

A division of the genus *Corucia* Gray, 1855, the Giant Skink, from the Solomon Islands, into five geographically separated species.

RAYMOND T. HOSER

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

Phone: +61 3 9812 3322 Fax: 9812 3355 E-mail: snakeman (at) snakeman.com.au

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ABSTRACT

For more than 100 years, the Solomon Islands skink genus *Corucia* Gray, 1855 has been viewed by virtually all herpetologists as being comprised of a single species, namely *C. zebata* Gray, 1855, type locality San Cristobal.

This view was shaken somewhat in 1997 when Köhler described the subspecies *C. zebata alfredschmidti*, from Bougainville, a designation which appears to have been widely accepted in the pet trade, but not so much in the scientific literature.

Following on from a molecular study of Hagen *et al.* (2012) which showed that the "species" *Corucia zebata* Gray, 1855 in fact consists of five divergent lineages, this paper provides the results of inspections of numerous specimens from across the Solomon Islands, which shows five variants which correspond to the clades identified by Hagen *et al.* (2012).

Two correspond with each of *Corucia zebata* Gray, 1855 and *C. zebata alfredschmidti* Köhler, 1997, while the other three have been until now, unnamed.

On the basis of deep phylogenetic divergences in excess of a million years for each group and ongoing geographical isolation by bodies of sea-water that the lizards cannot easily cross, with no ongoing evidence of cross-sea migrations, combined with obvious physical differences between each population, the five populations are each treated as full species that continue to evolve separately.

These are *C. zebata* Gray, 1855, being the type form for the genus *Corucia* from San Cristobel, *C. alfredschmidti* (Köhler, 1997) from the Bougainville Group of islands, including Shortland Island, *C. hoserae* sp. nov. from Guadalcanal, *C. woolfi* sp. nov. from the New Georgia group of islands and Choiseul and *C. elfakhariorum* sp. nov. from Ngela (AKA Nggela) and Santa Isabel.

Keywords: Taxonomy; Nomenclature; Lizards; Giant Skink; genus; *Corucia*; species; *zebrata*; *alfredschmidti*; new species; *hoserae*; *woolfi*; *elfakhariorum*; Solomon Islands; Solomons; Guadalcanal; Ngela; Nggela, Shortland; Malaita; San Cristobal; Makira; New Georgia; Santa Isabel; Choiseul; Florida Islands; Guadalcanal; Bougainville.

INTRODUCTION

For more than 100 years, the Solomon Islands skink genus *Corucia* Gray, 1855 has been viewed by virtually all herpetologists as being comprised of a single species, namely *C. zebata* Gray, 1855, type locality San Cristobal.

In fact for more than a century, no one bothered to inspect specimens from across the Solomon Islands with a view to ascertaining differences between specimens from different islands.

This view was shaken in 1997 when Köhler described the subspecies *C. zebata alfredschmidti*, from Bougainville.

This designation appears to have been widely accepted in the pet trade, but not so much in the scientific literature, where it

has sometimes been referred to, but not necessarily used as correct (e.g. McCoy 2006 and Hagen *et al.* 2012).

Put simply, professional herpetologists appear to have been preoccupied with other matters, rather than to look at these lizards from a taxonomic viewpoint.

Following on from a molecular study of Hagen *et al.* (2012) which showed that the "species" *Corucia zebata* Gray, 1855 in fact consists of five significantly divergent lineages, this paper provides the results of inspections of numerous (many dozens of) specimens from across the Solomon Islands, which shows five variants which correspond to the clades identified by Hagen *et al.* (2012).

This had been deduced by myself prior to the publication of

Hagen *et al.* but ongoing matters including litigation that commenced in one form or other in 2006 delayed publication of my results indefinitely (see Court of Appeal Victoria 2014 and VCAT 2015 for an overview).

Specimens (with accurate locality data) were inspected from the following islands: Guadalcanal, Ngela (AKA Nggela), Shortland, Malaita, San Cristobal, New Georgia, Santa Ana, Santa Isabel, Choiseul, Florida Islands, Guadalcanal, Makira, Bougainville.

McCoy (2006) lists other islands *Corucia* are also found including some from which I did not view specimens (see list of locations below with Buka Island added).

Two clades correspond with each of *Corucia zebrata* Gray, 1855 and *C. zebrata alfredschmidti* Köhler, 1997, while the other three have been until now, unnamed.

