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A NEW BENT-TOED GECKO (GENUS *CYRTODACTYLUS*) FROM SOUTHERN PALAWAN ISLAND, PHILIPPINES AND CLARIFICATION OF THE TAXONOMIC STATUS OF *C. ANNULATUS*

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Abstract: We describe a new species of gekkonid lizard from Palawan Island, southwestern Philippines. The new species differs from all Philippine *Cyrtodactylus* and all other phenotypically similar Southeast Asian *Cyrtodactylus* by characteristics of external morphology, color pattern, and body size. The new species is common in low- to mid-elevation primary growth forest and disturbed lowland riparian gallery forests along the southeast coastal foothills of Mt. Mantalingajan, on southern Palawan Island. To complement the description of the new species and enable future taxonomic work, we redescribe *Cyrtodactylus annulatus*, revise its diagnosis, and delineate its geographic range. To clarify the taxonomic status of this species with respect to other Philippine taxa and because the holotype of *C. annulatus* was destroyed in WWII, we designate a neotype for this species.

Key words: *Cyrtodactylus*; Geckos; New species; Palawan; Philippines

Philippine lizards of the family Gekkonidae include 10 genera, consisting of 39 or 40 species: *Gehyra* (1), *Gekko* (11 or 12), *Hemidactylus* (5; including *H. platyurus*, a species formerly assigned to *Cosymbotus*), *Hemiphyllodactylus* (1), *Lepidodactylus* (6), *Luperosaurus* (6), *Ptychozoon* (1), *Pseudogekko* (4), and *Cyrtodactylus* (4), (Brown and Alcala, 1978; Brown et al., 2007, in press *a, b*; Gaulke et al., 2007; Taylor, 1915, 1922*a, b*). A single Mindanao record for *Perochirus ateles* (Duméril, 1856; Boulenger, 1885) has not been confirmed in the last 150 years, but little work has been conducted in Western Mindanao and it is currently impossible to evaluate the status of *P. ateles.*

During the last 15 years there has been a remarkable increase in the numbers of published *Cyrtodactylus* descriptions (Bauer, 2002, 2003; Bauer et al., 2002, 2003; Batuwita and Bahir, 2005; David et al., 2004; Grismer, 2005; Grismer and Leong, 2005; Heidrich et al., 2007; Ngo and Bauer, 2008; Orlov et al., 2007; Pauwels et al., 2004; Quang et al., 2007; Sang et al., 2006; Youmans and Grismer, 2006; Ziegler et al., 2002). Owing to recent discoveries, the number of species of *Cyrtodactylus* has increased to more than 115 described taxa (Hayden et al., 2008; Linkem et al., 2008; TIGR Reptile Database, 2009). Of these, the four species of Philippine *Cyrtodactylus* have been considered to be an unremarkable assemblage from a faunistically depauperate "fringing archipelago" (Brown and Alcala, 1970, 1978). Included are *C. agusanensis*, *C. redimiculus, C. annulatus*, and *C. philippinicus*; the latter two taxa are considered to be "widely distributed" on numerous islands throughout the archipelago (Brown and Alcala, 1978). Because of this arrangement, populations of *Cyrtodactylus* are now routinely referred to *C. annulatus* or *C. philippinicus* on the basis of geography alone.

A comprehensive review of the ranges of morphological variation in the various populations of *Cyrtodactylus annulatus* and *C. philippinicus* is badly needed. Phenotypically similar but evolutionarily distinct suites of cryptic species have been found to be common among groups of amphibians and reptiles that previously have been considered widespread throughout the archipelago (Brown and Guttman, 2002; Brown and Diesmos, 2009; Evans et al., 2003; Gaulke et al., 2007). Brown and Alcala (1978) documented the distributions of *C. annulatus* across several Pleistocene Aggregate Island Complexes (PAICs; Brown and Diesmos, 2002; Inger, 1954; Voris, 2000) including the

