses, deeply forked hemipenes, and numerous subequal maxillary teeth leads me to conclude that *Oxyrhabdium* is unrelated to any genus of

burrowing or semi-burrowing colubrid snakes presently known from either Indonesia or the Malay Peninsula. I believe the similarities in the arrangement of head shields, smoothness of scales, reduction in length of the tail, and reduction in the size of the eye, shared in part with other genera of Indo-Malayan burrowing snakes (e.g. *Agrophis*, *Brachyorrhus*, *Oreoculamus*, and *Rabdion*) must be attributed to convergence among, otherwise, unrelated but morphologically adapted groups."

Notable published reports on the genus include: Bauer *et al.* (1995), Beukema (2011), Boulenger (1893), Brown *et al.* (2000), Duménil (1853), Duménil *et al.* (1854), Fischer (1885b), Gaulke (2001), Gaulke and Operiano (2006), Günther (1858, 1873), Hallermann (2007), Leviton (1964b), Peters (1872), Smith (1993), and sources cited therein.

**Content:** *Oxyrhabdium* Boulenger, 1893.

#### OXYRHABDIUMIINAE SUBFAM. NOV.

**(Terminal taxon: *Sténognathe modestus* Duménil, 1853).**

**Generally known as *Oxyrhabdium modestum* (Duménil, 1853).**

**Diagnosis:** As for the preceding family description.

The subfamily is known only from two species, both found in the Philippine Islands and both assigned to the genus *Oxyrhabdium* Boulenger, 1893.

**Content:** *Oxyrhabdium* Boulenger, 1893.

#### PSAMMODYNASTIIDAE FAM. NOV.

**(Terminal taxon *Psammophis pulverulenta*, Boie, 1827)**

**Generally known as *Psammodynastes pulverulentus* (Boie, 1827)**

**Diagnosis:** Separated from other snake families by the following suite of characters: Maxillary teeth 10-15, two anterior and last two posterior abruptly and strongly enlarged, the posteriormost grooved; anterior mandibular teeth strongly enlarged; head distinct from neck; canthus rostralis distinct, angular, eye large, pupil vertically elliptic; frontal narrow, elongate; nasal single, nostril small; body cylindrical; scales smooth, in 17 longitudinal rows at midbody; ventrals rounded, without keel; tail moderate; subcaudals paired; hypapophyses present throughout vertebral column; hemipenes forked, spinose throughout (Leviton 1983).

Monotypic for two species in the genus *Psammodynastes* Günther, 1858. Found in South-east Asia.

**Comments:** Leviton (1983) noted consistent differences between the two species within the single genus *Psammodynastes* Günther, 1858 as well as strong regional variation within the more widespread species *Psammodynastes pulverulentus*.

Published studies on both species within the genus namely, *Psammodynastes pulverulentus* Boie, 1827 and *Psammodynastes pictus* Günther, 1858 include, Auliya (2006), Beukema (2011), Boie (1827), Boulenger (1894b, 1896a, 1897, 1890, 1905), Brown *et al.* (2000), Bulian (1999), Cantor (1839), Chanard *et al.* (1999), Cox *et al.* (1998), Das *et al.* (2009), Das and Palden (2000), David and Vogel (1996), de Lang and Vogel (2005), Dowling and Jenner (1998), Duméril *et al.* (1854), Ferner *et al.* (2000), Gaulke (2001, 2006, 2011), Geissler (2012), Geissler *et al.* (2011), Grismer *et al.* (2007, 2008, 2010), Günther (1858), Haile (1958), Hein *et al.* (2001), Jackson and Fritts (1996), Kopstein (1938), Lim and Ng (1999), Malkmus *et al.* (2002), Manthey (1983), Manthey and Grossmann (1997), Mertens (1930), Ota (1991), Pauwels *et al.* (2003), Peters (1868), Rasmussen (1975), Rosén (1905), Saint Girons (1972), Sharma (2004), Smedley (1931), Smith (1993), Smith (1943), Steindachner (1867), Stejneger (1907, 1910), Stuart and Emmett (2006), Suyanto (1996), Taylor (1965), Teo and Rajathurai (1997), van Rooijen and van Rooijen (2002), Venning (1910), Wall (1907c, 1908c), Wanger *et al.* (2011), Zhao (1995, 1997), Ziegler (2002), Ziegler *et al.* (2007) and the sources cited therein.

**Content:** *Psammodynastes* Günther, 1858.

#### PSAMMODYNASTIIDAE SUBFAM. NOV.

(Terminal taxon *Psammophis pulverulenta*, Boie, 1827)

Generally known as *Psammodynastes pulverulentus* (Boie, 1827)

**Diagnosis:** As for the preceding family description.

Monotypic for two species within the genus *Psammodynastes* Günther, 1858.

Found in South-east Asia.

**Content:** *Psammodynastes* Günther, 1858.

#### SWILESERPENIIDAE FAM. NOV.

(Terminal taxon *Tropidonotus depressiceps* Werner, 1897)

Currently known as *Swileserpens depressiceps* Werner, 1897

From 1997 to 2012 known as *Buhoma depressiceps* Werner, 1897.

**Diagnosis:** The separation of this family, consisting the two genera of *Swileserpens* Hoser, 2012 and *Buhoma* Ziegler *et al.*, 1997 from all other African colubrid snake genera is possible by combination of (a) the presence of hypapophyses on the posterior vertebrae, (b) grooved posterior maxillary teeth, (c) the sulcus spermaticus is forked. Furthermore this family is distinguishable from the morphologically similar *Geodipsas* (within the family Pseudoxyrhophiidae), by deep bifurcation of the sulcus spermaticus, and by the combination of configuration of (a) sublinguals and (b) temporals as explained below. This is 3-4 infralabials contact the sublinguals in *Swileserpiniidae* versus 5-6 infralabials contact the first sublinguals in Malagasy *Geodipsas* and *Alluaudina* (Pseudoxyrhophiidae).

The configuration of the sublingual scales can be used to separate most African specimens of *Swileserpiniidae* from the morphologically convergent Malagasy taxa. In most there are three regular pairs of longish sublingual scales; behind these the ventral scales immediately begin, although occasionally large scales are irregularly interposed between the two pairs of large sublinguals. In contrast, the Malagasy *Geodipsas* have only two large pairs of sublinguals, and a varying number of small irregular scales are interposed between these and the beginning of the ventrals. A similar situation is also found in the Malagasy genera *Brygophis* and *Alluaudina* (Pseudoxyrhophiidae).

**Comments:** Key references in terms of the two genera within the family, namely *Swileserpens* Hoser, 2012 and *Buhoma* Ziegler *et al.*, 1997, include the following, Andersson (1901), Broadley and Howell (1991), Chifundera (1990), Chirio and Lebreton (2007), Derlyn (1978), Hoser (2012d), Hughes (1983), Loveridge (1922), Menegon *et al.* (2008), Pauwels and Vande weghe (2008), Pauwels *et al.* (2002), Rasmussen (1981), Rasmussen *et al.* (1995), Schmidt (1923), Spawls *et al.* (2001), Sternfeld (1917), Trape (1985), Trape and Roux-Esteve (1995), Tornier (1902), Werner (1897, 1899), Ziegler *et al.* (1997) and sources cited therein.

The family is confined to southern Africa.

Kaiser *et al.* (2013) (p. 20) have stated an intention to breach the Zoological Code (Ride *et al.* 1999) and rename the genus *Swileserpens* Hoser, 2012 and many hundreds of other properly named species and genera.

Their plan breaches the three critical rules of:

1/ Homonymy (Principal 5, Article 52 and elsewhere),  
2/ Priority (Principal 3, Article 23 and elsewhere),  
3/ Stability (Principal 4, Articles 23, 65 and elsewhere),  
as well as the ethics of the Code (Appendix A).

**Content:** *Swileserpens* Hoser, 2012; *Buhoma* Ziegler *et al.*, 1997.

#### SWILESERPENIINAE SUBFAM. NOV.

(Terminal taxon *Tropidonotus depressiceps* Werner, 1897)

Currently known as *Swileserpens depressiceps* Werner, 1897

From 1997 to 2012 known as *Buhoma depressiceps* Werner, 1897.

**Diagnosis:** As for the preceding family description.

The family is confined to southern Africa.



**Content:** *Swileserpens* Hoser, 2012; *Buroma* Ziegler *et al.*, 1997.

**THERMOPHIIDAE FAM. NOV.**

**(Terminal taxon *Tropidonotus baileyi* Wall, 1907)**

**Currently known as *Thermophis baileyi* (Wall, 1907)**

**Diagnosis:** The family is monotypic for the genus *Thermophis* Malnate, 1953.

Hence the diagnosis for the family is the same as for the genus.

This is as follows: Rostral, touches 6 shields, of which the anterior nasals make much the largest sutures, 4 or 5 times the length of the internasals, which are much the shortest. A pair of internasals the suture between them is two thirds to three quarters that between the prefrontal follows; two thirds to three quarters the internaso-prae-frontal suture. A pair of prae-frontals; the suture between them a quarter greater than the prae-fronto-frontal suture; in contact with internasal, postnasal, loreal, praeocular, supraocular, and frontal. Frontal, touches 6 shields, of which the supraoculars make the largest sutures, about one third larger than the parietals.

Supraocular, length is subequal to frontal; breadth three quarters that of the frontal. Nasal is divided, in contact with the first and second supralabials. One loreal, the length exceeds the height. Two praeoculars, the upper larger, not touching the frontal, the lower is above the level of the supralabials. Eye has a round pupil. Three postoculars, Three temporals, the lowest smallest, and touching the 6th and 7th supralabials; the median touching the 7th supralabial. There are 8 supralabials the 4th and 5th touching the eye. Anterior sublinguals, larger than the posterior. Posterior sublinguals are quite separated, in some specimens subdivided into two, in contact with the 5th and 6th infralabials (4th and 5th on right side in some larger specimens). Six infralabials, the 6th largest, and rather broader than the posterior sublinguals. In terms of scale rows on the body they are 19 at 2 heads lengths, behind the head; midbody 19; and 2 heads lengths before vent 17 (19:19:17). All dorsals are keeled except the last row. Double apical facets are very indistinct, but are present. 201-221 ventrals; not angulate. Anal, divided. Subcaudals, 91-111, mainly divided.