On the basis of deep phylogenetic divergences in excess of a million years for each group as found by Hagen *et al.* (2012) and ongoing geographical isolation by bodies of sea-water that the lizards cannot easily cross, with no ongoing evidence of cross-sea migrations and obvious physical differences between each population, the five populations are each treated as full species that continue to evolve separately.

Significant and ignored by taxonomists since 1995, was a paper by Balsai (1995) summarizing his studies which found that specimens from different islands when mated, failed to produce offspring. This further indicative of each form being a different species in the accepted Darwinian sense of the term.

These five herein defined forms are *C. zebrata* Gray, 1855, being the type form for the genus *Corucia* from San Cristobel, *C. alfredschmidti* (Köhler, 1997) from the Bougainville Group of islands, including Shortland Island, *C. hoserae* *sp. nov.* from Guadalcanal, *C. woolfi* *sp. nov.* from the New Georgia group of islands and Choiseul and *C. elfakhariorum* *sp. nov.* from Ngela (AKA Nggela) and Santa Isabel.

Divergences were ascertained on the basis of previous ice-age maxima connections between relevant islands as explained by authors such as Bruns *et al.* (2009), Russell and Coupe (1984) and sources cited within and more recently corroborated by the molecular results of Hagen *et al.* (2012) for these very lizards.

Notwithstanding the theft of relevant materials from this author in an illegal armed raid on 17 August 2011, which were not returned (Court of Appeal Victoria 2014 and VCAT 2015), I have made a decision to publish this paper in view of the conservation significance attached to the formal recognition of unnamed species and on the basis that further delays may in fact put these unnamed taxa at greater risk of extinction.

This noting the ongoing human population growth in the Solomon Islands and the associated influences of habitat destruction and potential for introduced pests and pathogens to attack vulnerable island populations.

The five distinctive forms herein are also given taxonomic recognition on the basis that likely divergences exceed the timeline determined as significant and worthy of conservation recognition by Keogh *et al.* (2003).

Hagen *et al.* (2012) also noted that rafting between islands is not viewed as a significant means of dispersal or ongoing gene flow, beyond times of initial colonisation.

The inability of the genus to disperse beyond the Solomon Islands also supports this view.

MATERIALS AND METHODS

These are not formally explained in a number of my recent papers under the heading "Materials and methods" or similar, on the basis they are self evident to any vaguely perceptive reader. However, the process by which the following taxonomy and nomenclature in this and other recent papers by myself of similar form, has been arrived at, is explained herein for the benefit of people who have recently published so-called "criticisms" online of some of my recent papers. They have alleged a serious "defect" by myself in not formally explaining

"Materials And Methods" under such a heading.

The process involved in creating the final product for this and other relevant papers has been via a combination of the following:

Genera and component species are audited to see if their classifications are correct on the basis on known type specimens, locations and the like when compared with known phylogenies and obvious morphological differences between like species.

Original descriptions and contemporary concepts of the species are matched with available specimens from across the ranges of the species to see if all conform to accepted norms.

These may include those held in museums, private collections, collected in the field, photographed, posted on the internet or held by individuals, and only when the location data is good and any other useful and relevant data is available.

Where specimens do not appear to comply with the described species (and accepted concept of the species), this non-conformation is looked at with a view to ascertaining if it is worthy of taxonomic recognition or other relevant considerations on the basis of differences that can be tested for antiquity or deduced from earlier studies.

When this appears to be the case (non-conformation), the potential target taxon is inspected as closely as practicable with a view to comparing with the nominate form or forms if other similar taxa have been previously named.

Other relevant data is also inspected, including any available molecular studies which may indicate likely divergence of populations.

Where molecular studies are unavailable for the relevant taxon or group, other studies involving species and groups constrained by the same geographical or geological barriers, or with like distribution patterns are inspected as they give reasonable indications of the likely divergences of the taxa being studied herein.

Additionally other studies involving geological history, sea level and habitat changes associated with long-term climate change, including recent ice age changes in sea levels, versus known sea depths are utilized to predict past movements of species and genus groups in order to further ascertain likely divergences between extant populations (as done in this very paper).

When all available information checks out to show taxonomically distinct populations worthy of recognition, they are then recognized herein according to the rules of the *International Code of Zoological Nomenclature* (Ride *et al.* 1999).