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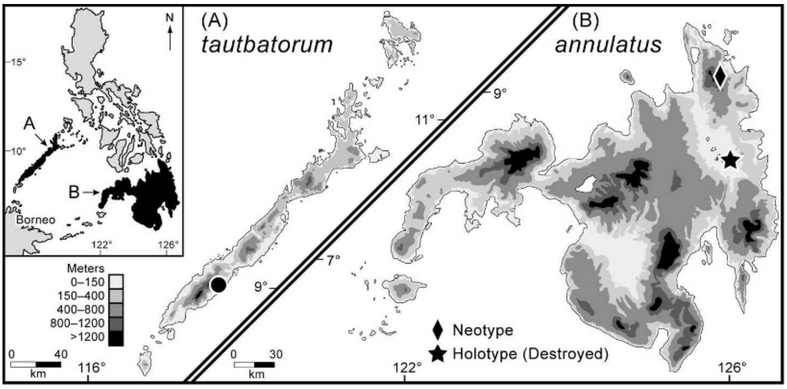

Fig. 1.—Map of the Philippines (inset) with details of Palawan Island (A; *Cyrtodactylus tautbatorum* type locality) and Mindanao Island (B: *C. annulatus* type locality and neotype locality). Elevational contours indicated with incremental shading (key).

Mindanao, Visayan, Sulu, and Palawan island groups. Given that few Philippine endemics defy these regional faunistic boundaries (Brown et al., 2000*a*, 2002, Gaulke et al., 2007; Fig. 1), it is reasonable to scrutinize these isolated populations for evidence of morphological variation that would support the recognition of distinct evolutionary lineages.

Together with biogeographical evidence, morphological data from the Palawan population strongly support the recognition of this population as a distinct evolutionary lineage (i.e., unique species, in accordance with all lineage-based species concepts; de Queiroz, 1998, 1999; Frost and Hillis, 1990; Wiley, 1978). Having collected this taxon on recent surveys to southern Palawan and having examined all available museum specimens, we do not hesitate to describe this unique and distantly allopatric population as a distinct species. We also clarify the status of *Cyrtodactylus annulatus* with respect to the remaining Philippine congeners and designate a neotype for this poorly understood Philippine endemic.

Materials and Methods

We (LJW and CDS) scored data from fluid-preserved specimens deposited in U.S. and Philippine collections (Leviton et al., 1985; Appendix I). Sex was determined by inspection of gonads or by scoring of prominent secondary sexual characteristics (Brown et al., 1997, 2000*b*; Brown, 1999) when dissection was not possible. Measurements (to the nearest 0.1 mm) were taken with digital calipers following character definitions by Brown (1999), Brown et al. (1997, 2007), and Ota and Crombie (1989). Characters include: snout–vent, snout, head, hand, forearm, upper arm, foot, tibia-fibula, femur, and tail lengths; head and tail widths, and heights; eye diameter; eye–naris, internarial, interorbital, eye–ear, and axilla–groin distances; Toes I and IV, and Fingers I and III lengths; scale counts of supralabials and infralabials to the center of the eye and posteriorly to the terminus of differentiation, enlarged circumorbitals anterodorsal to orbit, transverse midbody dorsals and ventrals, paravertebrals between midpoints of limb insertions, pore-bearing precloacals, pore-bearing preanofemorals, postmentals, postcloacal tubercles; subdigital lamellae of fingers and toes; transverse midbody tubercle rows; paravertebral tubercles between midpoints of limb insertions; tail annuli; subcaudals; and number of transverse bands in the axilla–groin region. Characters scored for right side of body, unless otherwise noted.

Species Description

Cyrtodactylus **tautbatorum** *sp. nov.*
(Figs. 2, 3)

Holotype.—PNM 9507 (field no. RMB 7724), an adult male, hemipenes everted (a portion of the liver preserved separately in 95% ethanol,