Dorsally, the colour is olive green, with five series of indistinct spots dorsally, most pronounced in the fore body, and sometimes fading behind, except the vertebral series which remains quite evident. Last 3 rows with dusky mesial lines and the last row bordered above and below with whitish. There is a dusky postocular streak, and dusky posterior edges to the labials. Belly bluish-grey, each ventral black basally. Younger specimens are darker than adults and the body is very laterally depressed.

The family is confined to China (Tibet = Xizang, Lhasa region), 3000-4000 m elevation or higher, including Litang County, Suchuan, China, elevation 3700 m.

**Comment:** Currently only known from two species within a single genus and a confined geographical region. It is possible that other isolated populations exist and may include one or more other (similar) species. Key references in terms of these snakes include Conant (1999), Dorge *et al.* (2007), Guo and Chen (2000), Guo

*et al.* (2008, 2009), Hofmann (2012), Hofmann *et al.* (2012), Huang *et al.* (2009), Liu and Zhao (2004), Malnate (1953), Sun *et al.* (2011), Wall (1907b), Zhao and Adler (1993) and sources cited therein.

**Content:** *Thermophis* Malnate, 1953.

**THERMOPHIINAE SUBFAM. NOV.**

**(Terminal taxon *Tropidonotus baileyi* Wall, 1907)**

**Currently known as *Thermophis baileyi* (Wall, 1907)**

**Diagnosis:** As for the preceding family description.

The subfamily is confined to China (Tibet = Xizang, Lhasa region), 3000-4000 m elevation or higher, including Litang County, Suchuan, China, elevation 3700 m.

**Content:** *Thermophis* Malnate, 1953.

**REFERENCES CITED**

- Andersson, L. G. 1901. Some new species of snakes from Cameroon and South America, belonging to the collections of the Royal Museum in Stockholm. *Bihang till K. Svenska Vet. Akad. Handlingar* 27(4):1-26.
- Angel, F. 1925. Résultats Scientifiques. Vertébrata. Reptiles et Batraciens. [*Mabuia* (*Mabuiopsis*) *jeanneli*, *Lygosoma graueri quinquedigitata*, *Ablepharus massaiensis*] In: *Voyage de Ch. Alluaud et R. Jeannel en Afrique Orientale (1911-1912)*. - Paris, 2:1-63.
- Amr, Z. S., Ahmad, M., Melhim, A. and Walid, N. 1997. Additions to the knowledge of Muller's snake, *Micrelaps muelleri* Boettger, 1880. (Squamata: Serpentes: Colubridae). *Herpetozoa* 10(3-4):163-168.
- Anderson, J. 1871. On some Indian reptiles. *Proc. Zool. Soc. London* 1871:149-211.
- Auffenberg, W. 1980. The herpetofauna of Komodo, with notes on adjacent areas. *Bulletin of the Florida State Museum Biological Sciences* 25(2):39-156.
- Auliya, M. 2006. *Taxonomy, Life History, and conservation of giant reptiles in west Kalimantan*. Natur und Tier Verlag, Münster:432 pp.
- Avadhani, R. 2005. Snakes of India. *Reptilia* (GB) (41):32-37.
- Baier, F. 2005. Herpetologische Reiseeindrücke aus Sri Lanka. *Elaphe* 13(4):59-64.
- Bar, A. and Haimovitch, G. 2012. *A Field Guide to Reptiles and Amphibians of Israel*. Pazbar Ltd:2012 pp.
- Bauer, A. M., Günther, R. and Klipfel, M. 1995. *The herpetological contributions of Wilhelm C.H. Peters (1815-1883)*. SSAR Facsimile Reprints in Herpetology:714 pp.
- Bergman, R. A. M. 1955. *Dendrophis pictus*. *Proc. Kon. Ned. Akad. Wet. Amsterdam*, C58:206-218.
- Bergman, R. A. M. 1956. The anatomy of *Dryophis prasinus*. *Proc. Kon. Ned. Akad. Wet. Amsterdam*, C 59:263-279.
- Beukema, W. 2011. Herpetofauna of disturbed forest fragments on the lower Mt. Kitanglad Range, Mindanao Island, Philippines. *Salamandra* 47(2):90-98.
- Bischoff, W. and Schmidtler, J. F. 1997. Nach 115 Jahren in Syrien wiedergefunden: *Micrelaps muelleri* Böttger, 1880 (Serpentes: Atractaspididae). *Salamandra* 33(1):25-32.
- Boettger, O. [as O. Böttger] 1880. Die Reptilien und

- Amphibien von Syrien, Palaestina und Cypem. Ber. Senckenb. Naturforsch. Ges., Frankfurt/M., 1879-1880:132-219.
- Boettger, O. 1893. Übersicht der von Prof. C. Keller anlässlich der Ruspolti'schen Expedition nach den Somaliländern gesammelten Reptilien und Batrachier. *Zool. Anz.* 16(416):113-119.
- Bogert, C. M. 1940. Herpetological results of the Vernay Angola Expedition. I. Snakes, including an arrangement of the African Colubridae. *Bulletin of the American Museum of Natural History* 77:1-107.
- Boie, F. 1827. *Bemerkungen über Merrem's Versuch eines Systems der Amphibien, 1. Lieferung: Ophidier.* Isis van Oken 20:508-566.
- Boistel, R., Herrel, A., Lebrun, R., Daghfous, G., Tafforeau, P. and Losos, J. B. 2011. Shake Rattle and Roll: The Bony Labyrinth and Aerial Descent in Squamates. *Integrative and Comparative Biology*, doi:10.1093/icb/icr034
- Bong Heang, K. 1987. An annotated checklist of the herpetofauna of Ulu Endau, Johore, Malaysia *Malayan Nature J.* 41(2-3):413-423.
- Bonnaterre, P. J. 1790. *Ophiologie, in Tableau encyclopédique et méthodique des trois règnes de la nature.* Panconoke, Paris:XLIV + 76 pp + 43 plates.
- Boulenger, G. A. 1886. On the reptiles and batrachians of the Solomon Islands. *Trans. Zool. Soc. London* 12:35-62.
- Boulenger, G. A. 1888. An account of the Reptilia obtained in Burma, north of Tenasserim, by M. L. Fea, of the Genova Civic Museum. *Ann. Mus. Civ. Stor. Nat. Genova*, ser. 2(6):593-604.
- Boulenger, G. A. 1890. The Fauna of British India, Including Ceylon and Burma. Reptilia and Batrachia. Taylor and Francis, London, xviii:541 pp.
- Boulenger, G. A. 1893. Catalogue of the snakes in the British Museum (Nat. Hist.) I. London (Taylor and Francis):448 pp.
- Boulenger, G. A. 1894a. *Catalogue of the Snakes in the British Museum (Natural History). Volume II., Containing the Conclusion of the Colubridae Aglyphae.* British Mus. (Nat. Hist.), London:xi + 382 pp.
- Boulenger, G. A. 1894b. On the herpetological fauna of Palawan and Balabac. *Ann. Mag. Nat. Hist.* (6)14:81-90.
- Boulenger, G. A. 1895a. On a collection of reptiles and batrachians from Ferguson Island, D'Entrecasteaux group British New Guinea. *Ann. Mag. Nat. Hist.* (6)16:28-32.
- Boulenger, G. A. 1895b. Description of two new reptiles obtained by Mr. A. S. Meek in the Trobriand Islands, British New Guinea. *Ann. Mag. nat. Hist.* (6)16:408-409.
- Boulenger, G. A. 1896a. Catalogue of the snakes in the British Museum, Vol. 3. London (Taylor and Francis): xiv + 727 pp.
- Boulenger, G. A. 1896b. A list of the reptiles and batrachians collected by the late Prince Eugenio Ruspolti in Somaliland and Gallaland in 1893. *Annali Mus. civ. Stor. nat. Genova, Giacomo Doria*, (2) 17:5-14 [11].
- Boulenger, G. A. 1897. List of the reptiles and batrachians collected by Mr. Alfred Everett in Lombok, Flores, Sumba and Saru, with descriptions of new species. *Ann. Mag. Nat. Hist.* (6)19:503-509.
- Boulenger, G. A. 1905. Remarks on Mr. N. Rosén's list of the snakes in the Zoological Museums of Lund and Malmö. *Ann. Mag. nat. Hist.* (7)15(87):283-284.
- Bourret, R. 1935. Notes herpetologiques sur l'Indochine française. XI. Sur quelques serpents récoltés en 1934. *Bull. gén. Instr. Publ.* 1934/35 (9. May):289-296.
- Broadley, D. G. 1993. *Micrelaps boettgeri.* *Journal of the Herpetological Association of Africa* 42:42.
- Broadley, D. G. and Howell, K. M. 1991. A check list of the reptiles of Tanzania, with synoptic keys. *Syntarsus* 1:1-70.
- Brongersma, L. D. 1933. Herpetological Notes I-IX. *Zool. Med. Rijksmus. Nat. Hist. Leiden*, 16 (1/2):1-29.
- Brown, R. M., Ferner, J. W., Sison, R. V., Gonzales, P. C., Kennedy, R. S. 1996. Amphibians and reptiles of the Zambales Mountains of Luzon Island, Republic of the Philippines. *Herpetological Natural History* 4(1):1-22.
- Brown, R. M., McGuire, J. A., Ferner, J. W., Icarangal Jr., N. and Kennedy, R. S. 2000. Amphibians and reptiles of Luzon island, II: preliminary report on the herpetofauna of Aurora Memorial national Park, Philippines. *Hamadryad* 25(2):175-195.
- Bulian, J. 1997. A problematic terrarium animal? Remarks on *Chrysopelea ornata ornatissima*. *Litteratura Serpentina* 17(3):52-57.
- Bulian, J. 1999. Über die Schlangenfauna eines Gartens in Südthailand. *Elaphe* 7(4):61-67.
- Cantor, T. E. 1839. Spicilegium serpentium indicorum [part 1]. *Proc. Zool. Soc. London* 1839: 31-34
- Burbrink, F. T., Crother, B. I. and Lawson, R., 2007. The destabilization of North American snake taxonomy. *Herpetological Review* 38:273-278.
- Cadle, J. E. 1984. Molecular systematics of Neotropical xenodontine snakes: III. Overview of xenodontine phylogeny and the history of New World snakes. *Copeia* 1984:641-652.
- Cadle, J. E. 1985. The Neotropical colubrid snake fauna (Serpentes: Colubridae): lineage components and biogeography. *Syst. Zool.* 34:1-20.
- Chanard, T., Grossmann, W., Gumprecht, A. and Schulz, K. D. 1999. *Amphibians and reptiles of peninsular Malaysia and Thailand - an illustrated checklist* [bilingual English and German]. Bushmaster Publications, Würselen, Germany:240 pp.
- Chen, X., Hunag, S., Guo, P., Colli, G. R., De Oca, A. N. M., Vitt, L. J., Pyron, R. A. and Burbrink, F. T. 2013. Understanding the formation of ancient intertropical disjunct distributions using Asian and Neotropical hinged-teeth snakes (*Sibynopsis* and *Scaphiodontophis*:Serpentes:Colubridae). *Molecular Phylogenetics and Evolution* 66 (2013):254-261.
- Chifundera, K. 1990. Snakes of Zaire and their bites. *Afr. Stud. Monogr.* (Kyoto) 10(3):137-157.
- Chirio, L. and Lebreton, M. 2007. *Atlas des reptiles du Cameroun.* MNHN, IRD, Paris:688 pp.
- Cochran, D. M. 1930. The herpetological results made by Dr. Hugh Smith in Siam from 1923 to 1929. *Proc. US Natl. Mus.* 77(11):1-39. [1931]