This means that if a name has been properly proposed in the past, it is used. This exactly what happens in this paper for the taxon originally described as *Corucia zebrata alfredschmidti* Köhler, 1997.

Alternatively, if no name is available, a new one is proposed according to the rules of the *International Code of Zoological Nomenclature* as is done three times in this paper.

As a matter of trite I mention that if a target taxon or group does check out as being "in order" or properly classified, a paper is usually not published unless some other related taxon is named for the first time.

The published literature relevant to the taxonomic judgements made within this paper includes papers relevant to Solomon Islands species affected by the same physical barriers to dispersion as well as those directly relevant to *Corucia*. Combined, they include the following:

Adler *et al.* (1995), Austin *et al.* (2010), Balsai (1995), Barbour (1921), Bonetti (2002), Boseto and Pikacha (2016), Boulenger (1884, 1886, 1887), Brenneman *et al.* (2007), Bruns *et al.* (1989), Coborn (1996), Dahl (1986), de Vosjoli (1993), Duméril and Bibron (1839), Gray (1856), Greer and Parker (1967), Greer and Simon (1982), Hagen and Bull (2011), Hagen *et al.* (2012, 2013), Hall (2002), Hauschild (1998), Iskandar and Erdelen

(2006), Jungfer and Jansen (1985), Keogh *et al.* (2003), Kinghorn (1928), Kirkpatrick (1996), Köhler (1997), Lima *et al.* (2011), Mann and Meek (2004), McCoy (1980, 2006), McDowell (1970, 1979), Moser (1992), Mys (1988), Parker (1983), Pianka and Vitt (2003), Pyron *et al.* (2013), Reeder (2003), Rittmeyer and Austin (2015), Russell and Coupe (1984), Schmidt (1998), Schmidt (1932), Sprackland (1993), Wright (1996, 2007), Ziegler (2005), Zollweg (2013), Zweifel (1966), and sources cited therein.

For the benefit of readers who wish to see standard examples of each of the newly described taxa within this paper, within the above references, (e.g. McCoy 1980, 2006 and Hagen *et al.* 2012) are photos of standard specimens of all five of the described forms herein with accurate locality information.

McCoy (2006) correctly noted taxonomic assessments based on captive specimens outside the Solomon Islands "cannot be regarded with any certainty" and I have subscribed to this view by excluding from my analysis any such specimens.

Notwithstanding this, I have not had difficulty ascertaining the provenance of captive animals based on the species criteria below with a strong degree of certainty and in the absence of any other information.

Due to requirements for valid descriptions as stated within the *International Code of Zoological Nomenclature* and relevant rulings by the ICZN, some material is repeated within this paper and I make no apologies for this.

GENUS *CORUCIA* GRAY, 1855.

Type species: *Corucia zebrata* Gray, 1855.

Diagnosis: Until now the genus has been treated as monotypic. The genus *Corucia* is defined and separated from all other skinks as follows: Large wedge-shaped head, distinct from the robust body, limbs are well-developed and with strong claws. The tail is slender and prehensile. The lower eyelid is scaly. The frontonasal is the largest head shield. No supranasals. Prefrontals are in contact or narrowly separated and if so, by a small median scale. Parietals are widely separated, bordered by one or more pairs of enlarged temporals. Nuchals are usually enlarged. Frontoparietals are distinct.

Head shields are commonly generally irregular and vary from one individual to the next. 35-40 mid-body scale rows, 19-22 lamellae under the fourth toe.

Each of the five herein recognized species are diagnosed below.

Distribution: Endemic to the Solomon Islands archipelago, including Bougainville, Buka, Shortland Islands, Choiseul, Vella Lavella, New Georgia, Tetepare, Vangunu, Santa Isabel, Guadalcanal, Ngela (AKA Nggela), Malaita, Makira (AKA San Cristobal), Ugi, Santa Ana (as mainly derived from McCoy 2006).

Content: *Corucia zebrata* Gray, 1855 (type species); *C. alfredschmidti* (Köhler, 1997); *C. elfakhariorum* sp. nov.; *C. hoserae* sp. nov.; *C. woolfi* sp. nov..

CORUCIA ZEBRATA GRAY, 1855.

Type locality: Makira Island (San Cristobal), Solomon Islands.