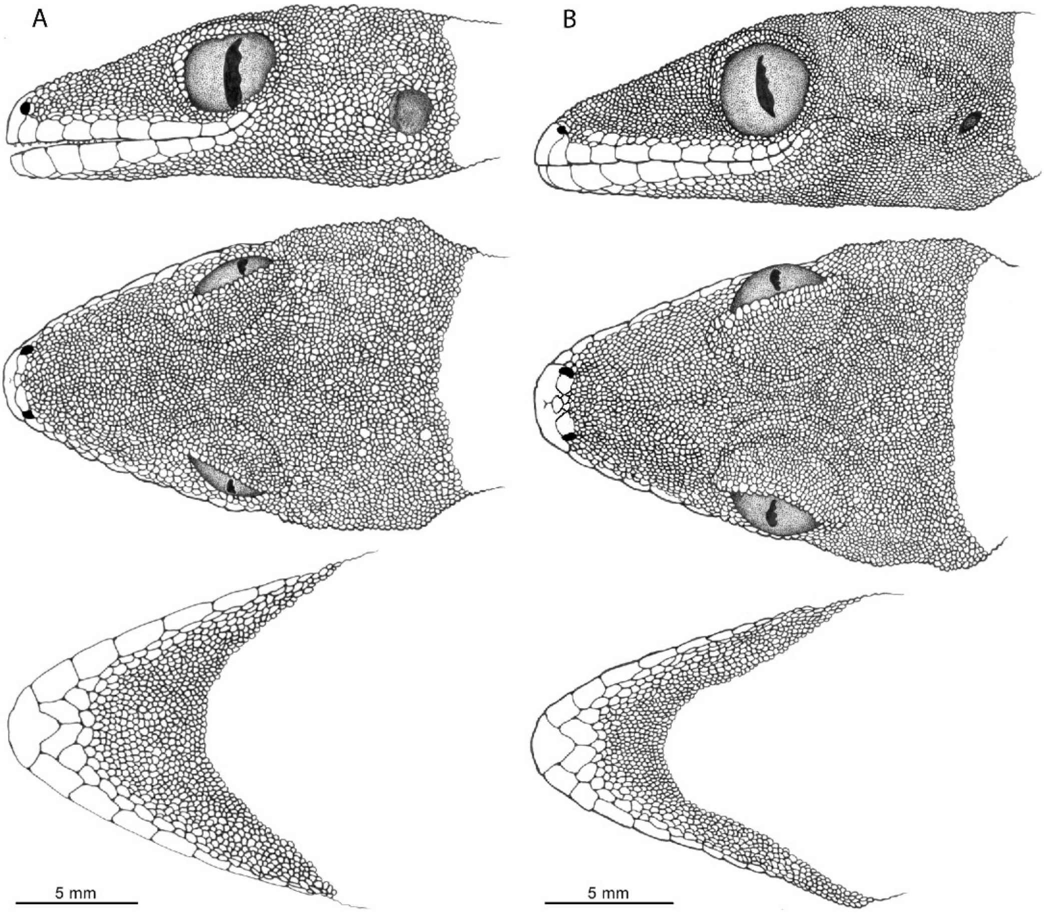

FIG. 2.—Lateral, dorsal, and ventral views of heads of (A) male *Cyrtodactylus tautbatorum* holotype (PNM 9507), and (B) male *C. annulatus* neotype (CAS 133694).

deposited in tissue collection at KU), collected on the roots of a tree overhanging a stream (19:00–22:00h) by RMB and Jason Fernandez in Philippines, Palawan Island, Palawan Province, municipality of Brooke's Point, Barangay Mainit, Mainit Falls (09° 50′ 204″ N, 118° 38′ 497″ E; 106 m), on 24 March 2007.

Paratopotypes.—Four adult males (PNM 9510–13), three adult females (KU 309324–25, PNM 9514), and one juvenile (PNM 9509), same locality and date as holotype; two adult males (KU 309318 and 309322) and five adult females (PNM 9508, KU 309319–21, and 309323), same locality as holotype, collected 23 March 2007; most specimens captured on exposed roots of large trees, overhanging a small stream; two specimens (PNM 9514, KU 309319) collected <1 m from the ground on trunks of small (DBH < 10 cm) saplings adjacent to stream.

