



<http://dx.doi.org/10.11646/zootaxa.3827.1.5>

<http://zoobank.org/urn:lsid:zoobank.org:pub:85E4ACA7-6C9A-4748-9983-AAF01EC66717>

A new *Gehyra* (Gekkonidae: Reptilia) from New Guinea with unique caudal scalation

PHILLIP L. SKIPWITH^{1,3} & PAUL M. OLIVER²

¹Museum of Vertebrate Zoology, University of California, Berkeley, 3101 Valley Life Sciences Building, Berkeley, CA 94720, USA

²Department of Zoology, University of Melbourne, Parkville, Victoria 3052, Australia, and Department of Sciences, GPO Box 666, Museum Victoria, Melbourne, Victoria, Australia

³Corresponding author. E-mail: pskipwith@berkeley.edu

Abstract

We describe a new species of gekkonid gecko in the genus *Gehyra* from West Papua, Indonesia. *Gehyra serraticauda* **sp. nov.** keys to *Gehyra*, but is distinct from all known species; most notably, it is characterised by a continuous fringe of prominent acuminate lateral scales running the length of the tail, a feature shared with none of its congeners. Its robust body, intermediate size, numerous internasals, partially divided digital scancers, and the presence of well-developed popliteal folds further distinguish it from other Papuan *Gehyra*. The holotype of *Gehyra serraticauda* **sp. nov.** is of uncertain provenance, with the type locality listed as Fakfak, Onin Peninsula. However, the recent observation of a potential conspecific from Kaimana, Triton Bay supports the presence of this species in the region.

Key words: Gekkonidae, Reptilia

Introduction

The Australasian region is home to numerous endemic squamate radiations, including several independent radiations of gekkotan lizards (Gamble *et al.* 2012). *Gehyra* is one of the most diverse Australasian gecko radiations, with forty-one species distributed across Southeast Asia, Australia, and Polynesia (Heinicke *et al.* 2011). The genus probably originated in the Asian or Pacific region, but reaches its greatest species diversity in Australia (Doughty *et al.* 2012; Heinicke *et al.* 2011; Sistrom *et al.* 2012). Phylogenetic and morphological analyses continue to identify previously unrecognised *Gehyra* from across Australasia and Oceania (Flecks *et al.* 2012; Heinicke *et al.* 2011; Oliver *et al.* 2010).

The New Guinea region is another centre of diversity for *Gehyra* - with seven nominal indigenous species (*G. baliola* Duméril, *G. barea* Kopstein, *G. intersitalis* Oudemans, *G. lampei* Andersson, *G. leopoldi* Brongersma, *G. membranacruralis* King & Horner, *G. papuana* Meyer) and one human commensal (*G. mutilata* Wiegmann) (King & Horner 1989; Oliver *et al.* 2010; Rösler *et al.* 2005). Many of these species have received little or no taxonomic attention since their original description; several key types have been lost, and the specific distinctness of two species is in doubt (Bauer & Henle 1994; Brongersma 1934). Due to the poor state of Melanesian *Gehyra* taxonomy, large series in museum collections either cannot be confidently identified, or have been misidentified.

As part of an ongoing project to better understand the diversity of Melanesian *Gehyra*, we are examining material held in museums in Australia, Europe, Indonesia and North America. In the course of this work, we noted a very distinctive specimen in the Museum of Comparative Zoology (MCZ R7314) collected by Antwerp Edgar Pratt from the Fakfak area of western New Guinea (Fig. 1). This specimen clearly differs from all other recognised *Gehyra* in terms of scalation, digital anatomy, and caudal morphology. More recently Dr. Dmitry Telnov captured and photographed a very similar animal in the region around Triton Bay, just over 100 kilometers east of Fakfak. On the basis of the distinctive morphology of these geckos we herein describe a new species.

Methods

The following measurements were taken to the nearest 0.1 mm: snout-vent length (SVL), trunk length from the axilla to the groin (TrK), width of the head at the widest point (HW), head length from snout tip to anterior margin of tympanic opening (HL), depth of head at deepest point (HD), distance from the posterior edge of the nares to the anterior corner of the eye (EN), distance between orbits (IORB), post-mental scale length (POM), forearm length from elbow to palm (FA), crus length from knee to heel (CS), transverse eye diameter (EYE), and transverse ear diameter (EAR). We also measured post-vent tail length (TL), but most specimens had partially regenerated or missing tails, making reliable comparisons based on this character difficult.

We counted internasals between the supranasals (both total number (IN) and number in transverse series (INT)), total number of enlarged supra (SUPR) and infralabials (INFR) (those more than twice size of surrounding scales), number of expanded lamellae under the left fourth finger and fourth toe (LAMF4, LAMT4), and total number of pre-cloacal pores.

We examined comparative material in the Australian Museum (AMS), California Academy of Sciences (CAS), Museum of Comparative Zoology Harvard (MCZ), Museum of Vertebrate Zoology UC Berkeley (MVZ), Museum Zoologicum Bogoriense Indonesia (MZB), National Museum of Natural History Washington DC (NMNH), National Museum of Victoria (NMV), Northern Territory Museum and Art Gallery (NTM), Rijksmuseum van Natuurlijke Historie (RMNH), and South Australian Museum (SAMA). Detailed photographs of the type of *Gehyra lampei* (MWNH 690) were generously provided by Fritz Geller-Grimm (Museum Weisbaden) and further comparisons were made using primary literature (Andersson 1913; Brongersma 1930, 1934; King & Horner 1989).