Diagnosis: The species *Corucia zebrata* Gray, 1855 is separated from others in the genus by the following unique suite of characters: Greenish to greenish-orange iris; Lighter scales on the limbs forming distinct bands. Most of the tail lacks any distinctive markings except for the anterior which has lighter scales arranged to give thin, jagged light cross bands across a brownish-grey background. There is significant lightening towards the snout including the upper labials which are a light yellowish colour. There are distinct dark and light markings on the rear of the head corresponding to dark etchings and whitish centres of the major head shields. The venter is usually an indistinct pattern of lighter and darker greyish brown.

The species *C. alfredschmidti* (Köhler, 1997) is separated from others in the genus by the following unique suite of characters: A dark yellow iris. Limbs and tail are greyish in colour but with

irregular dark spots being composed of individual scales. It has a distinctive green colouration on the head (sometimes yellowish green), including the underside, which is punctuated by small irregular blackish blotches. The venter is whitish, sometimes with faint irregular markings.

The species *C. hoserae* sp. nov. is separated from others in the genus by the following unique suite of characters: Generally greyish in colour, including on the limbs and tail, which have no significant distinct markings. The upper body is covered with an indistinct pattern. The head is generally a plain greyish colour with irregular scattered indistinct darker markings. The iris is a greenish colour, sometimes slightly yellowish near the centre. The venter may or may not be patterned but is usually a light greyish colour.

The species *C. woolfi* sp. nov. is in many respects similar to *C. alfredschmidti* (Köhler, 1997) but is separated that species and from others in the genus by the following unique suite of characters: Yellow head, yellow iris, lighter blotches down the flanks forming indistinct and broken longitudinal stripes, irregular black dots formed by single scales on the limbs. Unlike *C. alfredschmidti* (Köhler, 1997) *C. woolfi* sp. nov. does not have a dorsal body pattern including large blackish spots caused by one or more blackened scales. *C. woolfi* sp. nov., *C. hoserae* sp. nov. and *Corucia zebrata* Gray, 1855 are all characterised by a dorsal surface with small black flecks only configured in an irregular pattern.

The venter of *C. woolfi* sp. nov. is usually a light and indistinct pattern of lighter and darker yellowish white.

C. elfakhariorum sp. nov. is diagnosed and separated from others in the genus by the following unique suite of characters: The dorsal colouration in adults is generally plain and unmarked save for a scattering of darker (single scale) spots, these also being only semidistinct. There is no patterning anywhere, save for a faded blotch-like patterning on the dorsal upper body, which is easily overlooked. Legs are either unmarked, or sometimes punctuated by a small number of dark or black single scale spots on each limb, the number never being more than 3 on any limb. The underside is an off-white colour. The iris is yellowish-green, as is the head, but the head often fades to become greyish-brown in adults. The lower labials and chin shields are characterised by a peppering of dark, over a lighter, whitish background. Similar peppering is also found on the upper surface of the head which is darkish in colour and otherwise unmarked.

The colour of the sclera of the eye appears to vary within a given population, being either black or white (including in populations of *C. alfredschmidti*) and so is not treated as diagnostic for one or other species.

Distribution: *Corucia zebrata* Gray, 1855 is found on Makira Island (San Cristobal) and Malaita, Solomon Islands.

CORUCIA ALFREDSCHMIDTI KÖHLER, 1855.

Type locality: Bougainville Islands group, Solomon Islands.

Diagnosis: The species *Corucia alfredschmidti* (Köhler, 1997) is separated from others in the genus by the following unique suite of characters: A dark yellow iris. Limbs and tail are greyish in colour but with irregular dark spots being composed of individual scales. It has a distinctive green colouration on the head (sometimes yellowish green), including the underside which is punctuated by small irregular blackish blotches. The venter is whitish, sometimes with faint irregular markings.

The species *C. zebrata* Gray, 1855 is separated from others in the genus by the following unique suite of characters: Greenish to greenish-orange iris; Lighter scales on the limbs forming distinct bands. Most of the tail lacks any distinctive markings except for the anterior which has lighter scales arranged to give thin, jagged light cross bands across a brownish-grey background. There is significant lightening towards the snout including the upper labials which are a light yellowish colour. There are distinct dark and light markings on the rear of the

head corresponding to dark etchings and whitish centres of the major head shields. The venter is usually an indistinct pattern of lighter and darker greyish brown.