Other paratypes.—Twenty-five adult males (MCZ R-163064, 163066, 163068–69, 163071, 163073, 163075–76, 163079–82, 163085, 163087, 163089, 163094, 163097, 163099, 163101, 163105, 163107, 163110, 163112, R-26029–30), 18 adult females (MCZ R-163065, 163067, 163070, 163072, 163077, 163083–84, 163086, 163088, 163090, 163092, 163100, 163102, 163108, 163111, R-26027–28, 26031), and three juveniles (MCZ R-163074, 163103, 163104), collected by E.H. Taylor, September 1923, on Palawan Province, vicinity of Brooke's Point (exact locality and GPS coordinates unknown).

Diagnosis.—*Cyrtodactylus tautbatorum* is readily diagnosed from its phenotypically most

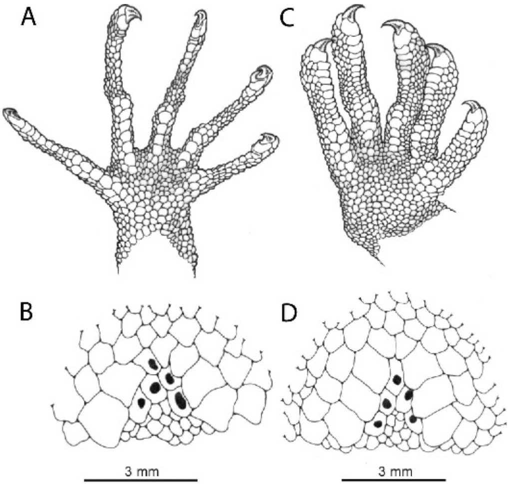

FIG. 3.—Palmar views of hand and ventral views of preanofemoral region of (A, B) *Cyrtodactylus tautbatorum* holotype (PNM 9507), and (C, D) *C. annulatus* neotype (CAS 133694).

similar Philippine congener, *C. annulatus* by the following combination of characters: (1) 4 or 5 "bow-tie" shaped (vs. invariably 3 "barbell" shaped; Fig. 4, 5) transverse body bands between limb insertions; (2) ventrolateral tubercle row highly protuberant (vs. nonprotuberant or absent): (3) contact between the first infralabial and three (vs. two) enlarged postmentals; (4) internasal in contact with supranasals; (5) dorsal trunk tubercles convex (vs. conical or pointed sharply); and (6) smaller body size (Table 1).

The new species is much smaller than *Cyrtodactylus agusanensis,* and further differs from this species by having of a precloacal groove, the internasal in contact with supranasals, and fewer subdigital lamellae, precloacal pores, midbody tubercle rows, and midbody dorsal scale rows; *C. tautbatorum* also lacks a series of femoral pore-bearing scales, present in *C. agusanensis*. *Cyrtodactylus tautbatorum* is smaller than *C. philippinicus,* from which it can further be distinguished by having the internasal in contact with supranasals, fewer third finger subdigital lamellae, precloacal pores, midbody tubercle rows (Table 1), and "bow tie" shaped (vs. "barbell" shaped) transverse body bands. The new species is also smaller than its only sympatric