Results

Systematics

Gehyra Gray

Gehyra serraticauda sp. nov.

(Figs 1–3)

Holotype. MCZ R7314, adult male, purchased from Antwerp Edgar Pratt and with collection locality recorded as Fakfak, Onin Peninsula (~2°55'S, 132°18'E), West Papua Province, Indonesia. Date of original collection unknown, but lodged in the MCZ collection in 1909.

Additional material. Uncollected specimen, from near Kamaka (formerly Warika) Village, 45 km SSE of Kaimana, Triton Bay, (03°46'14"S, 134°10'14"E), West Papua Province, Indonesia, 150–160 m a.s.l., collected, photographed and released by Dmitry Telnov, 10 September 2010.

Diagnosis. *Gehyra serraticauda* is distinguished from other *Gehyra* species by the following suite of characters: moderately large size (91 mm SVL), prominent popliteal fold on the hindlimbs, high number of digital lamellae (finger IV = 16, toe IV = 17), distal lamellae deeply notched, rostral concave, supranasals small and widely separated by numerous small internasals, preanal pores arranged in a long single continuous chevron (36), and original tail strongly compressed dorsoventrally and adorned with a continuous series of acuminate scales on the lateral edges.

Comparisons. A summary of comparative data for Melanesian *Gehyra* is given in Table 1. The combination of moderately large body size (> 90 mm) and distinctive acuminate lateral scales on the tail distinguish this species from all other *Gehyra*.

Gehyra serraticauda sp. nov. specifically differs from *Gehyra mutilata*, *G. papuana* and the types of *G. lampei* and *G. interstitialis* in having very distinct lateral caudal serrations (*versus* minute or none), a much larger adult size (> 90 mm *versus* < 70 mm), and a higher number of internasal scales (~10 *versus* < 4). Based on the original description of *G. interstitialis* (actual types lost), *Gehyra serraticauda* sp. nov. further differs in having a notched rostral (*versus* quadrangular) and U-shaped mental (*versus* triangular). *Gehyra leopoldi* is a poorly known taxon that may be synonymous with *G. mutilata* (Bauer & Henle 1994); it is distinguished from *G. serraticauda* sp. nov.

by its much smaller size (44 mm), lower number of subdigital lamellae (always <9 *versus* usually >9 (exceptions being finger I and toe I)), and presence of only a single internasal in a dorsal concavity of the rostral.

TABLE 1. Comparison of key diagnostic characters for nominal *Gehyra* from New Guinea.

	<i>G. serraticauda</i>	<i>G. barea</i>	<i>G. baliola</i>	<i>G. interstitialis</i>
SVL mean (min-max)	91	96.7 (88.1–105.2)	88.2 (65.0–105.0)	61
Rostral	deeply notched	deeply notched	deeply notched	?
Lamellae	partially divided	partially divided	partially divided	divided
Tail Shape	strongly flattened	slightly flattened	slightly flattened	round
Tail serrations	pronounced	absent	absent	absent
Pores	36	28–33	28–34	50
Popliteal skin fold	present	present	present	?

TABLE 1. (Continued)

	<i>G. lampei</i>	<i>G. membranacrusis</i>	<i>G. mutilata</i>	<i>G. papuana</i>
SVL mean (min-max)	60	110 (52.0–131.0)	46.6 (32.5–67.6)	70
Rostral	slightly notched	slightly notched	slightly notched	slightly notched
Lamellae	divided	undivided	divided	divided
Tail Shape	slightly flattened	round	slightly flattened	slightly flattened
Tail serrations	?	absent	minute	minute
Pores	33	32–44	14–26	37
Popliteal skin fold	present	present	present	present

Gehyra serraticauda **sp. nov.** is similar in size to *G. baliola*, *G. barea* and *G. oceanica*, but again differs in having well developed tail serrations. It is further differentiated from *G. oceanica* by having deeply notched lamellae (*versus* shallowly notched and undivided), the presence of numerous small internasal scales (*versus* absent), enlarged subcaudals (*versus* small), and the presence of a prominent popliteal skinfold (*versus* absent). *Gehyra serraticauda* **sp. nov.** can be distinguished from a final large species of Papuan *Gehyra*, *G. membranacrusis* by its deeply notched subdigital lamellae (*versus* shallowly notched and undivided) and smaller and more numerous internasals (~10 *versus* 1–4).

Gehyra serraticauda **sp. nov.** differs from *Gehyra marginata* Boulenger from the Maluku Islands of Indonesia (just west of New Guinea) in its smaller adult size (< 130mm *versus* > 130 mm), divided digital lamellae (*versus* undivided), lower number of lamellae (digit IV manus = 17 *versus* 20–25, digit IV pes = 17 *versus* 20–23), by the presence of many small internasals (*versus* a single large internasal), well developed popliteal skin folds only (*versus* well developed lateral skin folds on the trunk and both antecubital and popliteal skin folds), and having enlarged polygonal subcaudals (*versus* small and relatively uniform).