The species *C. hoserae* sp. nov. is separated from others in the genus by the following unique suite of characters: Generally greyish in colour, including on the limbs and tail, which have no significant distinct markings. The upper body is covered with an indistinct pattern. The head is generally a plain greyish colour with irregular scattered indistinct darker markings. The iris is a greenish colour, sometimes slightly yellowish near the centre. The venter may or may not be patterned but is usually a light greyish colour.

The species *C. woolfi* sp. nov. is in many respects similar to *C. alfredschmidti* (Köhler, 1997) but is separated that species and from others in the genus by the following unique suite of characters: Yellow head, yellow iris, lighter blotches down the flanks forming indistinct and broken longitudinal stripes, irregular black dots formed by single scales on the limbs. Unlike *C. alfredschmidti* (Köhler, 1997) *C. woolfi* sp. nov. does not have a dorsal body pattern including large blackish spots caused by one or more blackened scales. *C. woolfi* sp. nov., *C. hoserae* sp. nov. and *Corucia zebrata* Gray, 1855 all characterised by a dorsal surface with small black flecks only configured in an irregular pattern. The venter of *C. woolfi* sp. nov. is usually a light and indistinct pattern of lighter and darker yellowish white.

C. elfakhariorum sp. nov. is diagnosed and separated from others in the genus by the following unique suite of characters: The dorsal colouration in adults is generally plain and unmarked save for a scattering of darker (single scale) spots, these also being only semidistinct. There is no patterning anywhere, save for a faded blotch-like patterning on the dorsal upper body, which is easily overlooked. Legs are either unmarked, or sometimes punctuated by a small number of dark or black single scale spots on each limb, the number never being more than 3 on any limb. The underside is an off-white colour. The iris is yellowish-green, as is the head, but the head often fades to become greyish-brown in adults. The lower labials and chin shields are characterised by a peppering of dark, over a lighter, whitish background. Similar peppering is also found on the upper surface of the head which is darkish in colour and otherwise unmarked.

The colour of the sclera of the eye appears to vary within a given population, being either black or white (including in populations of *C. alfredschmidti*) and so is not treated as diagnostic for one or other species.

Distribution: *Corucia alfredschmidti* (Köhler, 1997) is found in the Bougainville Group of islands, including Buka and Shortland islands, within the Solomon Islands archipelago.

CORUCIA HOSERAE SP. NOV.

Holotype: A preserved specimen at the Australian Museum, Sydney, NSW, Australia, specimen number: R.137063 (the first of the series collected) collected at Makarakomburu (South Slope), Guadalcanal, Solomon Islands (9°45'S, 160°00'E). The Australian Museum, Sydney, NSW, Australia is a public facility that allows access to its specimen holdings.

Diagnosis: The species *Corucia hoserae* sp. nov. is separated from others in the genus by the following unique suite of characters: Generally greyish in colour dorsally, including on the limbs and tail, which have no significant distinct markings. The upper body is covered with an indistinct pattern, but with a scattering of indistinct black flecks, which are sometimes more numerous on the flanks of the body. The head is generally a plain greyish colour with irregular scattered indistinct darker markings, but usually presents at a glance as unmarked. The iris is a greenish colour, sometimes slightly yellowish near the centre. The venter may or may not be patterned but is usually a light greyish colour.

The species *C. zebrata* Gray, 1855 is separated from others in the genus by the following unique suite of characters: Greenish

to greenish-orange iris; lighter scales on the limbs forming distinct bands. Most of the tail lacks any distinctive markings except for the anterior which has lighter scales arranged to give thin, jagged light cross bands across a brownish-grey background. There is significant lightening towards the snout including the upper labials which are a light yellowish colour. There are distinct dark and light markings on the rear of the head corresponding to dark etchings and whitish centres of the major head shields. The venter is usually an indistinct pattern of lighter and darker greyish brown.

The species *C. alfredschmidti* (Köhler, 1997) is separated from others in the genus by the following unique suite of characters: A dark yellow iris. Limbs and tail are greyish in colour but with irregular dark spots being composed of individual scales. It has a distinctive green colouration on the head (sometimes yellowish green), including the underside, which is punctuated by small irregular blackish blotches. The venter is whitish, sometimes with faint irregular markings.