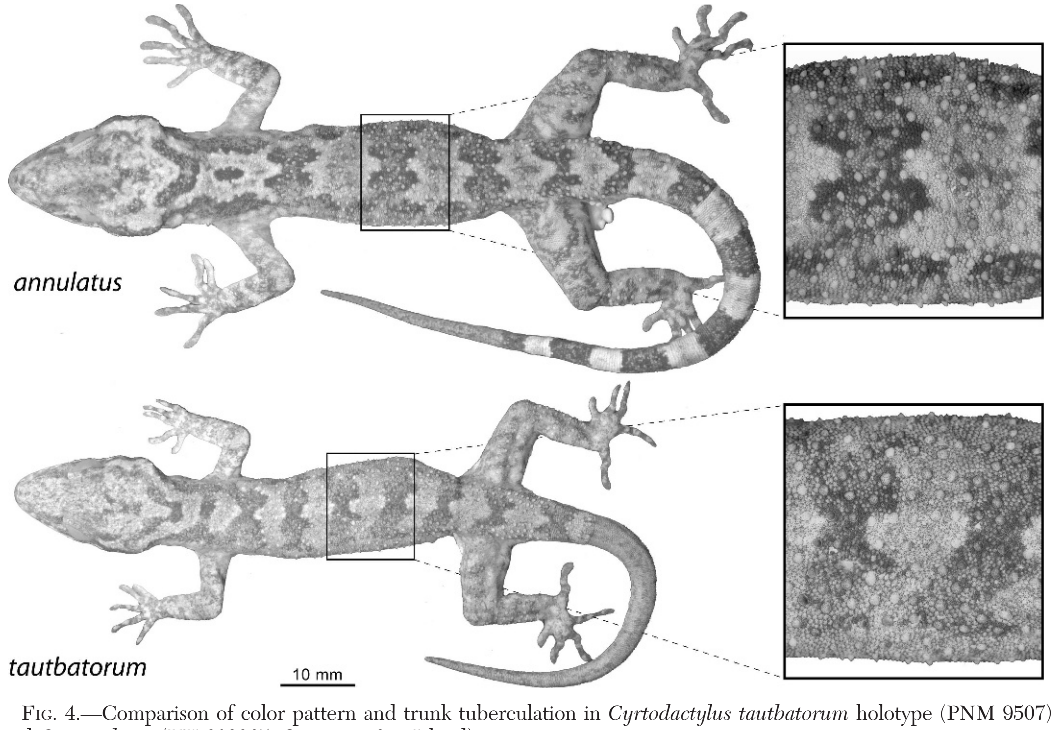

FIG. 4.—Comparison of color pattern and trunk tuberculation in *Cyrtodactylus tautbatorum* holotype (PNM 9507) and *C. annulatus* (KU 309365, Camiguin Sur Island).

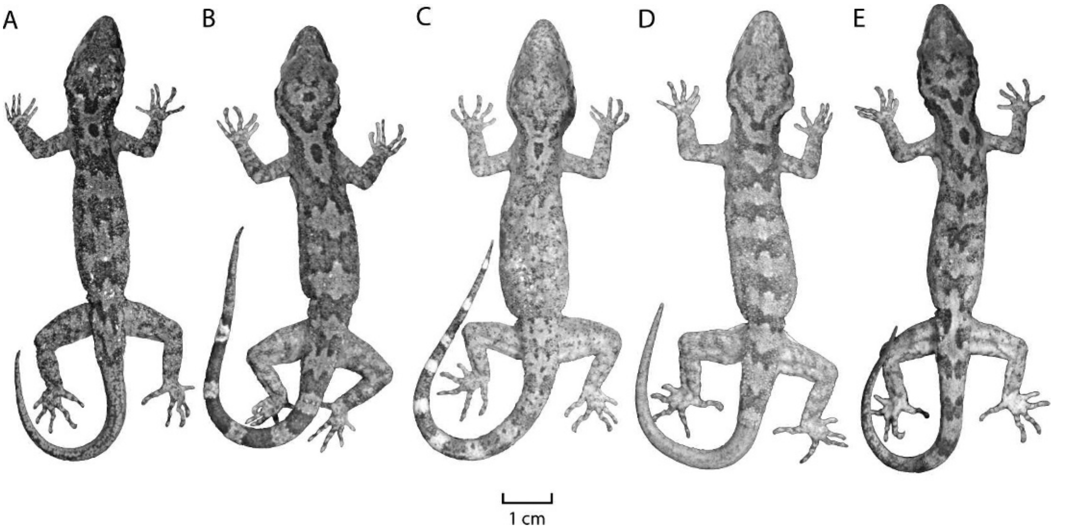

FIG. 5.—Comparison of color pattern in five specimens of *Cyrtodactylus tautbatorum* (KU 309318–9, and 309323–5).

TABLE 1.—Summary of quantitative and qualitative diagnostic characters (present, absent) observed in *Cyrtodactylus tautbatorum*, specimens of other Philippine *Cyrtodactylus* species, and *Cyrtodactylus baluensis*. Sample size for each sex, body size, and general geographical distribution (PAIC = Pleistocene Aggregate Island Complexes, sensu Brown and Diesmos, 2002) are included for reference. See Materials and Methods for character abbreviations.