Two other gekkonid genera occurring in the Pacific region may also have flattened tails with lateral serrations. The three species of *Perochirus* from Micronesia and Vanuatu have dorso-ventrally flattened tails with very distinct lateral spines; but differ from all *Gehyra* in the presence of a well developed claw and free phalanx on the inner toe (*versus* vestigial or absent), and further differ from *G. serraticauda* **sp. nov.** specifically in lacking popliteal folds and having much more widely spaced lateral spines (one per tail segment) (Zug 2013). *Hemidactylus* includes a number of species that have tail serrations and expanded digital pads, but can again be readily distinguished by the presence of a distinct claw on all digits (greatly reduced on the inner toe in *Gehyra serraticauda* **sp. nov.**), and are also generally somewhat smaller than *G. serraticauda* **sp. nov.**

Description of holotype.— Adult male with expressed postcloacal pores and large flap of loosely attached skin on the right side of the head (Figs. 1a–b): SVL 91.0 mm; TrK 46.3 mm; HW 17.1 mm; HL 21.8 mm; HD 10.8 mm; EN 7.6; IORB 8.6 mm; POM 2.9 mm; FA 12.3 mm; CS 13.3 mm; EYE 5.8 mm; EAR 2.1 mm; TL(total) 83.0; TL(original) 65.0; IN 10; INT 5; SUPR 13; INFR 11; LAMF4 17; LAMT4 17.

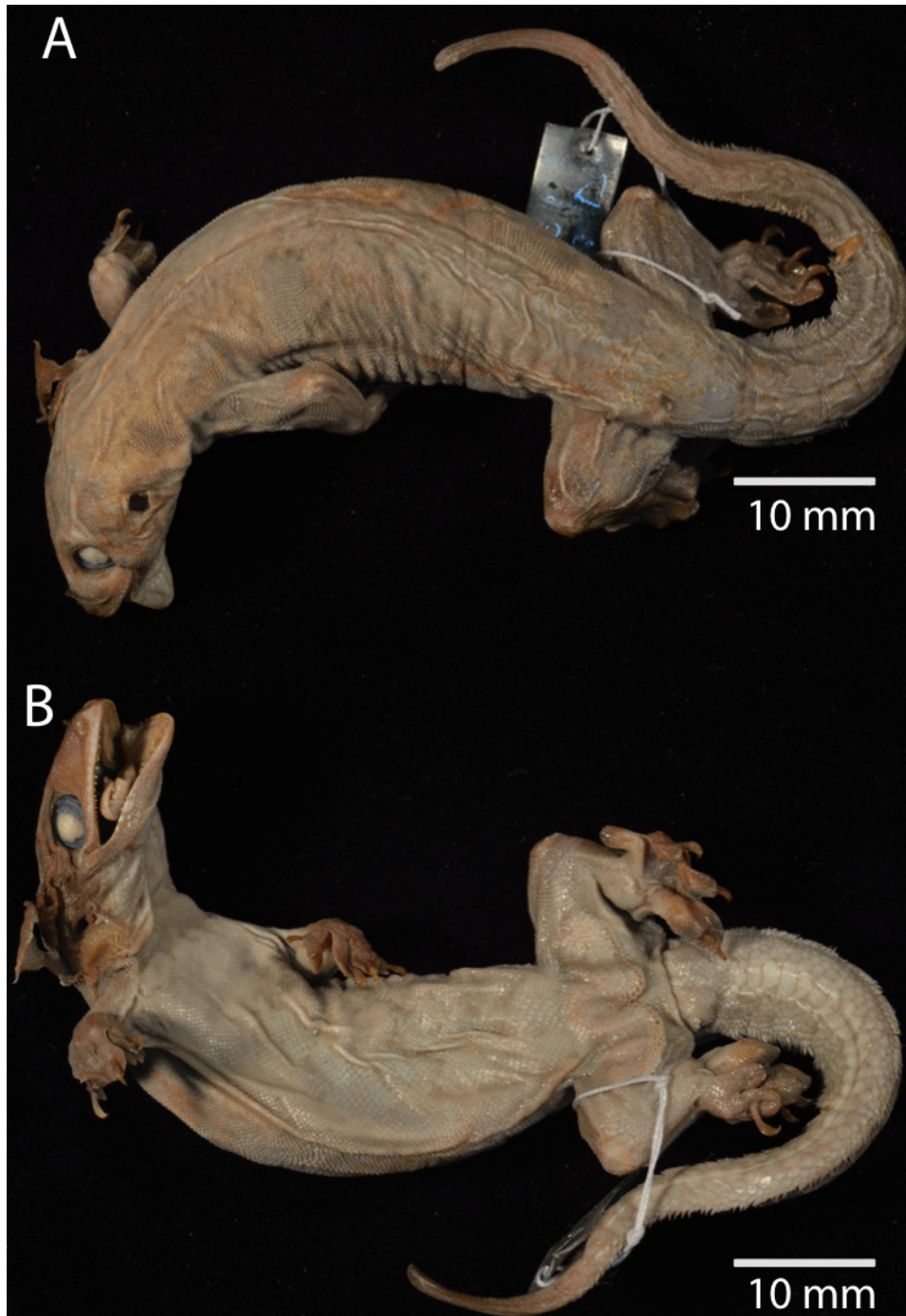


FIGURE 1. Holotype of *Gehyra serraticauda* sp. nov. (MCZ R7314); A) dorsal view and B) ventral view.

Head triangular, longer than wide ($HW/HL=0.78$) moderately large ($HL/SVL = 0.24$) and deep ($HD/HL = 0.50$); anterior left dentary fractured, posterior corner of jaw upturned. Rostrum long and robust ($EN/HL = 0.35$) with distinct dorsal concavity, transverse fold of skin extends across tip of rostrum. Rostrum with deep dorsal notch, in contact with two supranasals and five small internasals along dorsal edge (Fig. 2c). Supranasals separated by a high number of small internasals ($n = 10$) and up to five in transverse series. Nares contacting one supralabial, rostral, one large supranasal and one large postnasal; supralabials 11–12; infralabials 12. Mental U-shaped, bordered by oblong post-mentals. Pupil partially dilated, somewhat elliptical with smooth margins and limited crenulations (Fig. 2d). Body long and robust ($TrK/SVL = 0.40$), thorax flexed prominently to the left. Skin on dorsum and venter smooth and composed entirely of small, flat, granular scales.