The species *C. woolfi* sp. nov. is in many respects similar to *C. alfredschmidti* (Köhler, 1997) but is separated that species and from others in the genus by the following unique suite of characters: Yellow head, yellow iris, lighter blotches down the flanks forming indistinct and broken longitudinal stripes, irregular black dots formed by single scales on the limbs. Unlike *C. alfredschmidti* (Köhler, 1997) *C. woolfi* sp. nov. does not have a dorsal body pattern including large blackish spots caused by one or more blackened scales. *C. woolfi* sp. nov., *C. hoserae* sp. nov. and *C. zebrata* Gray, 1855 are characterised by a dorsal surface with small black flecks only that are configured in an irregular pattern. The venter of *C. woolfi* sp. nov. is usually a light and indistinct pattern of lighter and darker yellowish white.

C. elfakhariorum sp. nov. is diagnosed and separated from others in the genus by the following unique suite of characters: The dorsal colouration in adults is generally plain and unmarked save for a scattering of darker (single scale) spots, these also being only semidistinct. There is no patterning anywhere, save for a faded blotch-like patterning on the dorsal upper body, which is easily overlooked. Legs are either unmarked, or sometimes punctuated by a small number of dark or black single scale spots on each limb, the number never being more than 3 on any limb. The underside is an off-white colour. The iris is yellowish-green, as is the head, but the head often fades to become greyish-brown in adults. The lower labials and chin shields are characterised by a peppering of dark, over a lighter, whitish background. Similar peppering is also found on the upper surface of the head which is darkish in colour and otherwise unmarked.

The colour of the sclera of the eye appears to vary within a given population, being either black or white (including in populations of *C. alfredschmidti*) and so is not treated as diagnostic for one or other species.

The genus *Corucia* is defined and separated from all other skinks as follows: Large wedge-shaped head, distinct from the robust body, limbs are well-developed and with strong claws. The tail is slender and prehensile. The lower eyelid is scaly. The frontonasal is the largest head shield. No supranasals. Prefrontals are in contact or narrowly separated and if so, by a small median scale. Parietals are widely separated, bordered by one or more pairs of enlarged temporals. Nuchals are usually enlarged. Frontoparietals are distinct.

Head shields are commonly generally irregular and vary from one individual to the next. 35-40 mid-body scale rows, 19-22 lamellae under the fourth toe.

Distribution: Guadalcanal in the Solomon Islands, and immediately adjacent islets, not including the Florida Islands group.

Etymology: Named in honour of my mother, Katrina Hoser of Sydney, NSW, Australia in recognition of her many decades services to herpetology.

CORUCIA WOOLFI SP. NOV.

Holotype: A preserved specimen at the Australian Museum, Sydney, NSW, Australia, specimen number: R.134945, (the first of the series collected), collected at Mt. Javi, 5km north of Patutiva Village, Marovo Lagoon, New Georgia, Solomon Islands (8°31'S, 157°52'E).

The Australian Museum, Sydney, NSW, Australia is a public facility that allows access to its specimen holdings.

Paratype: A preserved specimen at the Australian Museum, Sydney, NSW, Australia, specimen number: R.134946 (the first of the series collected), collected at Tamaneke Village, Marovo Lagoon, New Georgia, Solomon Islands (8°19'S, 157°49'E).

Diagnosis: The species *Corucia woolfi sp. nov.* is in many respects similar to *C. alfredschmidti* (Köhler, 1997) as described below, but is separated that species and from others in the genus by the following unique suite of characters: Yellow head, yellow iris, lighter blotches down the flanks forming indistinct and broken longitudinal stripes, irregular black dots formed by single scales on the limbs. Unlike *C. alfredschmidti* (Köhler, 1997) *C. woolfi sp. nov.* does not have a dorsal body pattern including large blackish spots caused by one or more blackened scales. *C. woolfi sp. nov.*, *C. hoserae sp. nov.* and *C. zebrata* Gray, 1855 are all characterised by a dorsal surface with small black flecks only configured in an irregular pattern. The venter of *C. woolfi sp. nov.* is usually a light and indistinct pattern of lighter and darker yellowish white.

The species *C. alfredschmidti* (Köhler, 1997) is separated from others in the genus by the following unique suite of characters: A dark yellow iris. Limbs and tail are greyish in colour but with irregular dark spots being composed of individual scales. It has a distinctive green colouration on the head (sometimes yellowish green), including the underside, which is punctuated by small irregular blackish blotches. The venter is whitish, sometimes with faint irregular markings.