Range	*tautbatorum* (8m, 8f) Palawan Island	*annulatus* (4m, 6f) Visayan and Mindanao PAIC	*agusanensis* (12m, 4f) Mindanao PAIC	*philippinicus* (21m, 17f) Central and Northern Philippine Islands	*redimiculus* (7m, 3f) Palawan Island	*baluensis* (3m, 3f) Borneo
SVL (m)	47.2–68.7	68.8–79.4	82.3–100.1	70.0–93.6	76.9–90.0	61.5–77.5
SVL (f)	57.8–66.0	59.3–80.5	95.3–96.4	63.15–97.6	86.2–94.2	77.1–87.8
TB	4–5	3	3	3–6	3–4	4–7
MBTR	13–17	14–18	18–21	17–20	13–16	13–18
MBDS	76–93	81–95	93–105	87–125	104–121	82–100
MBVS	46–58	49–60	53–70	40–75	46–54	43–48
PVT	23–28	17–28	19–28	21–31	18–22	19–28
PVS	140–170	124–166	150–185	152–212	190–212	160–185
TL IV	17–21	17–22	23–30	19–26	19–24	20–22
FL III	15–17	15–21	18–26	17–25	17–22	18–19
SUL	6–8	7–10	7–10	6–10	7–11	7–10
IIFL	6–7	7–8	6–8	5–8	6–8	6–7
PS	4–6	6	6–9	7–10	4–6	7–11
Post-cloacal tubercles	1–4	2–4	4–7	2–5	4–6	1–3
Neck banding pattern	V	M	M	M	M	V
Tubercle shape	convex, relatively large	conical, pointed, relatively large	conical, pointed, relatively large	moderately pointed, moderate	convex, relatively large	convex, relatively large
Lateral tubercle row	moderate	minimal or absent	moderate	very distinct	very distinct	moderate
Homogeneous tubercle size	+	+	−	+	−	+
Pre-anal groove	+	+	−	+	−	+
Enlarged femorals	−	−	+, with pores	+, pores absent	+, with pores	+, with pores

congener, *C. redimiculus*, and further differs from this species by having "bow-tie" shaped (vs. wavy) transverse body bands, internasal in contact with supranasals, a precloacal groove, more paravertebral tubercles, fewer third finger subdigital lamellae, and fewer midbody dorsal scale rows. *C. tautbatorum* is also distinguished by the absence of enlarged femoral scales and pores, and the absence of a reticulate (white-on-black) head color pattern. These and other features distinguishing Philippine congeners are summarized in Table 1, whereas characters distinguishing the new species from morphologically similar non-Philippine species are summarized in Table 2.

Description of holotype.—Adult male, snout–vent length 65.0 mm; head moderately long, distinct from neck, 29.0% snout–vent length; head width 66.7%, height 36.8% head length; head triangular and tip of snout rounded in dorsal aspect; snout elongate, 37.3% head length; lores concave; eye diameter 21.8% head length, 81.1% eye–ear distance; auricular opening ovoid, longest axis 9.2% head length.

Dorsal head scalation homogeneous, scales small and granular; superciliaries increasing in size (laterally elongated) anteriorly; rostral triangular, wider than tall, partially devided dorsally by inverted "Y" shaped crease; rostral bordered dorsally by single internasal and supranasals; internasal bordered by rostral and supranasals; internarial distance 1.9 mm; nares bordered by supranasals, rostral, first supralabials, and three postnasals; supralabials and infralabials rectangular, 7/7 to midpoint of eye (9/9 total) and 7/6 to midpoint of eye (10/10 total) respectively; supralabials bordered dorsally by secondary, slightly differentiated row of scales, extending to midpoint of eye; infralabials bordered ventrally by similar secondary row, extending to posterior margin of eye.

Ventral head scalation heterogenous; mental bordered by first infralabials and paired postmentals, with triangular projection posteriorly; 4 differentiated scales posterior to postmentals; gular scales heterogeneous, small and granular, increasing in size and elongating in nuchal region.