Limbs relatively short and stout. Digits on both the fore and hind limbs with prominent and expanded pads

(finger pads 1.1–1.6 times minimum width of finger, toe pads 1.2–1.5 minimum width of toe) (Fig. 2a–b); penultimate phalanx free and well developed on all digits except finger I and toe I. The scansorial pad of digit I of both manus and pes is narrower relative to length than the other digits. Distal lamellae (excluding penultimate lamellae) deeply notched on fingers and toes, lamellar counts for all digits (total/deeply notched) as follows: fingers I = 11/4, II = 12/5, III = 16/6, IV = 17/7, V = 16/7; toes I = 14/6, II = 16/7, III = 17/8, IV = 17/8, V = 16/7. Basal webbing between digits limited, never reaches first phalangeal joint. Precloacal and femoral pores (n = 36) arranged in a single curved row terminating halfway along the femur (Fig. 2f). Hemipenial bulge present but not pronounced, single row of three short cloacal spurs angled posteriorly on each bulge.

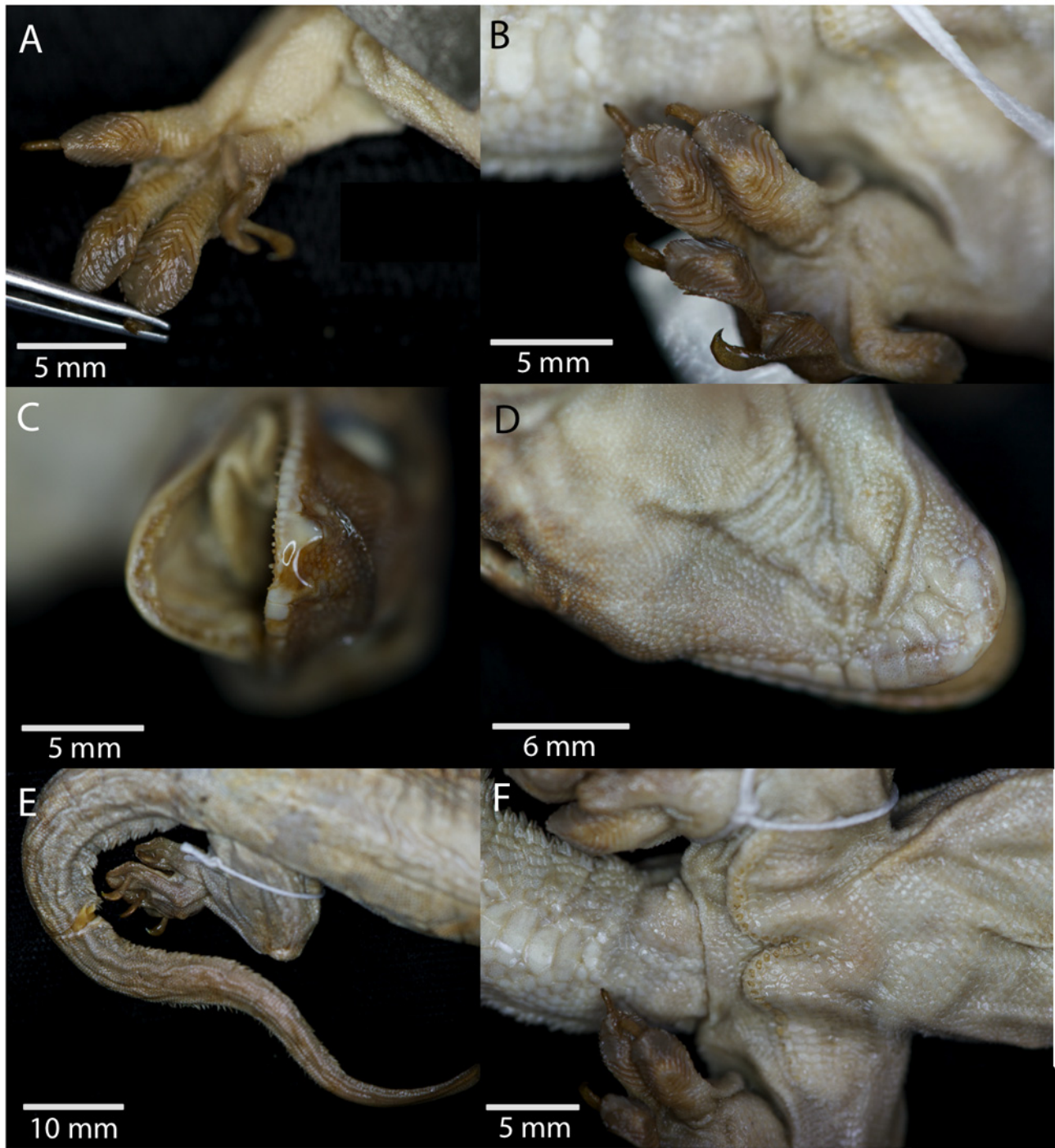


FIGURE 2. Details of holotype of *Gehyra serraticauda* sp. nov. (MCZ R7314); A) subdigital lamellae manus, scale = 5 mm, B) subdigital lamellae pes, scale = 5 mm, C) rostral configuration, scale = 5 mm, D) mental scale configuration, scale = 6 mm, E) acuminate lateral caudal scales, scale = 10 mm, F) pore arrangement, scale = 5 mm.