- Cohn, L. 1905. Schlangen aus Sumatra. *Zool. Anz.* 29:540-548. [1906].
- Collins, J. T. 2006. A re-classification of snakes native to Canada and the United States. *J. Kansas Herpetol.* 19:18-20.
- Conant, R. 1999. Obituaries: Joseph Randle Bailey 1913-1998. *Herpetological Review* 30(2):10-11.
- Cope, E. D. 1893. Prodomus of a new system of the non-venomous snakes. *Am. Nat.* 27:477-483.
- Cox, M. J., Van Dijk, P. P., Nabhitabhata, J. and Thirakhupt, K. 1998. *A Photographic Guide to Snakes and Other Reptiles of Peninsular Malaysia, Singapore and Thailand.* Ralph Curtis Publishing:144 pp.
- Crother, B. I. (Ed.). 2008. Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding, 6th ed. *SSAR Herpetological Circular* 37:1-84.
- Crother, B. I. 1999. Phylogenetic relationships among West Indian xenodontine snakes (Serpentes: Colubridae) with comments on the phylogeny of some mainland xenodontines. *Contemp. Herpetol.* 2:1-4.
- Crother, B. I. (Ed.). 2012. Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding, 7th ed. *SSAR Herpetological Circular* 39:1-101.
- Das, A., Uttam Saikia, B. H., Murthy, C. K., Dey, S. and Dutta, S. K. 2009. A herpetofaunal inventory of Barail Wildlife Sanctuary and adjacent regions, Assam, north-eastern India. *Hamadryad* 34(1):117-134.
- Das, I. 1999. Biogeography of the amphibians and reptiles of the Andaman and Nicobar Islands, India. In: Ota, H. (ed) *Tropical Island herpetofauna...*, Elsevier:43-77.
- Das, I. and Palden, J. 2000. A herpetological collection from Bhutan, with new country records. *Herpetological Review* 31(4):256-258.
- Das, I. and De Silva, A. 2005. *Photographic guide to snakes and other reptiles of Sri Lanka.* New Holland Publishers:144 pp.
- Daudin, F. M. 1803. *Histoire Naturelle Generale et Particuliere des Reptiles.* Vol. 6. F. Dufart, Paris.
- David, P. and Dubois, A. 2005. Découverte et redescription de l'holotype d'*Ahaetulla pulverulenta* (Duméril, Bibron and Duméril, 1854) (Reptilia, Serpentes, Colubridae), avec une remarque sur le statut de *Dryinus fuscus* Duméril, Bibron & Duméril, 1854. *Zoosystema* 27(1):163-178.
- David, P. and Vogel, G. 1996. *The snakes of Sumatra. An annotated checklist and key with natural history notes.* Bücher Kreth, Frankfurt/M.:260 pp.
- de Lang, R. and Vogel, G. 2005. *The snakes of Sulawesi. A field guide to the land snakes of Sulawesi with identification keys.* Frankfurter Beiträge zur Naturkunde, 25, Edition Chimaira, Frankfurt am Main:312 pp.
- De Queiroz, K. 2006. PhyloCode and the distinction between taxonomy and nomenclature. *Syst. Biol.* 55:160-162.
- Derlyn, P. P. 1978. Notes sur les serpents du Burundi (2me partie). Les genres *Geodipsas* et *Thelotornis*. *Revue de zoologie Africaine* 92(1):208-218.
- de Rooij, N. 1917. *The Reptiles of the Indo-Australian Archipelago. II. Ophidia.* Leiden (E. J. Brill), xiv + 334 S.
- Deuve, J. 1970. *Serpents du Laos.* Office de la Recherche Scientifique et Technique Outre-Mer, Paris, Mem. no. 39:251 pp.
- Devan-Song, A. and Brown, R. M. 2012. Amphibians and Reptiles of Luzon Island, Philippines, VI: The Herpetofauna of the Subic Bay Area. *Asian Herpetological Research* 3(1):1-20.
- de Witte, G. F. and Laurent, R. F. 1947. Revision d'un groupe de Colubridae africains: genres *Calamelaps*, *Miodon*, *Aparallactus*, et formes affines. *Mém. Mus. Roy. Hist. Nat. Belgique* (sér. 2)29:1-134.
- Disi, A. M. 1985. A contribution to the herpetofauna of Jordan. 2. New records and a systematic list of snakes from Jordan. *The Snake* 17(1):31-42.
- Disi, A. M., Modry, D., Necas, P. and Rifai, L. 2001. Amphibians and reptiles of the Hashemite Kingdom of Jordan. Edition Chimaira, Frankfurt:408 pp.
- Dorge, T., Hofmann, S., Wangdwei, M., et al. 2007. The ecological specialist, *Thermophis baileyi* (Wall, 1907):new records, distribution and biogeographic conclusions. *Herpetological Bulletin* 101:8-12.
- Doria, G. 1874. Enumerazione dei rettili raccolti dal Dott. O. Beccari in Amboina alle Isole Aru ed alle Isole Kei durante gli anni 1872-73. *Ann. Mus. Civ. Stor. Nat. Giacomo Doria* 6:325-357.
- Dowling, H. G. 1978. Suborder Serpentes. In Dowling, H. G. and Duellman, W. E. (eds.), *Systematic Herpetology: A Synopsis of Families and Higher Categories*, HISS Publ., New York: pages 100.1-114.3.
- Dowling, H. G. and Deullmann, W. E. 1978. *Systematic Herpetology: A Synopsis of Families and Higher Categories.* HISS Publ., New York.
- Dowling, H. G. and Jenner, J. V. 1988. Snakes of Burma: checklist of reported species and bibliography. *Smithsonian Herp. Inf. Serv.* (76):19 pp.
- Duméril, A. M. C. 1853. Prodomus de la classification des reptiles ophiidiens. *Mém. Acad. Sci., Paris*, 23:399-536.
- Duméril, A. M. C., Bibron, G. and Duméril, A. H. A., 1854. *Erpétologie générale ou histoire naturelle complète des reptiles. Tome septième. Deuxième partie, comprenant l'histoire des serpents venimeux.* Paris, Librairie Encyclopédique de Roret:i-xii+781-1536.
- Ferner, J. W., Brown, R., Sison, R. V. and Kennedy, R. S. 2000. The amphibians and reptiles of Panay Island, Philippines. *Asiatic Herpetological Research* 9:1-37.
- Fischer, J. G. 1880. Neue Reptilien und Amphibien. *Archiv für Naturgeschichte* 46(1):215-227.
- Fischer, J. G. 1885a. Über eine Kollektion von Amphibien und Reptilien aus Südost Borneo. *Archiv für Naturgeschichte* 51:41-72.
- Fischer, J. G. 1885b. Ichthyologische und herpetologische Bemerkungen. *V. Herpetologische Bemerkungen. Jahrb. Hamburg. Wiss. Anst.* 2:82-121.
- Flower, S. S. 1897. Notes on a collection of reptiles and batrachians made in the Malay Peninsula in 1895-96;