Body elongate, axilla–groin distance 41.9% snout–vent length, lacking distinct ventrolateral folds; dorsal scalation granular, heterogeneous, with semi-regular rows of convex tubercles sparsely distributed and increasing in protuberance (from convex to conical to sharply pointed) posteriorly; tubercles in 17 longitudinal midbody and 28 transverse paravertebral tubercle rows; paravertebral scales 165; transverse mid-body dorsal and ventral scales 79 and 52 respectively, between lateral tubercle rows; ventral scales imbricate, 2–3 times larger than dorsals; precloacal scales arranged in 3 chevron-shaped, differentiated transverse rows; posterior row of five scales (2/3) pierced with enlarged pores, surrounding shallow precloacal groove.

Forelimbs slender; forearm and upper arm 13.2% and 8.3% snout–vent length respectively; dorsal scalation heterogeneous; scales larger than ventrals, as well as dorsal head and trunk scales; tubercles absent from upper arm, sparse on forearm, less spinose than posterior dorsal trunk tubercles; ventral scalation homogeneous, lacking tubercles; fingers well developed, Fingers I and III 31.9% and 56.9% forearm length respectively; lamellae enlarged and slightly raised, those proximal to inflection larger than distal lamellae, slight increase in size from inflection to claw (Fig. 3); finger number followed by subdigital lamellae (in parentheses): I (12), II (14), III (16), IV (16), V (14); all fingers clawed; claws well developed, sheathed by single dorsal and ventral scale.

Hind limbs relatively robust, diameter at insertion twice that of forelimb; femur long, 17.9% snout–vent length; dorsal scalation heterogeneous, with tubercles regularly distributed and tuberculation similar to that of posterior dorsal trunk; ventral scalation homogeneous, scales slightly smaller than dorsals, lacking tubercles; enlarged femoral scales (and pores) absent; toes well developed, as on hand, Toes I and IV 22.7% and 68.8% tibia-fibula length respectively; lamellae enlarged and slightly raised, those proximal to inflection larger than distal lamellae, slight increase in size from inflection to claw; toe number followed by subdigital lamellae (in parentheses): I (11), II (16), III (18), IV (19), V (19); all toes clawed; claws well developed, sheathed by single dorsal and ventral scale.

TABLE 2.—Summary of qualitative diagnostic characters (present, absent) in *Cyrtodactylus tautbatorum* and non-Philippine species of *Cyrtodactylus*. Most data for non-Philippine species was taken from Grismer (2005). SVL was rounded to the nearest integer value for simplicity, and missing data are denoted by question marks. Letters in the first row followed by colons represent the following terms: T, tubercle(s); L, lamellae; PF, preanofemoral; and CP, color pattern. Question marks indicate missing data.