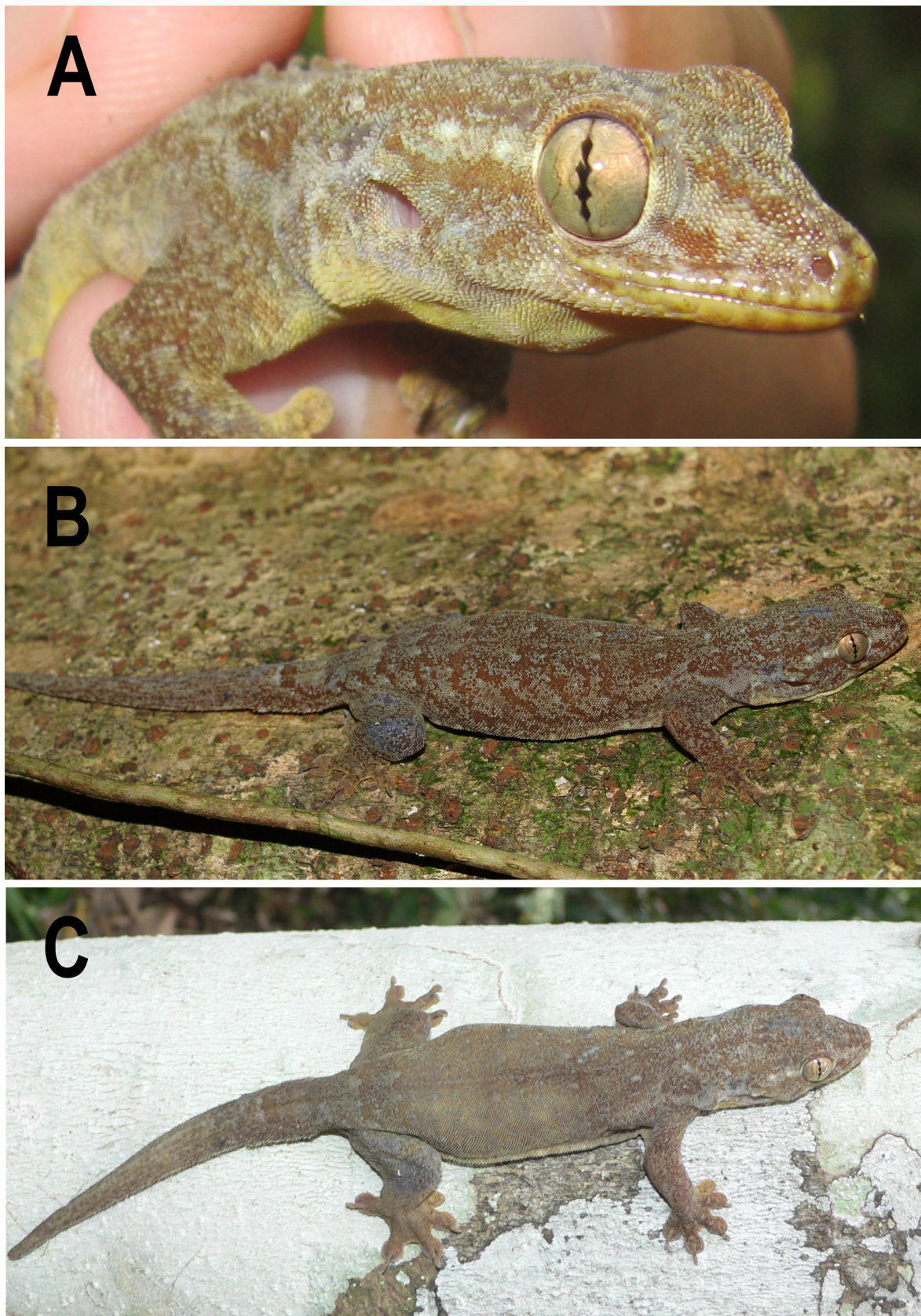


FIGURE 3. Uncollected specimen of *Gehyra serraticauda* sp. nov. from near Kamaka Village, 45 km SSE of Kaimana, Triton Bay, (3°46'14"S, 134°10'14"E), West Papua Province, Indonesia, 150–160 m, collected, photographed and released by Dmitry Telnov, 10 September 2010; A) close up of head, B) whole body shortly after capture, C) whole body shortly before release. Note significant colour change.

Tail strongly compressed dorsoventrally, approximately 1.5 times wider than high, 83.0 mm in total length (65.0 mm original, 18.0 mm regenerated). Original portion partially autotomised 24.0 mm from the vent, with a distinct medial groove on the ventral surface, a single row of greatly enlarged pentagonal subcaudals extending its full length, and a continuous lateral fringe of densely packed acuminate scales extending from just posterior to the hindlimbs to the end of the original tail (Fig. 2e). Scallation on the regenerated section of the tail is substantially smaller and more irregular and heterogeneous than that of the original, although the subcaudals are still relatively enlarged.

In preservative, dorsum beige with irregular dark grey patches on the left shoulder, lateral regions of torso, pelvic area, and distal portion of the tail. Dorsal surface of the hands and feet beige like the dorsum of the body but with a slight reddish tinge, giving an overall darker appearance; lamellae of all digits beige becoming slightly darker distally. Colouration on the regenerated tail light reddish-grey.