- with a list of the species recorded in that region. *Proc. Zool. Soc. London* 1896:856-914.
- Flower, S. S. 1899. Notes on a second collection of reptiles made in the Malay Peninsula and Siam, from November 1896 to September 1898, with a list of the species recorded from those countries. *Proc. zool. Soc. London* 1899:600-697.
- Frith, C. B. 1977. A survey of the snakes of Phuket island and adjacent mainland areas of peninsular Thailand. *Nat. Hist. Bull. Siam Soc.* (Bangkok) 26:263-316.
- Gadow, H. 1909. *Amphibia and Reptilia*. MacMillan, London:668 pp.
- Garman, S. 1901. Some reptiles and batrachians from Australasia. *Bull. Mus. Comp. Zool.* Harvard 39:1-14.
- Gaulke, M. 1986. Zum Beutefangverhalten der Schmuckbaumschlange *Chrysopelea paradisi* Boie 1827. *Salamandra* 22(2/3):211-212.
- Gaulke, M. 1994. Contribution to the snake fauna of the Sulu Archipelago, with the description of a new subspecies of *Dendrelaphis caudolineatus* (Gray, 1834). *Herpetological Journal* 4(4):136-144.
- Gaulke, M. 2001. Die Herpetofauna von Sibaliw (Panay), einem der letzten Tieflandregenwaldgebiete der West-Visayas, Philippinen. Teil II: Schlangen. *Herpetofauna* 23(131):23-34.
- Gaulke, M. 2006. *Psammodynastes pulverulentus*, gewöhnliche Falschviper. *Reptilia* (Münster) 11(59):51-54,
- Gaulke, M. 2011. *The herpetofauna of Panay Island, Philippines*. Edition Chimaira:390 pp.
- Gaulke, M. 2012. Der Philippinische Smaragdschink (*Lamprolepis smaragdina philippinica*):Taxonomie, Biologie, Haltung und Nachzucht. *Terraria Elaphe* 2013(1):76-89.
- Gaulke, M. and Operiano, G. 2006. *Oxyrhabdium leporinum visayanum* - Gebänderte Philippinische Wühschlange. *Sauria* 28(3):51-52.
- Geissler, P. 2012. Neues aus Indochina - die Amphibien und Reptilien des Cat-Tien-Nationalparks in Südvietnam. *Terraria Elaphe* 2012(5):72-77.
- Geissler, P., Nguyen, T. Q., Poyarkov, N. A. and Böhme, W. 2011. New records of snakes from Cat Tien National Park, Dong Nai and Lam Dong provinces, southern Vietnam. *Bonn Zoological Bulletin* 60(1):9-16.
- Golder, F. 1989. *Ahaetulla nasuta* (Lacépède, 1789), Haltung und Nachzucht. *Salamandra* 25(2):65-72.
- Gray, J. E. 1825. A synopsis of the genera of reptiles and Amphibia, with a description of some new species. *Annals of Philosophy*, 10:193-217.
- Gray, J. E. 1826. Reptilia. Appendix in: King, P. P. *Narrative of a survey of the Intertropical and Western Coasts of Australia performed between the years 1818 and 1822*. London: John Murray 2:424-434.
- Gray, J. E. 1835. *Illustrations of Indian Zoology, chiefly selected from the collection of Major - General Hardwicke*. Vol. 2. London (1833-1834):263 pp., 95 plates.
- Gray, J. E. 1841. A catalogue of the species of reptiles and Amphibia hitherto described as inhabiting Australia, with a description of some new species from Western Australia. Appendix E, pp. 422-449. In: G. Grey, *Journals of Two Expeditions of Discovery in Northwest Australia*. T. and W. Boone, London. Vol. 2.
- Gray, J. E. 1842. Description of some hitherto unrecorded species of Australian reptiles and batrachians. *Zoological Miscellany* (London: Treuttel, Würtz and Co):51-57.
- Greene, H. W. 1997. Snakes: the evolution of mystery in nature. *Berkeley: University of California Press*:XIV + 351 pp.
- Grismer, L. L., McGuire, J. A., Sosa, R. and Kaiser, H. 2002. Revised checklist and comments on the terrestrial herpetofauna of Pulau Tioman, Peninsular Malaysia. *Herpetological Review* 33(1):26-29.
- Grismer, L. L. et al. 2007. The herpetofauna of the Phnom Aural Wildlife Sanctuary and checklist of the herpetofauna of the Cardamom Mountains, Cambodia. *Hamadryad* 31(2):216-241.
- Grismer, L. L., Neang, T., Chav, T., Wood, Jr., P. L., Oaks, J. R., Holden, J. and Gr, J. L. 2008. Additional amphibians and reptiles from the Phnom Samkos Wildlife Sanctuary in Northwestern Cardamom Mountains, Cambodia, with comments on their taxonomy and the discovery of three new species. *The Raffles Bulletin of Zoology* 56(1):161-175.
- Grismer, L. L., Onn, C. K., Grismer, J. L., Wood, Jr., P. L. and Norhayati, A. 2010. A checklist of the herpetofauna of the Banjaran Bintang, Bintang, Peninsula Malaysia. *Russian Journal of Herpetology* 17(2):147-160.
- Grossmann, H. P. and Schäfer, C. 2001. Beitrag zur Kenntnis der landbewohnenden Reptilienfauna von Pulau Tioman, West-Malaysia. *Sauria* 23(4):11-28.
- Grossmann, W. and Tillack, F. 2004. Pulau Tioman: Perle im Südchinesischen Meer, Teil 1. *Reptilia* (Münster) 9(50):42-49.
- Grossmann, W. and Tillack, F. 2001a. Bemerkungen zur Herpetofauna des Khao Lak, Phang Nga, thailändische Halbinsel. Teil II: Reptilia: Serpentes; Testudines; Diskussion. *Sauria* 23(1):25-40.
- Grossmann, W. and Tillack, F. 2001b. Bemerkungen zur Herpetofauna des Khao Lak, Phang Nga, thailändische Halbinsel. Teil III: Ergebnisse der Jahre 1999 und 2000. *Sauria* 23(3):21-34.
- Günther, A. 1858. *Catalogue of Colubrine snakes of the British Museum*. London, I - XVI:281 pp.
- Günther, A. 1859. On the geographical distribution of reptiles. *Ann. Mag. Nat. Hist.* (3)3:221-237.
- Günther, A. 1864. *The Reptiles of British India*. London (Taylor and Francis):xxvii + 452 pp.
- Günther, A. 1867. Additions to the knowledge of Australian reptiles and fishes. *Ann. Mag. nat. Hist.* (3)20:45-57.
- Günther, A. 1872. Seventh account of new species of snakes in the collection of the British Museum. *Ann. Mag. Nat. Hist.* (4)9:13-37.
- Günther, A. 1873. Notes on some reptiles and batrachians obtained by Dr. Bernhard Meyer in Celebes and the Philippine Islands. *Proc. Zool. Soc. London* 1873:165-172.
- Guo, P. and Chen, Y. Y. 2000. The rare and endemic snakes in China: *Thermophis baileyi*. *Sichuan Journal of*

- Zoology, Chengdu* 19(2):79-80.
- Guo, P., Liu, S. Y., Feng, J. C. and He, M. 2008. The Description of A New Species of *Thermophis* (Serpentes Colubridae). *Sichuan Journal of Zoology* 27(3):321.
- Guo, P., Liu, S. Y., Huang, S. He, M., Sun, Z. Y., Feng, J. C. and Zhao, E. M. 2009. Morphological variation in *Thermophis Malnate* (Serpentes: Colubridae), with an expanded description of *T. zhaoermii*. *Zootaxa* 1973:51-60.
- Haile, N. S. 1958. The snakes of Borneo, with a key to the species. *Sarawak Mus., Kuching, J.* 8:743-771.
- Hallermann, J. 2007. Zur Geschichte der herpetologischen Sammlung des Zoologischen Museums Hamburgs, mit besonderer Berücksichtigung von Dr. Johann Gustav Fischer (1819 - 1889). *Sekretär* 7(1):20-32.
- Hien, P., Grossmann, W. and Schäfer, C. 2001. Beitrag zur Kenntnis der landbewohnenden Reptilienfauna von Pulau Tioman, West-Malaysia. *Sauria* 23(4):11-28.
- Hofmann, S. 2012. Population genetic structure and geographic differentiation in the hot spring snake *Thermophis baileyi* (Serpentes, Colubridae): Indications for glacial refuges in southern-central Tibet. *Molecular Phylogenetics and Evolution* 63(2):396-406.
- Hofmann, S., Fritzsche, P., Solhøy, T., Dorge, T. and Mieke, G. 2012. Evidence of Sex-biased Dispersal in *Thermophis baileyi* inferred from Microsatellite Markers. *Herpetologica* 68(4):514-522.
- Hoser, R. T. 2012a. A reassessment of the higher taxonomy of the Elapidae. *Australasian Journal of Herpetology* 10:49-63.
- Hoser, R. T. 2012b. A new genus and new subgenus of snakes from the South African region (Serpentes: Colubridae). *Australasian Journal of Herpetology* 12:23-25.
- Hoser, R. T. 2012c. Divisions of the Asian Colubrid snake genera *Xenochrophis*, *Dendrelaphis* and *Boiga* (Serpentes: Colubridae). *Australasian Journal of Herpetology* 12:65-76.
- Hoser, R. T. 2012d. A review of Kukri Snakes, currently referred to the genus *Oligodon* Fitzinger, 1826, with a division into twelve genera, four further subgenera and the creation of a tribe to accommodate them (Serpentes:Colubridae). *Australasian Journal of Herpetology* 13:15-34.
- Hoser, R. T. 2013. Further division of the genera *Boiga* Fitzinger, 1826 and *Chrysopelea* Boie, 1826, with the creation of a new tribe, a new genus and a new subgenus. *Australasian Journal of Herpetology*:16.
- How, R. A. and Kitchner, D. J. 1997. Biogeography of Indonesian snakes. *Journal of Biogeography* 24:725-735.
- How, R. A., Schmitt, L. and Maharadatunkamsi, H. 1996. Geographical variation in the genus *Dendrelaphis* (Serpentes: Colubridae) within the islands of south-eastern Indonesia. *Journal of Zoology* (London) 238(2):351-363.
- Hraoui-Bloquet, S., Sadek, R. A., Sindaco, R. and Venchi, A. 2002. The herpetofauna of Lebanon: new data on distribution. *Zoology in the Middle East* 27:35-46.
- Huang, S., Liu, S. Y., Guo, P., Zhang, Y. P. and Zhao, E. M., 2009. What are the closest relatives of the hot-spring snakes (Colubridae: *Thermophis*), the relict species endemic to the Tibetan Plateau? *Mol. Phylogenet. Evol.* 51:438-446.
- Hughes, B. 1983. African snake faunas. *Bonn. Zool. Beitr.* 34:311-356.
- ICZN 1987. Opinion 1463. De Lacepede 1788-1789, Histoire Naturelle des Serpens and later editions: rejected as a non-binominal work. *Bulletin of Zoological Nomenclature* 44(4):265-267.
- ICZN 2005. Opinion 2104 (Case 3226). Lacepede, B. G. É. de la V., 1788, Histoire Naturelle des Quadrupèdes Ovipares: rejected as a non-binominal work. *Bulletin of Zoological Nomenclature* 62(1).
- Ingle, M. 2010. First locality record of *Chrysopelea ornata* Shaw, 1802 from Kheonae Wildlife Sanctuary, Dewas, Madhya Pradesh. *Reptile Rap* (10):5-6.
- Iskandar, D. T. and Colijn, E. 2002. *A checklist of Southeast Asian and New Guinean Reptiles. Part I: Serpentes*. Biodiversity Conservation Project, Jakarta:195 pp. [2001].
- Iskandar, D. T. and Erdelen, W. R. 2006. Conservation of amphibians and reptiles in Indonesia: issues and problems. *Amphibian and Reptile Conservation* 4(1):60-87.
- Jackson, K. and Fritts, T. H. 1996. Observations of a grooved anterior fang in *Psammodynastes pulverulentus*: Does the Mock Viper resemble a protoelapid? *Journal of Herpetology* 30(1):128-131.
- Jan, G. 1863. *Elenco sistematico degli ofidi desritti e disegnatati per l'Iconografia general.* A. Lombardi, Milan.
- Janzen, P., Klaas, P. and Ziesmann, S. 2007. Sri Lankas Schlangenfauna. *Draco* 7(30):56-64.
- Kaiser, H., Crother, B. I., Kelly, C. M. R., Luiselli, L., O'Shea, M., Ota, H., Passos, P., Schleip, W. and Wüster, W. 2013. Best Practices: In the 21st Century, Taxonomic Decisions in Herpetology are Acceptable Only When Supported by a Body of Evidence and Published via Peer-Review. *Herpetological Review* 44(1):8-23.
- Kannan, P. 2006. Record of ornate flying snake *Chrysopelea ornata* (Shaw) in Mudumalai Wildlife sanctuary, Southern India. *Cobra* 63:13.
- Karunaratna, D. M. S. S. and Amarasinghe, A. A. T. 2009. Erstnachweis von Blutegeln (Hirudinea) im Beutespektrum der Langnasen-Peitschennatter, *Ahaetulla nasuta* (Reptilia, Colubridae). *Sauria* 31(4):53-54.
- Karunaratna Suranjan, D. M. S. and Thasun Amarasinghe, A. A. 2011. A Preliminary survey of the reptile fauna in Nilgala Forest and its vicinity, Monaragala District, Sri Lanka. *Taprobanica* 3(2):69-76.
- Keller, R. A., Boyd, R. N. and Wheeler, Q. D. 2003. The illogical basis of phylogenetic nomenclature. *Botan. Rev.* 69:93-110.
- Kelly, C. M. R., Barker, N. P. and Villet, M. H. 2003. Phylogenetics of advanced snakes (Caenophidia) based on four mitochondrial genes. *Syst. Biol.* 52:439-459.
- Kelly, C. M. R., Barker, N. P., Villet, M. H. and Broadley, D. G. 2009. Phylogeny, biogeography and classification of the snake superfamily Elapoidea: a rapid radiation in

the late Eocene. *Cladistics* 25:38-63.