The species *C. zebrata* Gray, 1855 is separated from others in the genus by the following unique suite of characters: Greenish to greenish-orange iris; Lighter scales on the limbs forming distinct bands. Most of the tail lacks any distinctive markings except for the anterior which has lighter scales arranged to give thin, jagged light cross bands across a brownish-grey background. There is significant lightening towards the snout including the upper labials which are a light yellowish colour. There are distinct dark and light markings on the rear of the head corresponding to dark etchings and whitish centres of the major head shields. The venter is usually an indistinct pattern of lighter and darker greyish brown.

The species *C. hoserae sp. nov.* is separated from others in the genus by the following unique suite of characters: Generally greyish in colour dorsally, including on the limbs and tail, which have no significant distinct markings. The upper body is covered with an indistinct pattern, but with a scattering of indistinct black flecks. The head is generally a plain greyish colour with irregular scattered indistinct darker markings. The iris is a greenish colour, sometimes slightly yellowish near the centre. The venter may or may not be patterned but is usually a light greyish colour. *C. elfakhariorum sp. nov.* is diagnosed and separated from others in the genus by the following unique suite of characters: The dorsal colouration in adults is generally plain and unmarked save for a scattering of darker (single scale) spots, these also being only semidistinct. There is no patterning anywhere, save for a faded blotch-like patterning on the dorsal upper body, which is easily overlooked. Legs are either unmarked, or sometimes punctuated by a small number of dark or black single scale spots on each limb, the number never being more than 3 on any limb. The underside is an off-white colour. The iris is yellowish-green, as is the head, but the head often fades to become greyish-brown in adults. The lower labials and chin shields are characterised by a peppering of dark, over a lighter, whitish background. Similar peppering is also found on the upper

surface of the head which is darkish in colour and otherwise unmarked.

The colour of the sclera of the eye appears to vary within a given population, being either black or white (including in populations of *C. alfredschmidti*) and so is not treated as diagnostic for one or other species.

The genus *Corucia* is defined and separated from all other skinks as follows: Large wedge-shaped head, distinct from the robust body, limbs are well-developed and with strong claws. The tail is slender and prehensile. The lower eyelid is scaly. The frontonasal is the largest head shield. No supranasals. Prefrontals are in contact or narrowly separated and if so, by a small median scale. Parietals are widely separated, bordered by one or more pairs of enlarged temporals. Nuchals are usually enlarged. Frontoparietals are distinct.

Head shields are commonly generally irregular and vary from one individual to the next. 35-40 mid-body scale rows, 19-22 lamellae under the fourth toe.

Distribution: The New Georgia group of islands in the Western District of the Solomon Islands and Choiseul, Solomon Islands.

Etymology: Named in honour of Paul Woolf, of Walloon, near Brisbane, Queensland, Australia in recognition of his many decades services to herpetology including as foundation president of the Herpetological Society of Queensland (HSQI Inc.).

CORUCIA ELFAKHARIORUM SP. NOV.

Holotype: A preserved specimen at the Australian Museum, Sydney, NSW, Australia, specimen number: R.76041, collected at Boromole, Nggela Sule, (Ngela), Solomon Islands (9°03' S, 160°18' E).

The Australian Museum, Sydney, NSW, Australia is a public facility that allows access to its specimen holdings.

Paratypes: Two preserved specimens at the Australian Museum, Sydney, NSW, Australia, specimen numbers: R.9291 and R9292 from Government Station Ysabel (AKA Santa Isabel), Solomon Islands (8° 23' S, 159° 48' E).

Diagnosis: *Corucia elfakhariorum sp. nov.* is diagnosed and separated from others in the genus by the following unique suite of characters: The dorsal colouration in adults is generally plain and unmarked save for a scattering of darker (single scale) spots, these also being only semidistinct. There is no patterning anywhere, save for a faded blotch-like patterning on the dorsal upper body, which is easily overlooked. Legs are either unmarked, or sometimes punctuated by a small number of dark or black single scale spots on each limb, the number never being more than 3 on any limb. The underside is an off-white colour. The iris is yellowish-green, as is the head, but the head often fades to become greyish-brown in adults. The lower labials and chin shields are characterised by a peppering of dark, over a lighter, whitish background. Similar peppering is also found on the upper surface of the head which is darkish in colour and otherwise unmarked.