Variation. Photographs of the uncollected specimen from near Kamaka Village kindly provided to us by Dmitry Telnov (Fig. 3a–c), specimen details above) show that it has a deeply divided rostral, prominent popliteal folds and acuminate scales on the lateral edges of the original tail. It is on the basis of these characters and its large size (field measured SVL ~120mm) that we assign this individual to the *G. serraticauda* **sp. nov.** When originally captured the colouration of this specimen was as follows; dorsum silvery grey with very extensive terracotta mottling and numerous indistinctly edged transverse bands along the dorsum; fore and hindlimbs predominantly terracotta with no clear pattern but some silvery flecking; head with similar mottled colouration to the body and distinct silvery loreal and postorbital stripes; regrown tail silvery brown with no clear pattern; supralabials, infralabials and region of venter visible in photographs yellow; iris light olive green and pupil elliptical with scalloped edges. In photos taken at a later time prior to release the dorsal colouration is greatly faded and mostly silvery grey with a brownish tinge towards the anterior regions and the only clear patterning being a small number of silvery spots and stripes on the head and neck.

Distribution and ecology. Presuming the collection data for the holotype is accurate; this distribution of this species extends from Fakfak on the Onin Peninsula east as far as the Triton Bay region. Collection information for the holotype indicates that it was purchased from local people, and it thus seems likely that it is from a locality that is within walking distance of Fakfak. However, more fieldwork is required to confirm that this species occurs in this area.

The Triton Bay specimen was collected in primary lowland rainforest on limestone in the environs of Kamaka Village. It was found during the day while hiding under bark on a dead standing tree. Like many *Gehyra* the strong dorsal patterning on this specimen varied over short periods of time (King & Horner 1989). Nothing is known about the collection locality and habitat of the holotype.

Eymology. The specific epithet is a feminine combination of the Latin adjective ‘serratus’ (notched like a saw) and the noun “cauda” (tail), and refers to the distinctive enlarged lateral scales on the tail of this species.

Remarks. The taxonomic status and distribution of many Papuan *Gehyra* remains unclear (a situation exacerbated by low sample sizes for non-human commensal species and the loss and destruction of key types). New material and a proper phylogenetic analysis is required before *G. serraticauda* **sp. nov.** can be confidently placed in the phylogeny of *Gehyra*. However, it is superficially most similar to *G. baliola* and *G. barea* in overall size and proportions, the presence of a high number of scales between the nasals, and deeply notched lamellae. The distribution of this species also sits between the known range of *G. baliola* (southern New Guinea) and *G. barea* (probably widespread over islands just to the west of New Guinea), suggesting possible geographic turnover of ecologically similar and related taxa.

Gehyra, for the most part, is a morphologically conserved taxon and the prominent lateral fringe of acuminate scales on the tail of *G. serraticauda* **sp. nov.** is quite unique (although *Gehyra mutilata* does have a similar, but much less prominent fringe). Many other gekkonids have flattened and or ornamented tails; ranging from prominent lappets (e.g., *Ptychozoon* sp.) to spiniform scales (e.g., *Kolekanos plumicaudus* and *Phelsuma serraticauda*). These structures may serve an array of functions, but are most frequently and most easily correlated with outline disruption and camouflage (Young *et al.* 2002; Heinicke *et al.* 2012).