Keogh, J. S. 1998. Molecular phylogeny of elapid snakes and a consideration of their biogeographic history. *Biol. J. Linn. Soc.* 63:177-203.

Khaire, A. and Khaire, N. 1993. Occurrence of brown whip snake *Ahaetulla pulverulenta* (Dum. and Bibr.) in Pune, India. *The Snake* 25:147-148.

Koch, A. 2011. The Amphibians and Reptiles of Sulawesi: Underestimated Diversity in a Dynamic Environment. pp. 383-404 in: Zachos, F. E and Habel, J. C. (eds.), *Biodiversity Hotspots*. Springer, Berlin.

Kopstein, P. F. 1926. Reptilien von den Molukken und den benachbarten Inseln. *Zool. Med.* 1:71-112.

Kuhl, H. 1820. *Beiträge zur Zoologie und vergleichenden Anatomie*. Hermannsche Buchhandlung, Frankfurt:152 pp.

Kopstein, F. 1938. Ein Beitrag zur Eierkunde und zur Fortpflanzung der Malaiischen Reptilien. *Bull. Raffl. Mus.* (14):81-167.

Lacépède, B. G. E. 1789. *Histoire Naturelle des Quadrupèdes Ovipares et de Serpens. Vol.2*. Imprimerie du Roi, Hôtel de Thou, Paris:671 pp.

Lanza, B. 1983. A list of the Somali amphibians and reptiles. *Monitore Zoologico Italiano, new Ser., Suppl.* 18(8):193-247.

Lanza, B. 1990. Amphibians and reptiles of the Somali Democratic Republic: check list and biogeography. *Biogeographia*, 14:407-465 [1988].

Largen, M. J. and Rasmussen, J. B. 1993. Catalogue of the snakes of Ethiopia (Reptilia Serpentes), including identification keys. *Tropical Zoology* 6:313-434.

Laurenti, J. N. 1768. *Specimen medicum, exhibens synopsis reptilium*. Joan. Thom, Vienna.

Lawson, R. J. B., Slowinski, J. B., Crother, B. I. and Burbrink, F. T. 2005. Phylogeny of the Colubroidea (Serpentes): new evidence from mitochondrial and nuclear genes. *Mol. Phylog. Evol.* 37:581-601.

Lazell, J. D. 2002. The herpetofauna of Shek Kwu Chau, South Chinese Sea, with descriptions of two new colubrid snakes. *Mem. Hong Kong Nat. Hist. Soc.* 25:82 pp.

Lazell, J. and Lu, W. 1990. Four remarkable reptiles from South China Sea islands, Hong Kong Territory. *Asiatic Herpetological Research* 3:64-66.

Leviton, A. E. 1964a. Contributions to a review of Philippine snakes. IV. The genera *Chrysopelea* and *Dryophis*. *Philippine J. Sci.* 93:131-145.

Leviton, A. E. 1964b. Contributions to a review of Philippine snakes. VI. The snakes of the genus *Oxyrhabdion*. *Philippine J. Sci.* 93:407-422.

Leviton, A. E. 1968. Contributions to a review of Philippine snakes, X. The snakes of the genus *Ahaetulla*. *Philippine J. Sci.* 96(1):73-90.

Leviton, A. E. 1970. Contributions to a review of Philippine snakes, XII. The Philippine snakes of the genus *Dendrelaphis* (Serpentes: Colubridae). *Philippine J. Sci.* 97(4):371-396.

Leviton, A. E. 1983. Contributions to a review of Philippine snakes, XIV. The snakes of the genera *Xenopeltis*, *Zaocys*, *Psammodynastes* and *Myersophis*. *Philippine Journal of Science* 112:195-223.

Lidth De Jeude, T. W. V. 1911. Reptilien (Schlangen). *Nova Guinea. Résultats de l'expédition scientifique néerlandaise à la Nouvelle Guinée en 1907 sous les auspices de Dr. H.A. Lorenz* 9. Leiden (E. J. Brill):265-287.

Liem, K. F., Marx, H. and Rabb, G. 1971. The viperid snake *Azemiops*: its comparative cephalic anatomy and phylogenetic position in relation to Viperinae and Crotalinae. *Field. Zool.* 59:64-126.

Lim, K. K. P. and Cheong, L. F. 2011. *Dendrelaphis haasi* (reptilian:Squamata:Colubridae), a new snake record for Singapore. *Nature in Singapore* 4:9-2.

Lim, K. K. P. and Lim, F. L. K. 1992. A guide to the Amphibians and Reptiles of Singapore. Singapore Science Centre:160 pp.

Lim, K. K. P. and Ng, H. H. 1999. The terrestrial herpetofauna of Pulau Tioman, Peninsular Malaysia. *Raffles Bull. Zool.*, Suppl. No. 6:131-155.

Link, H. F. 1807. Beschreibung der Naturalien-Sammlung der Universität zu Rostock, zweite Abtheilung. *Adlers Erben*, Rostock:51-100

Linnaeus, C. 1758. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Tomus I. Editio decima, reformata. Laurentii Salvii, Holmiae*. 10th Edition:824 pp.

Liu, S. Y. and Zhao, E. M. 2004. Discovery of *Thermophis baileyi* (Wall, 1907), a snake endemic to Xizang AR, from Litang County, Sichuan, China. *Sichuan J. Zoology*, 23(3):234-235.

Loveridge, A. 1922. New reptiles from Tanganyika Territory. *Proc. Zool. Soc. London* 1922:313-315.

Loveridge, A. 1948. New Guinean reptiles and amphibians in the Museum of Comparative Zoology and United States National Museum. *Bull. Mus. Comp. Zool. Harvard* 101(2):305-430.

Loveridge, A. 1948. New Guinean reptiles and amphibians in the Museum of Comparative Zoology and United States National Museum. *Bull. Mus. Comp. Zool. Harvard* 101(2):305-430.

Loveridge, A. 1956. On snakes collected in the Anglo-Egyptian Sudan by J.S. Owen, Esq. *Sudan Notes Rec.* 36:37-56 [1955].

Macleay, W. 1875. Notes on a new species of *Dendrophis* from Cleveland Bay. *Proceedings of the Linnean Society of NSW* 1:15-16. [1877 on title page].

Macleay, W. 1877. The ophidians of the Chevert Expedition. *Proceedings of the Linnean Society of NSW* 2:33-41.

Macleay, W. 1878. Notes on a collection of snakes from Port Darwin. *Proceedings of the Linnean Society of NSW* 2:219-222.

Macleay, W. 1884. Notes on some reptiles from the Herbert River, Queensland. *Proceedings of the Linnean Society of NSW* 8:432-436.

Mahony, S., Hasan, K., Kabir, M., Ahmed, M. and Hossain, K. 2009. A catalogue of amphibians and reptiles in the collection of Jahangirnagar University, Dhaka, Bangladesh. *Hamadryad* 34(1):80- 94.