The species *C. zebrata* Gray, 1855 is separated from others in the genus by the following unique suite of characters: Greenish to greenish-orange iris; Lighter scales on the limbs forming distinct bands. Most of the tail lacks any distinctive markings except for the anterior which has lighter scales arranged to give thin, jagged light cross bands across a brownish-grey background. There is significant lightening towards the snout including the upper labials which are a light yellowish colour. There are distinct dark and light markings on the rear of the head corresponding to dark etchings and whitish centres of the major head shields. The venter is usually an indistinct pattern of lighter and darker greyish brown.

The species *C. alfredschmidti* (Köhler, 1997) is separated from others in the genus by the following unique suite of characters: A dark yellow iris. Limbs and tail are greyish in colour but with irregular dark spots being composed of individual scales. It has

a distinctive green colouration on the head (sometimes yellowish green), including the underside, which is punctuated by small irregular blackish blotches. The venter is whitish, sometimes with faint irregular markings.

The species *C. woolfi* sp. nov. is in many respects similar to *C. alfredschmidti* (Köhler, 1997) as described below, but is separated that species and from others in the genus by the following unique suite of characters: Yellow head, yellow iris, lighter blotches down the flanks forming indistinct and broken longitudinal stripes, irregular black dots formed by single scales on the limbs. Unlike *C. alfredschmidti* (Köhler, 1997) *C. woolfi* sp. nov. does not have a dorsal body pattern including large blackish spots caused by one or more blackened scales. *C. woolfi* sp. nov., *C. hoseræ* sp. nov. and *C. zebrata* Gray, 1855 are all characterised by a dorsal surface with small black flecks only configured in an irregular pattern. The venter of *C. woolfi* sp. nov. is usually a light and indistinct pattern of lighter and darker yellowish white.

The species *C. hoseræ* sp. nov. is separated from others in the genus by the following unique suite of characters: Generally greyish in colour dorsally, including on the limbs and tail, which have no significant distinct markings. The upper body is covered with an indistinct pattern, but with a scattering of indistinct black flecks. The head is generally a plain greyish colour with irregular scattered indistinct darker markings. The iris is a greenish colour, sometimes slightly yellowish near the centre. The venter may or may not be patterned but is usually a light greyish colour.

The colour of the sclera of the eye appears to vary within a given population, being either black or white (including in populations of *C. alfredschmidti*) and so is not treated as diagnostic for one or other species.

The genus *Corucia* is defined and separated from all other skinks as follows: Large wedge-shaped head, distinct from the robust body, limbs are well-developed and with strong claws. The tail is slender and prehensile. The lower eyelid is scaly. The frontonasal is the largest head shield. No supranasals.

Prefrontals are in contact or narrowly separated and if so, by a small median scale. Parietals are widely separated, bordered by one or more pairs of enlarged temporals. Nuchals are usually enlarged. Frontoparietals are distinct.

Head shields are commonly generally irregular and vary from one individual to the next. 35-40 mid-body scale rows, 19-22 lamellae under the fourth toe.

Distribution: The islands Ngela (AKA Nggela) and the Florida Islands group, Choiseul and Santa Isabel, including immediately adjacent islets in the Solomon Islands.

Etymology: Named in honour of three brothers, Moses, Akram and Danny El-Fakhari of Northcote, Victoria, Australia in recognition of their significant logistical contributions to herpetology spanning some decades, reconstruction of Lebanon after the civil war that ended around 1990 and a many years involvement in public service through their taxi-cab business in Melbourne, Victoria, Australia, which involves carting inebriated people home in taxi-cabs so that they do not drive home drunk and kill other innocent people.

NOTES ON THE DESCRIPTIONS FOR ANY POTENTIAL REVISORS

Unless mandated by the rules of the *International Code of Zoological Nomenclature*, none of the spellings of the newly proposed names should be altered in any way. Should one or more newly named taxa be merged by later authors to be treated as a single species, the order of priority of retention of names should be as follows: *hoseræ*; *woolfi*; *elfakhariorum*, which is the order (page priority) of the descriptions within this text.

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CONFLICT OF INTEREST

The author has no known conflicts of interest in terms of this paper and conclusions within.

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