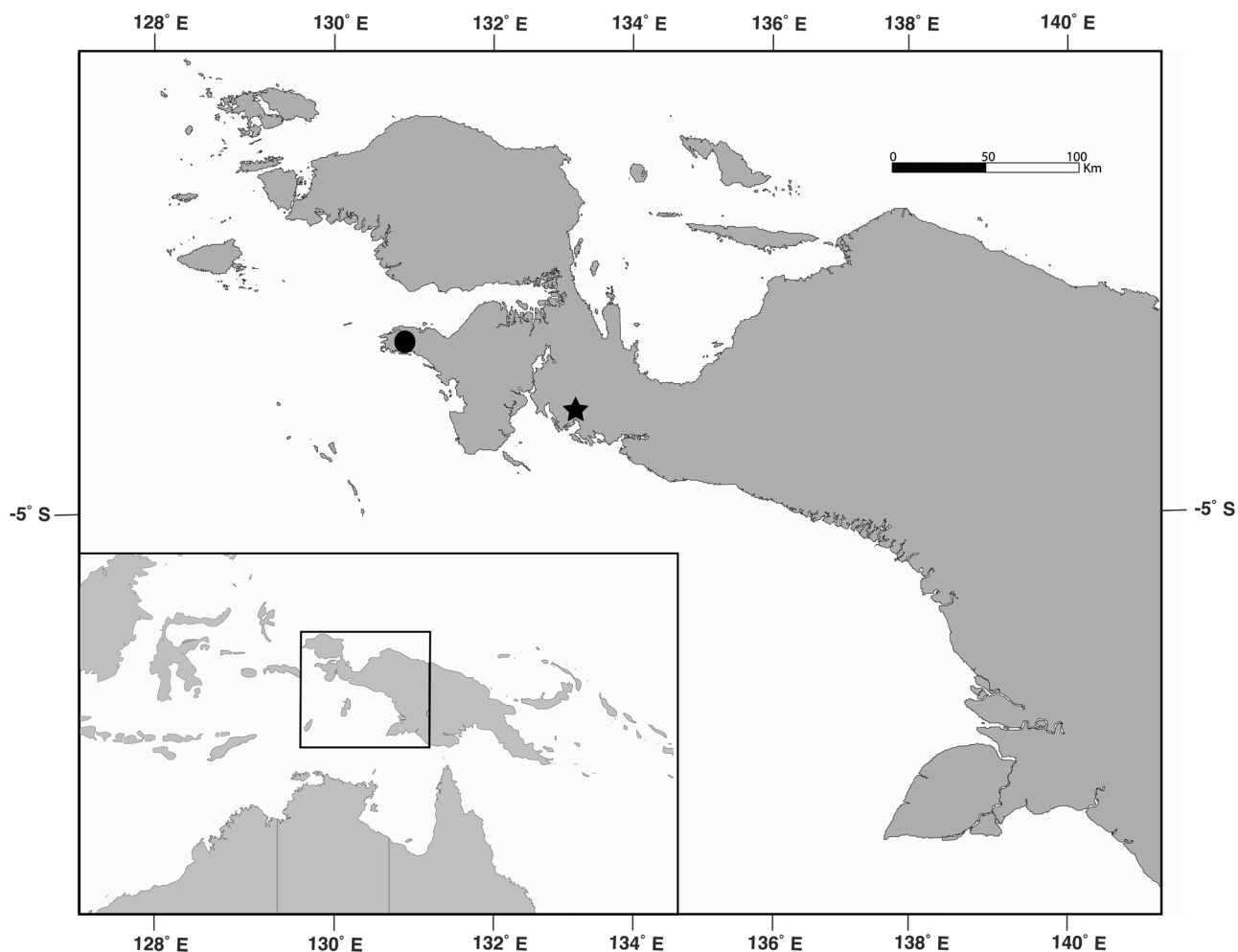


FIGURE 4. Map of western New Guinea showing the location of the township of Fakfak on the Onin Peninsula (black circle) and locality for uncollected specimen photographed by Dimitry Telnov (black star).

Acknowledgements

We thank Dmitry Telnov (the Entomological Society of Latvia, Riga) for kindly providing photographs and locality details for the animal he captured at Triton Bay. We thank Fritz Geller-Grimm for providing photos and information about the types of *G. lampei*, Colin McCarthy who provided photos of the holotype of *G. marginata* and Guillaume Puig for translating the original description of *Gehyra leopoldi*. Ross Sadler (AMS), Hellen Kurniati, Mumpuni (MZB), Jens Vindum (CAS), Mark Hutchinson and Carolyn Kovach (SAMA), José Rosado (MCZ), Jens Vindum (CAS), Carol Spencer (MVZ), Kevin de Queiroz (NMNH), and Jeremy Jacobs (NMNH) kindly provided access to specimens in their care. Paul Oliver was funded by a McKenzie Postdoctoral Fellowship from the University of Melbourne and a grant from the Australian Pacific Science Foundation to Paul Oliver, Stephen Richards, and Mike Lee.

Literature cited

- Andersson, L.G. (1913) On a small collection of reptiles and batrachians from German New Guinea and some other herpetological notes. *Jahrbuecher Des Vereins Fuer Naturkunde Wiesbaden*, 66, 67–79.
- Bauer, A.M. & Henle, K. (1994) *Familia Gekkonidae (Reptilia, Sauria). Part 1. Australia and Oceania*. *Das Tierreich* 109, 309 pp.
- Brongersma, L.D. (1930) Sur un Geckonidae nouveau, *Gehyra leopoldi*. nov. sp. de la Nouvelle Guinée. *Bulletin du Musée*

Royal d'Histoire naturelle de Belgique, 6, 1–3.

- Brongersma, L.D. (1934) Contributions to the Indo-Australian herpetology. *Zoologische Mededelingen Leiden*, 17, 161–251.
- Doughty, P., Palmer, R., Siström, M., Bauer, A. & Donnellan, S. (2012) Two new species of *Gehyra* (Squamata: Gekkonidae) geckos from the north-west Kimberley region of Western Australia. *Records of the Western Australian Museum*, 27, 117–134.
- Flecks, M., Schmitz, A., Böhme, W., Henkel, F.W. & Ineich, I. (2012) A new species of *Gehyra* Gray, 1834 (Squamata, Gekkonidae) from the Loyalty Islands and Vanuatu, and phylogenetic relationships in the genus *Gehyra* in Melanesia. *Zoosystema*, 34, 203–221.
<http://dx.doi.org/10.5252/z2012n2a1>
- Gamble, T., Greenbaum, E., Jackman, T., Russell, A.P. & Bauer, A.M. (2012) Origin and loss of adhesive toe pads in geckos. *PLoS ONE*, 7, e39429.
<http://dx.doi.org/10.1371/journal.pone.0039429>
- Heinicke, M.P., Greenbaum, E., Jackman, T.R. & Bauer, A.M. (2011) Phylogeny of a trans-Wallacean radiation (Squamata, Gekkonidae, *Gehyra*) supports a single early colonization of Australia. *Zoologica Scripta*, 40, 584–602.
<http://dx.doi.org/10.1111/j.1463-6409.2011.00495.x>
- Heinicke, M.P., Greenbaum, E., Jackman, T.R. & Bauer, A.M. (2012) Evolution of gliding in Southeast Asian geckos and other vertebrates is temporally congruent with dipterocarp forest development. *Biology Letters*, 8, 994–997.
<http://dx.doi.org/10.1098/rsbl.2012.0648>
- King, M. & Horner, P. (1989) Karyotypic evolution in *Gehyra* (Gekkonidae: Reptilia). V. A new species from Papua New Guinea and the distribution and morphometrics of *Gehyra oceanica* (Lesson). *Beagle*, 6, 169–178.
- Oliver, P., Siström, M., Tjaturadi, B., Krey, K. & Richards, S. (2010) On the status and relationships of the gecko species *Gehyra barea* Kopstein 1926, with description of new specimens and a range extension. *Zootaxa*, 2354, 45–55.
- Siström, M., Donnellan, S. & Hutchinson, M.N. (2012) Delimiting species in recent radiations with low levels of morphological divergence: A case study in Australian *Gehyra* geckos. *Molecular Phylogenetics and Evolution*, 68, 135–143.
<http://dx.doi.org/10.1016/j.ympev.2013.03.007>
- Young, B.A., Lee, C.E. & Daly, K.M. (2002) On a flap and a foot: aerial locomotion in the “flying” gecko, *Ptychozoon kuhli*. *Journal of Herpetology*, 36, 412–418.
<http://dx.doi.org/10.2307/1566185>
- Zug, G.R. (2013) *Reptiles and Amphibians of the Pacific Islands: A Comprehensive Guide*. University of California Press, Berkeley, California, 306 pp.