Malkmus, R. 1985. Amphibien und Reptilien vom Mount

- Kinabalu (4101 m), Nordborneo. *Herpetofauna* (Germany):7(35):6-13.
- Malkmus, R., Manthey, U., Vogel, G., Hoffmann, P. and Kosuch, J. 2002. *Amphibians and reptiles of Mount Kinabalu (North Borneo)*. A.R.G. Ganther Verlag, Rugell:404 pp.
- Malnate, E. V. 1953. The taxonomic status of the Tibetan colubrid snake *Natrix baileyi*. *Copeia* 1953 (2):92-96.
- Manthey, U. and Grossmann, W. 1997. *Amphibien und Reptilien Südostasiens*. Natur und Tier Verlag (Münster): 512 pp.
- McCoy, M. 2006. *Reptiles of the Solomon Islands*. Pensoft Series, Faunistica 57:212 pp.
- McDowell, S. B. 1984. Results of the Archbold Expeditions. No. 112. The snakes of the Huon Peninsula, Papua New Guinea. *American Museum Novitates* 2775:1-28.
- McKay, J. L. 2006. *A Field Guide to the Amphibians and Reptiles of Bali*. Krieger Publishing, vii + 146 pp.
- Meirte, D. 1992. Clés de détermination des serpents d'Afrique. Museum Royal d'Adrique Centrale, Tervuren Belgique *Annual Series Octavo Science Zoologique* 267:1-152.
- Meise, W. and Hennig, W. 1932. Die Schlangengattung *Dendrophis*. *Zool. Anz.* 99(11/12):273-297.
- Menegon, M., Doggart, N. and Owen, N. 2008. The Nguru mountains of Tanzania, an outstanding hotspot of herpetofaunal diversity. *Acta Herpetologica* 3(2):107-127.
- Mertens, R. 1926. Über die Rassen einiger indo-australischer Reptilien. *Senckenberg. Biol.* 8:272-279.
- Mertens, R. 1927. Neue Amphibien und Reptilien aus dem Indo-Australischen Archipel, gesammelt während der Sunda-Expedition Rensch. *Senckenbergiana* 9:234-242.
- Mertens, R. 1930. Die Amphibien und Reptilien der Inseln Bali, Lombok, Sumbawa und Flores. *Senck. Naturf. Gesell., Frankfurt am Main, Abhandl.* 42(3):117-344.
- Midtgaard, R. 2011. Erster fotografischer Nachweis mit Fundortdaten der seltenen Schlange *Ahaetulla mycterizans* (Linnaeus, 1758) aus Singapur. *Sauria* 33(3):59-60.
- Miralles, A. and David, P. 2010. First record of *Ahaetulla mycterizans* (Linnaeus, 1758) from Sumatra, Indonesia (Squamata, Colubridae), with an expanded definition of this poorly known species. *Zoosystema* 32(3):449-456.
- Mocquard, F. 1888. Sur une collection de reptiles et de batraciens rapportés des pays comalis et de Zanzibar par M. G. Révoil. Mémoires Publiés par la Société Philomathique a l'occasion du Centenaire de sa fondation 1788-1888, Paris:109-134.
- Murthy, T. S. N. 2010. *The reptile fauna of India*. B.R. Publishing, New Delhi:332 pp.
- Nabhitabhata, J., Chan-ard, T. and Chuaynkern, T. 2000. *Checklist of Amphibians and Reptiles in Thailand*. Office of Environmental Policy and Planning, Bangkok:152pp.
- Neumann-Denzau, G. and Neumann-Denzau, H. 2010. The Brown vine snake *Ahaetulla pulverulenta* (Duméril, Bibron & Duméril, 1854) in the Sundarbans, Bangladesh - first record from the eastern part of the Indian subcontinent. *Herpetology Notes* 3:271-272.
- Nixon, K. C., Carpenter, J. M. and Stevenson, D. W. 2003. The PhyloCode is fatally flawed, and the "Linnaean" system can easily be fixed. *Botan. Rev.* 69:111-120.
- Obst, F. J. 1977. Die herpetologische Sammlung des Staatlichen Museums für Tierkunde Dresden und ihre Typusexemplare. *Zool. Abh. Mus. Tierk. Dresden* 34:171-186.
- Ota, H. 1991. Taxonomic Status of *Mabuya multicarinata* (Gray, 1845) (Scincidae: Squamata: Reptilia) from Taiwan, with Comments on the Herpetofauna of Lanyu Island. *Bull. Coll. Sci., Univ. Ryukyus*, (51):11-18.
- Parker, H. W. 1949. The snakes of Somaliland and the Sokotra Islands. *Zoologische Verhandelingen, Leiden* 6:1-115.
- Pauwels, O. S. G. and Vande weghe, J. P. 2008. *Les reptiles du Gabon*. Smithsonian Institution, Washington:272 pp.
- Pauwels, O. S. G. et al. 2000. Herpetological investigations in Phang-Nga Province, southern Peninsular Thailand, with a list of reptile species and notes on their biology. *Dumerilia* 4(2):123-154.
- Pauwels, O. S. G., Kamdem Toham, A. and Chimsunchart, C. 2002. Recherches sur l'herpétofaune du Massif du Chaillu, Gabon. *Bull. Inst. Roy. Sci. Nat. Belgique (Biologie)* 72:47-57.
- Pauwels, O. S. G., David, P., Chimsunchart, C. and Thirakhupt, K. 2003. Reptiles of Phetchaburi Province, Western Thailand: a list of species, with natural history notes, and a discussion on the biogeography at the Isthmus of Kra. *Natural History Journal of Chulalongkorn University* 3(1):23-53.
- Peters, W. C. H. 1868. Über eine neue Nagergattung, *Chiropodomys penicillatus*, sowie über einige neue oder weniger bekannte Amphibien und Fische. *M. Ber. k. preuss. Akad. Wiss. Berlin*, 1868:448-461.
- Peters, W. C. H. 1872. Über drei neue Schlangenarten (*Calamaria bitorques*, *Stenognathus brevirostris* und *Hemibungarus gemianulis*) von den Philippinen. *Monatsber. königl. Akad. Wiss. Berlin*. 1872 (Juli):585-587.
- Pinou, T., Vicario, S., Marscher, M. and Caccone, A. 2004. Relict snakes of North America and their relationships to the Caenophidia using Bayesian methods on mitochondrial sequences. *Mol. Phylogenet. Evol.* 32:563-574.
- Purkayastha, J., Das, M. and Sengupta, S. 2011. Urban herpetofauna: a case study in Guwahati City of Assam, India. *Herpetology Notes* 4:195-202.
- Pyron, R. A. and Burbrink, F. T. 2009. Neogene diversification and taxonomic stability in the snake tribe Lamproleptini (Serpentes: Colubridae). *Molecular Phylogenetics and Evolution* 52, 524-529.
- Pyron, R. A. and Burbrink, F. T., 2012. Extinction, ecological opportunity, and the origins of global snake diversity. *Evolution* 66:163-178.
- Pyron, R. A., Burbrink, F. T., Colli, G. R., de Oca, A. N., Vitt, L. J., Kuczynski, C. A. and Weins, J. J. 2011. The phylogeny of advanced snakes (Colubroidea), with

- discovery of a new subfamily and comparison of support methods for likelihood trees. *Molecular Phylogenetics and Evolution* 58:329-342.
- Pyron, R. A., et al. 2013. Genus-level phylogeny of snakes reveals the origins of species richness in Sri Lanka. *Molecular Phylogenetics and Evolution* 66:969-978.
- Quah, E. S. H., Shahrulanuar, M. S., Grismer, L. L., Muin, M. A., Chan, K. O. and Grismer, J. 2011. Preliminary Checklist of the Herpetofauna of Jerejak Island, Penang, Malaysia. *Malayan Nature Journal* 63(3):595-600.
- Rannala, B., Huelsenbeck, J. P., Yang, Z. and Nielsen, R. 1998. Taxon sampling and the accuracy of large phylogenies. *Syst. Biol.* 47:702-710.
- Rasmussen, J. B. 1975. Geographical variation, including an evolutionary trend, in *Psammodynastes pulverulentus* (Boie, 1827) (Boiginae, Homalopsidae, Serpentes). *Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening* 138:39-64.
- Rasmussen, J. B. 1981. The snakes from the rainforest of the Usambara Mountains, Tanzania: a checklist and key. *Salamandra* 17(3/4):173-188.
- Rasmussen, J. B. 2002. A review of the African members of the genus *Micrelaps* Boettger 1880 (Serpentes Atractaspididae). *Tropical Zoology* 15:71-87.
- Rasmussen, J. B. 2003. Geographic distribution. *Micrelaps vaillanti* (Mocquard 1888) Desert Black-headed Snake. *African Herp News* (36):12-13.
- Rasmussen, J. B., Howell, K. M. and Andersen, M. 1995. A review of the Usambara forest snake *Geodipsas vauerocegae* and the Uluguru forest snake *G. procterae*. *Amphibia-Reptilia*, Leiden, 16(2):123-136.
- Ride, W. D. L. (ed.) et al. (on behalf of the International Commission on Zoological Nomenclature) 1999. *International code of Zoological Nomenclature*. The Natural History Museum - Cromwell Road, London SW7 5BD, UK (also commonly cited as "ICZN 1999").
- Romer, A. S. 1956. *Osteology of the Reptiles*. University of Chicago Press, Chicago, USA.
- Rosén, N. 1905. List of the snakes in the Zoological Museum of Lund and Malmö, with descriptions of new species and a new genus. *Ann. Mag. nat. Hist.* (7)15:168-181.
- Saint Girons, H. 1972. Notes sur l'Ecologie des Serpents du Cambodge. *Zoologische Mededelingen* 47:65-87.
- Sajdak, R. A. 2010. *Hunters in the trees: A Natural History of Arboreal Snakes*. Krieger, Malabar, Florida:192 pp.
- Sang, N. V., Cuc, H. T. and Truong, N. Q. 2009. *Herpetofauna of Vietnam*. Chimaira, Frankfurt:768 pp.
- Schlegel, H. 1837. *Essai sur la physionomie des serpens. Partie Générale: xxviii +251 S. + Partie Descriptive: 606 S. + xvi*. La Haye (J. Kips, J. HZ. et W. P. van Stockum).
- Schmidt, D. 2012. Giftbisse von giftigen und „harmlosen“ Schlangen. Teil 2. Terraria. *Elaphe* 2012 (3): 68-75.
- Schmidt, K. P. 1923. Contributions to the herpetology of the Belgian Congo based on the collection of the American Museum Congo Expedition, 1909-1915. Part II. Snakes, with field notes by Herbert Lang and James P. Chapin. *Bull. Amer. Mus. nat. Hist.* 49(1):1-146.
- Schmidt, K. P. 1932. Reptiles and Amphibians from the Solomon Islands. *Field Mus. Nat. Hist. Zool. Ser.* 18(9):175-190.
- Sharma, R. C. 2004. *Handbook Indian Snakes*. Akhill Books, New Delhi:292 pp.
- Shaw, G. 1802. General Zoology, or Systematic Natural History. Vol.3, part 2. G. Kearsley, Thomas Davison, London:313-615.
- Smedley, N. 1931. Amphibians and reptiles from the Cameron Highlands, Malay Peninsula. *Bull. Raffl. Mus. Singapore*, 6:105-123.
- Smith, B. E. 1993. Notes on a collection of squamate reptiles from eastern Mindanao, Philippine Islands part 2: Serpentes. *Asiatic Herpetological Research* 5:96-102.
- Smith, H. M., Smith, R. B. and Sawin, H. L. 1977. A summary of snake classification (Reptilia, Serpentes). *Journal of Herpetology* 11:115-121.
- Smith, M. A. 1930. The Reptilia and Amphibia of the Malay Peninsula from the Isthmus of Kra to Singapore, including the adjacent Islands. A Supplement to G. A. Boulenger's Reptilia and Batrachia 1912. *Bull. Raffles Mus.* (3):1-149.
- Smith, M. A. 1943. *The Fauna of British India, Ceylon and Burma, Including the Whole of the Indo-Chinese Sub-Region. Reptilia and Amphibia. 3 (Serpentes)*. Taylor and Francis, London:583 pp.
- Smedley, N. 1932. Notes on the herpetological collections in the Selangor Museum. *Bull. Raffl. Mus.* 7:9-17.
- Smith, B. E. 1993. Notes on a collection of squamate reptiles from eastern Mindanao, Philippine Islands part 2: Serpentes. *Asiatic Herpetological Research* 5:96-102.
- Smith, M. A. 1943. The Fauna of British India, Ceylon and Burma, Including the Whole of the Indo-Chinese Sub-Region. Reptilia and Amphibia. 3 (Serpentes). Taylor and Francis, London. 583 pp.
- Spawls, S., Howell, K., Drewes, R. C. and Ashe, J. 2001. A field guide to the reptiles of East Africa. Academic Press:543 pp.
- Steindachner, F. 1867. In: Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorff-Urbair (Zoologie), Vol. 1, part 3 (Reptilien p.1-98). K. Gerold's Sohn/Kaiserlich-Königl. Hof- und Staatsdruckerei, Wien [1869 on title page].
- Stejneger, L. H. 1907. Herpetology of Japan and adjacent territory. *Bull. US Natl. Mus.* 58:xx+577 pp.
- Stejneger, L. H. 1910. The batrachians and reptiles of Formosa. *Proc. US Natl. Mus.* 38:91-114.
- Stejneger, L. 1933. The ophidian generic names *Ahaetulla* and *Dendrophis*. *Copeia* 1933(4):199-203.
- Sternfeld, R. 1908. Neue und ungenügend bekannte afrikanische Schlangen. S.Ber. Ges. naturforsch. Freunde Berlin, 4:92-95.
- Sternfeld, R. 1910. Neue Schlangen aus Kamerun, Abessinien und Deutsch-Ostafrika. *Mitt. zool. Mus. Berlin* 5:67-70.
- Sternfeld, R. 1917. Reptilia und Amphibia. In: Schubotz, H. (Hrsg.): *Wissenschaftliche Ergebnisse der Zweiten*



- Deutschen Zentral-Afrika-Expedition, 1910-1911 unter Führung Adolph Friedrichs, Herzog zu Mecklenburg.* Leipzig: Klinkhardt and Biermann, [Band] 1, Zoologie, Lieferung 11; S.:407-510.
- Stuart, B. L. and Emmett, D. A. 2006. A Collection of Amphibians and Reptiles from the Cardamom Mountains, Southwestern Cambodia. *Fieldiana Zool. N.S.* (109):1-27.
- Sudasinghe, H. B. S. A. T. 2010. Beobachtung einer *Dendrelaphis bifrenalis* (Reptilia: Colubridae) beim Fressen eines *Polypedates cruciger* (Amphibia: Rhacophoridae) in Sri Lanka. *Sauria* 32(4):75-78.
- Sun, X., Liu, S. and Huang, S. 2011. Tibetan Plateau Relict Snakes of the Genus *Thermophis* and Their Relationship to New World Relict Snakes. *Asian Herpetological Research* 2(3):161-168.
- Suyanto, R. L. A. A. H. 1996. Geographical Variation in the Morphology of Four Snake Species from the Lesser Sunda Islands, Eastern Indonesia. *Biological Journal of the Linnean Society* 59(4):439-456.
- Taylor, E. H. 1950. The snakes of Ceylon. *Univ. Kansas Sci. Bull.* 33(14):519-603.
- Taylor, E. H. 1953. Report on a collection of Ceylonese serpents. *Univ. Kansas Sci. Bull.* 35(14):1615-1624.
- Taylor, E. H. 1965. The serpents of Thailand and adjacent waters. *Univ. Kansas Sci. Bull.* 45(9):609-1096.
- Teo, R. C. H. and Rajathurai, S. 1997. Mammals, reptiles and amphibians in the Nature Reserves of Singapore: Diversity, abundance and distribution. *Proc. Nature Reserves Survey Seminar. Gardens Bulletin Singapore* 49:353-425.
- Thompson, C. and Thompson, T. 2008. *First contact in the Greater Mekong - new species discoveries.* WWF:40 pp.
- Thompson, J. C. 1913. Contributions to the Anatomy of the Ophidia. *Proc. Zool. Soc. London* 1913:414-426.
- Tillack, F. 2006. Buchbesprechung: The Snakes of Sulawesi, A field Guide to the Land Snakes of Sulawesi with Identification Keys. *Sauria* 28(2):41-43.
- Tiwari, K. K. and Biswass, S. 1973. Two new reptiles from the great Nicobar Islands. *J. Zool. Soc. India* 25:57-63.
- Trape, J. F. 1985. Les serpents de la region de Dimonika (Mayombe, Republique Populaire du Congo. *Revue de zoologie africaine* 99(2):135-140.
- Trape, J. F. and R. Roux-Esteve 1995. Les serpents du Congo: liste commentée et clé de détermination. *Journal of African Zoology* 109(1):31-50.
- Tornier, G. 1902. Herpetologisch Neues aus Ostafrika. *Zool. Anz.* 25:700-704.
- Tweedie, M. W. F. 1950. Notes on Malayan reptiles, No.2. *Bull. Raffl. Mus.* (23):191-199.
- Tweedie, M. W. F. 1954. Notes on Malayan reptiles, No.3. *Bull. Raffl. Mus.* (25):107-117.
- Tweedie, M. W. F. 1983. *The snakes of Malaya.* Third edition. Singapore National Printers (Pte) Ltd., Singapore:167 pp.
- Underwood, G. and Kochva, E. 1993. On the affinities of the burrowing asps *Atractaspis* (Serpentes: Atractaspididae). *Zoological Journal of the Linnean Society* 107:3-64.
- van Rooijen, J. and van Rooijen, M. 2002. Einige Ergänzungen, Berichtigungen und neue Beobachtungen zur Herpetofauna von Pulau Tioman, West-Malaysia. *Sauria* 24(3):3-12.
- van Rooijen, J. and van Rooijen, M. 2007. The land snakes of the Santubong Peninsula, Sarawak, Borneo: A preliminary list of species with natural history notes. *Russian Journal of Herpetology* 14(1):27-38.
- van Rooijen, J. and Vogel, G. 2008a. A new species of *Dendrelaphis* (Serpentes: Colubridae) from Java, Indonesia. *The Raffles Bulletin of Zoology* 56(1):189-197.
- van Rooijen, J. and Vogel, G. 2008b. Contributions to a review of the *Dendrelaphis pictus* complex (Serpentes: Colubridae) - 1. Description of a sympatric species. *Amphibia-Reptilia* 29:101-115.
- van Rooijen, J. and Vogel, G. 2008c. An investigation into the taxonomy of *Dendrelaphis tristis* (Daudin, 1803): revalidation of *Dipsas schokari* (Kuhl, 1820) (Serpentes, Colubridae). *Contributions to Zoology* 77(1)33-43.
- van Rooijen, J. and Vogel, G. 2009. A multivariate investigation into the population systematics of *Dendrelaphis tristis* (Daudin, 1803) and *Dendrelaphis schokari* (Kuhl, 1820): revalidation of *Dendrophis chairecacos* Boie, 1827 (Serpentes: Colubridae). *Herp. J.* 19:193-200.
- Van Rooijen, J. and Vogel, G. 2010. On the discovery and origin of a Javan population of the Indochinese colubrid snake *Dendrelaphis subocularis* (Boulenger, 1888): a multivariate study. *Contributions to Zoology* 79(3):85-92.
- Venchi, A. and Sindaco, R. 2006. Annotated checklist of the reptiles of the Mediterranean countries, with keys to species identification. Part 2 -Snakes (Reptilia, Serpentes). *Annali del Museo Civico di Storia Naturale "G. Doria", Genova, XCVIII:259-364.*
- Venkatraman, C., Gokula, V. and Kumar, S. 1997. Occurrence of brown whip snake (*Ahaetulla pulverulenta*) in Siruvani foot hills. *Cobra* 28:36-37.
- Venning, F. E. W. 1910. Further notes on snakes from the Chin Hills. *J. Bombay Nat. Hist. Soc.* 20:770-775.
- Vidal, N., Delmas, A.-S., David, P., Cruaud, C., Couloux, A. and Hedges, S. B. 2007. The phylogeny and classification of caenophidian snakes inferred from seven nuclear protein-coding genes. *C. R. Biologies* 330:182-187.
- Vidal, N., Branch, W. R., Pauwels, O. S. G., Hedges, S. B., Broadley, D. G., Wink, M., Cruaud, C., Joger, U. and Nagy, Z. T. 2008. Dissecting the major African snake radiation: a molecular phylogeny of the Lamprophiidae Fitzinger (Serpentes, Caenophidia). *Zootaxa* 1945:51-66.
- Vidal, N., Rage, J.-C., Couloux, A. and Hedges, S. B. 2009. Snakes (Serpentes). In: Hedges, S. B. and Kumar, S. (Eds.), *The Timetree of Life.* Oxford University Press, New York, USA:390-397.
- Vidal, N., Dewynter, M., Gower, D. J., 2010. Dissecting the major American snake radiation: a molecular phylogeny of the Dipsadidae Bonaparte (Serpentes, Caenophidia). *C. R. Biologies* 333:48-55.
- Vijayakumar, S. P. and David, P. 2006. Taxonomy, Natural