APPENDIX 1. Material examined.

Institutional abbreviations are given in materials and methods.

- Gehyra barea*. RMNH 6625 (lectotype, largest specimen in series of three) Teon Island, South Banda Sea, Maluku Province, Indonesia; RMNH 5093 (paralectotype) Serua Island, south Banda Sea, Maluku Province, Indonesia; MZB lace 5438 (Field-number SJR 7719) 'Yakut Camp', Batanta Island, Papua Barat, Indonesia; MZB lace 5364 (Field-number SJR 7786) 'Waibya Camp', northern Salawati Island, Papua Barat, Indonesia.
- Gehyra baliola*. AMS R139399–120402, Fogamaiyu, Southern Highlands Province, PNG; AMS R102404, 120406, Waro, Southern Highlands Province, PNG; SAMA R64844, Gobe Ridge, Southern Highlands Province, PNG; CAS 121968–9 Boze, Western Province, PNG; CAS 126667, 126671–2 Matkomrae, Western Province, PNG; MCZ139425 Emiti, Bamu River, Western Province, Papua New Guinea; MCZ22905 Merauke, Papua Province, Indonesia.
- Gehyra georgopotthasti*. NMV D02058, D02059, D03244 Vanuatu.
- Gehyra lampei*. MWNH 690 (holotype), Bogadjim at Stephansort (German New Guinea), Madang Province, PNG.
- Gehyra marginata*. MZB lace 6062–64 West Halmahera, North Maluku Province; MZB lace 38, Obi, North Maluku Province, Indonesia; NMNH 215815–215817, 215819 Kampung Loleba, Wasile District, Halmahera, Moluccas, Indonesia; NMNH 237587 Kampung Pasir Putih, Jailolo District, Halmahera, Moluccas, Indonesia; NMNH 237638 Kampung Tuguis, Kao District, Halmahera, Moluccas, Indonesia.
- Gehyra membranacuralis*. NTM R13746 (holotype), NTM R13744–45 (paratypes), Port Moresby, PNG; NMNH 518565 Tekedu, 11 km SW of, Ivimka Camp Gulf Province, Papua New Guinea; MCZ124129, Wipim, Western Province, PNG; MCZ140719, MCZ146026 Mawatta, Western Province, PNG; MCZ135505, Waigani Swamp, Western Province, PNG; MCZ136092, Oriomo River, Western Province, PNG.
- Gehyra mutilata*. MVZ 268080, 268082 Tanah-Jampea Island, Sulawesi, Indonesia; MVZ 74897, 74900–7402, Morobe Province, Papua New Guinea; MCZ R153056 Brown River, Central Province, Papua New Guinea; MCZ R123256 Daru, Western Province, Papua New Guinea.
- Gehyra oceanica*. SAMA R04920, SAMA R05178A–B Kunua, Bougainville Province, Papua New Guinea; SAMA R08224A–B, SAMA R08227A–C, SAMA R08231A–B Mutahi, Bougainville Province, PNG; SAMA R08254 Topanas, Bougainville Province, PNG; SAMA R08686–7 Keravat, East New Britain Province, PNG; SAMAR06728 Lagenda

Plantation, Talasea, West New Britain Province, PNG; SAMA R06969 Kandrian, West New Britain Province, PNG; SAMA R60228–9 Wanui Camp, East New Britain Province, PNG; SAMA R56833–4 Barora Faa, Isabel Province, Solomon Islands; SAMA R56886 Kolopakisa, Isabel Province, Solomon Islands; SAMA R56957 Rob Roy Island, Choiseul Province, Solomon Islands; SAMA R57011 Tetepare Island, Western Province, Solomon Islands.

Gehyra vorax. CAS 159429 Navua, Viti Levu, Fiji; CAS 172616, 186243–4 Namosi Province, Viti Levu, Fiji; CAS 186245 Verata, Tailevu, Viti Levu, Fiji.

Perochirus ateles. CAS 251358 Murilo Island, Chuuk State, Federated States of Micronesia; CAS 241397 Weito Island, Chuuk State, Federated States of Micronesia; CAS 241345 Onupuku Island, Chuuk State, Federated States of Micronesia; CAS 206190 Pikepe, Pohnpei, Federated States of Micronesia; CAS 241370 Enekep Island, Chuuk State, Federated States of Micronesia; CAS 251360 East Fayu Island, Chuuk State, Federated States of Micronesia.