- History, and Distribution of the Snakes of the Nicobar Islands (India), based on new materials and with an Emphasis on endemic species. *Russian Journal of Herpetology* 13(1):11- 40.
- Vitt, L. J. and Caldwell, J. P. 2009. *Herpetology: An Introductory Biology of Amphibians and Reptiles*, (Third Edition) Academic Press, San Diego, USA.
- Vogel, G. 1995. *Dendrelaphis striatus* (Cohn) neu für die Fauna Borneos (Serpentes: Colubridae). *Mitt. Zool. Mus. Berlin* 71:147-149.
- Vogel, G. 2010. Zur Systematik der Schlangen der orientalischen Region: Forschungsdefizite führen zur Unterschätzung der Artenvielfalt. *Ophidia* 4(2):18-26.
- Vogel, G. and Van Rooijen, J. 2007. A new species of *Dendrelaphis* (Serpentes: Colubridae) from Southeast Asia. *Zootaxa* 1394:25-45.
- Vogel, G. and van Rooijen, J. 2008. Contributions to a review of the *Dendrelaphis pictus* (Gmelin, 1789) complex - 2. the eastern forms. *Herpetozoa* 21(1/2):3-29.
- Vogel, G. and van Rooijen, J. 2011a. Contributions to a Review of the *Dendrelaphis pictus* (Gmelin, 1789) Complex (Serpentes: Colubridae) - 3. The Indian Forms, with the Description of a New Species from the Western Ghats. *Journal of Herpetology* 45(1):100-110.
- Vogel, G. and van Rooijen, J. 2011b. A New species of *Dendrelaphis* (Serpentes: Colubridae) From the Western Ghats - India. *Taprobanica* 03 (02):77-85.
- Vogel, G. and van Rooijen, J. 2011c. Description of a new species of the genus *Dendrelaphis* Boulenger, 1890 from Myanmar (Squamata: Serpentes: Colubridae). *Bonn Zoological Bulletin* 60 (1):17-24.
- Vyas, R. 2007. Herptofauna of Puma Wildlife Sanctuary, Gujarat, India. *Reptile Rap* (8):10-15.
- Wall, F. 1905a. Notes on Snakes collected in Cannanore from 5th November 1903 to 5th August 1904. *J. Bombay Nat. Hist. Soc.* 16:292.
- Wall, F. 1905b. Notes on some Bangalore Snakes. *J. Bombay Nat. Hist. Soc.* 16:389-394.
- Wall, F. 1905c. A Popular Treatise on the Common Indian Snakes. Part I. *J. Bombay Nat. Hist. Soc.* 16:533-554.
- Wall, F. 1906. A Popular Treatise on the Common Indian Snakes. Part II. *J. Bombay Nat. Hist. Soc.* 17:1-17.
- Wall, F. 1907a. Tuctoo and snake. *J. Bombay Nat. Hist. Soc.* 17:10-35.
- Wall, F. 1907b. Some new Asian snakes. *J. Bombay Nat. Hist. Soc.* 17:612-618.
- Wall, F. 1907c. Viviparous habit of the false Himalayan Viper (*Psammodynastes pulverulentus*). *J. Bombay Nat. Hist. Soc.* 18:204.
- Wall, F. 1908a. Remarks on some recently acquired snakes. *J. Bombay nat. Hist. Soc.* 18:778-784.
- Wall, F. 1908b. A new color variety of the common green whip-snake (*Cryophis mycterizans*). *J. Bombay nat. Hist. Soc.* 18:919.
- Wall, F. 1908c. Notes on a collection of snakes from the Khasi Hills, Assam. *J. Bombay nat. Hist. Soc.* 18:312-337.
- Wall, F. 1908d. A Popular Treatise on the Common Indian Snakes. Part VI. The Golden Tree-Snake (*Chrysopelea ornata*). *J. Bombay Nat. Hist. Soc.* 18:227-243.
- Wall, F. 1910a. Remarks on the varieties and distribution of the common Green Whip Snake (*Dryophis mycterizans*). *J. Bombay nat. Hist. Soc.* 20:229.
- Wall, F. 1910b. Varieties of the common Green Whip Snake (*Dryophis mycterizans*). *J. Bombay nat. Hist. Soc.* 20:524.
- Wall, F. 1910c. Notes on snakes collected in Upper Assam. Part II. *J. Bombay Nat. Hist. Soc.* 19(4):825-845.
- Wall, F. 1913. Notes on some interesting snakes recently presented to the Society. *J. Bombay nat. Hist. Soc.* 22:639.
- Wall, F. 1921a. *Ophidia Taprobanica or the Snakes of Ceylon*. Colombo Mus. (H. R. Cottle, govt. printer), Colombo:xxii + 581 pp.
- Wall, F. 1921b. Remarks on the Indian species of *Dendrophis* and *Dendrelaphis*. *Records of the Indian Museum* 22:15-16.
- Wanger, T. C., Motzke, I., Saleh, S. and Iskandar, D. T. 2011. The amphibians and reptiles of the Lore Lindu National Park area, Central Sulawesi, Indonesia. *Salamandra* 47(1):17-29.
- Wells, R. W. and Wellington, C. R. 1985. A classification of the Amphibia and Reptilia of Australia. *Australian Journal of Herpetology*, Supplementary Series (1):1-61.
- Werner, F. 1893. Herpetologische Nova (1). *Zool. Anz.* 16(414):81-84.
- Werner, F. 1897. Über Reptilien und Batrachier aus Togoland, Kamerun und Tunis aus dem Kgl. Museum für Naturkunde in Berlin. *Verh. Zool.-Bot. Ges., Wien* 47:395-407.
- Werner, F. 1899. Ueber Reptilien und Batrachier aus Togoland, Kamerun und Deutsch-Neu-Guinea grösstentheils aus dem k. Museum für Naturkunde in Berlin. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien* 49:132-157.
- Werner, F. 1925. *Neue oder wenig bekannte Schlangen aus dem Naturhistorischen Staatsmuseum in Wien*. II. Teil. Sitz. Ber. Akad. Wiss., Wien, Abt. I, 134:45-66.
- Werner, Y. L.; Babocsay, G., Carmely, H. and Thuna, M. 2006. *Micrelaps* in the southern Levant: variation, sexual dimorphism, and a new species (Serpentes: Atractaspididae). *Zoology in the Middle East* 38:29-48.
- Whitaker, R. and Captain, R. 2004. *Snakes of India*. Draco Books:500 pp.
- Whitaker, R., Whitaker, Z. and Mills, D. 1982. Reptiles of Papua New Guinea. *Wildlife in New Guinea* (82/2):1-53.
- Wiens, J. J. 2003. Missing data, incomplete taxa, and phylogenetic accuracy. *Syst. Biol.* 52:528-538.
- Wiens, J. J. and Moen, D. S. 2008. Missing data and the accuracy of Bayesian phylogenetics. *J. Syst. Evol.* 46, 307-314.
- Zaher, H. 1999. Hemipenial morphology of the South American xenodontine snakes, with a proposal for a monophyletic Xenodontinae and a reappraisal of colubroid hemipenes. *Bull. Am. Mus. Nat. Hist.* 240:1-168.

Zaher, H., Grazziotin, F. G., Cadle, J. E., Murphy, R. W., Moura-Leite, J. C. and Bonatto, S. L. 2009. Molecular phylogeny of advanced snakes (Serpentes, Caenophidia) with an emphasis on South America xenodontines: a revised classification and descriptions of new taxa. *Pap. Av. Zool.* 49:115-153.

Zaher, H., Grazziotin, F. G., Graboski, R., Fuentes, R. G., Sanchez-Martinex, P., Montingelli, G. G., Zhang, Y. P. and Murphy, R. W. 2012. Phylogenetic relationships of the genus *Sibynophis* (Serpentes: Colubroidea). *Papeis Avulsos de Zoologia*, 52(12):141-149.

Zhao, E. M. 1995. Intraspecific classification of some Chinese snakes. *Sichuan Journal of Zoology*, 14(3):107-112.

Zhao, E. M. 1997. Intraspecific classification of some Chinese snakes. *Asiatic Herpetological Research* 7:170-172.

Zhao, E. and Adler, K. 1993. *Herpetology of China*. SSAR, Oxford/Ohio:522 pp.

Ziegler, T. 2002. *Die Amphibien und Reptilien eines Tieflandfeuchtwald-Schutzgebietes in Vietnam*. Natur und Tier Verlag (Münster):342 pp.

Ziegler, T. and Vogel, G. 1999. On the knowledge and specific status of *Dendrelaphis ngansonensis* (Bourret, 1935) (Reptilia: Serpentes: Colubridae). *Russ. J. Herpetol.* 6(3):199-208.

Ziegler, T., Vences, M., Glaw, F. and Böhme, W. 1997. Genital morphology and systematics of *Geodipsas Boulenger*, 1896 (Reptilia: Serpentes: Colubridae), with description of a new genus. *Revue Suisse de Zoologie* 104(1):95-114.

Ziegler, T., Hendrix, R., Thanh, V. N., Vogt, M., Forster, B. and Kien, D. N. 2007. The diversity of a snake community in a karst forest ecosystem in the central Truong Son, Vietnam, with an identification key. *Zootaxa* 1493:1-40.

Zug, G. R., Win, H., Thin, T., Min, T. Z., Lhon, W. Z. and Kyaw, K. 1998. Herpetofauna of the Chatthin Wildlife Sanctuary, north-central Myanmar with preliminary observations of their Natural History. *Hamadryad* 23(2):111-120.

Zug, G. R., Vitt, L. J. and Caldwell, J. P. 2001. *Herpetology: An Introductory Biology of Amphibians and Reptiles*. Academic Press, New York, USA.

Zwickl, D. J. and Hillis, D. M., 2002. Increased taxon sampling greatly reduces phylogenetic error. *Syst. Biol.*

Hoser 2013 - Australasian Journal of Herpetology 17:3-21.

ISSN 1836-5698 (Print)  
ISSN 1836-5779 (Online)

**Tax Invoice**

Invoice Number: 18306      Date: 24/04/2013  
Reference:      Kwik Kopy

**Australasian Journal of Herpetology**

**Kwik Kopy Printing Centre Box Hill**  
3/1031 Whitehorse Road, Box Hill VIC 3128  
Tel: (03) 9899 0833 Fax: (03) 9899 0536  
mail@kwikkopyboxhill.com.au  
www.kwikkopyboxhill.com.au  
Suechess Pty. Ltd. | ABN 65 740 679 782

Please return this remittance advice with your payment using one of the methods listed at the bottom of this page.

Quantity	Description	Price
50	Australasian Journal of Herpetology Issue 16 - 64 page document printed black and white on 128gsm gloss and 250gsm gloss cover in colour	\$227.27
50	Australasian Journal of Herpetology Issue 17 - 64 page document printed black and white on 128gsm gloss and 250gsm gloss cover in colour	\$227.27
50	Australasian Journal of Herpetology Issue 18 - 80 page document printed black and white on 128gsm gloss and 250gsm gloss cover in colour	\$272.27
50	Australasian Journal of Herpetology Re-print Issue 8 - 64 page document printed black and white on 128gsm gloss and 250gsm gloss cover in colour	\$227.27

5188  
598

<b>SUBTOTAL</b>	\$954.10
<b>TAX</b>	\$95.41
<b>TOTAL</b>	\$1,049.51
<b>DEPOSITS</b>	\$0.00
<b>AMOUNT DUE</b>	\$1,049.51

**Payment Details**  
Please pay within 30 days, this is an invoice/statement and a statement will not be issued.  
Make cheques payable to Kwik Kopy Box Hill.  
We accept Visa, Mastercard and Amex payments and they will incur an additional 2% fee.  
You can deposit directly into our bank account.  
E & O.E. All claims and returned goods are to be accompanied by this invoice, and made within 7 days of receipt of goods.

**Direct Deposit Details:**  
Acct: Suechess Pty. Ltd.  
Bank: Westpac  
BSB: 033-172  
Acct No.: 33 4219

Please debit my (tick appropriate card)  Visa  Mastercard  Amex  
For the amount of \$ \_\_\_\_\_  
Card Number (please print numbers clearly) \_\_\_\_\_  
Expiry Date \_\_\_\_\_ / \_\_\_\_\_  
Name on card \_\_\_\_\_  
Signature \_\_\_\_\_