Cyrtodactylus species	SVL	T: moderate to strong	T: on forelimbs	T: on hindlimbs	T: on head and/or occiput	T: on at least 1/3 of tail	Ventral scale count	Enlarged median subcaudals	L: broad proximal subdigital	L: Toe IV count	Enlarged femoral scales	Femoral pore count	Precloacal groove	Enlarged precloacal scales	Total precloacal pore count	PF: continuous series	CP (head): reticulated	CP (body): banded	CP (body): blotched	CP (body): striped
tautbatorum	47–69	+	+	+	+	+	46–58	–	+	17–21	–	–	+	+	4–5	–	+	+	–	–
aurensis	92–95	–	–	–	–	–	45–51	+	+	18–23	–	–	+	+	7	–	+	+	–	–
baluensis	62–88	+	+	+	+	–	40–45	+	+	21–23	+	6–9	–	+	7–11	–	+	–	+	–
brevipalmatus	64–73	+	+	+	–	+	35–45	–	+	16–19	+	6–7	–	+	9–10	–	–	–	+	–
cavernicolous	64–81	+	–	+	+	+	51–58	–	+	22–26	–	–	+	+	4	–	+	+	–	–
consobrinus	97–121	+	+	+	+	+	58–65	+	+	23–28	+	1–6	–	+	9–10	–	+	+	–	–
elok	56–68	–	+	+	–	+	44	–	+	18–19	–	–	–	+	8	–	–	–	+	–
fumosus	71–75	+	+	+	+	–	35–40	–	+	20–22	+	42–52	–	+	42–52	+	–	–	+	–
ingeri	65–76	+	+	+	+	+	40–43	+	+	23–27	–	–	–	+	8	–	+	–	+	–
lateralis	85	+	+	+	+	?	60–64	–	+	21–22	?	–	–	–	13	–	–	–	+	–
malayanus	70–73	+	+	+	+	+	58–62	+	+	21–23	+	–	–	+	8–10	–	+	+	–	–
marmoratus	76	+	+	+	+	–	40–50	–	+	23–24	+	3–10	+	+	12–16	–	–	–	+	–
matsuii	105	+	+	+	+	+	51	–	+	22	–	–	–	–	7	–	+	–	+	–
oldhami	63–77	+	+	+	+	+	34–38	+	+	12–17	+	–	–	+	0–4	?	–	–	–	+
pubisulcus	59–74	+	–	+	+	+	43–55	–	+	17–22	–	–	+	+	7–9	–	–	–	+	–
peguensis	85	+	+	+	+	+	29–38	+	+	16–18	–	–	–	+	7–9	–	+	+	–	–
pulchellus	115	+	+	+	+	+	33–35	+	+	19–20	+	4–18	+	+	6–8	+	–	+	–	–
quadrivirgatus	51–71	+	+	+	+	+	34–42	–	+	19–20	+	–	–	+	0–4	–	–	–	–	+
sworderi	63–77	+	+	+	+	?	42–48	–	+	20	+	–	–	+	5–6	–	–	–	+	–
thirakhupti	80	+	+	+	+	–	38	+	+	20–21	+	–	–	+	–	+	+	+	–	–
tiomanensis	84	+	+	+	+	–	36–40	–	+	20–22	+	–	+	+	3–5	–	–	+	–	–
yoshii	75–96	+	+	+	+	+	50–58	–	–	25–30	–	–	–	–	8–12	–	–	–	+	–
seribuatensis	75	+	+	+	+	+	28–39	–	+	19–22	+	42–45	–	+	42–45	+	–	–	+	–

Tail original, length 67.9 mm, tapering abruptly posterior to hemipenal bulge, then gradually to terminus; 5 annuli discernable, posterior to which whorls cannot be distinguished, owing to absence of differentiated scales associated with annuli; tubercles convex, similar to those on trunk, and decreasing in size distally; enlarged medial subcaudal scales absent; 3 enlarged post-cloacal tubercles on either side of cloaca; posterior margin of hemipenal bulge with paired, laterally expanded, post-cloacal glandular openings.

Coloration of holotype in ethanol.—Dorsal base coloration (of neck, body, limbs, and tail) medium gray, with indistinct dark brown speckling; vertebral region of trunk light gray; dark brown transverse bands overlay base coloration dorsally, varying from "V-shaped" in the nuchal region, to a straight transverse bar immediately anterior to forelimb insertion, to "bow-tie" shaped throughout the trunk (Fig. 5); bands on trunk lighter than those in nuchal region, becoming indistinct laterally; head ground color medium brown, fading to gray ground color of body posteriorly; interorbital bar dark brown; supralabials with series of alternating white and dark brown vertical bands; laterally, dark brown bands extend from posterior margin of orbit and connecting with first transverse dorsal band; limbs mottled with indistinct light gray and dark brown; fingers and toes banded dark brown; tail more conspicuously banded than trunk, with regularly shaped cream to white, and dark brown alternating bands throughout.

Ventral portions of head, trunk, and limbs light cream with dark speckling laterally; hands and feet dark gray, contrasting with lighter cream of wrists and ankles; subcaudal coloration gray distally, becoming progressively white proximally; subcaudal ground coloration cream through anterior quarter, dark gray to dark brown bands discernable to terminus. Holotype coloration in life unrecorded.

Variation.—Summaries of univariate morphological variation in the series are presented in Table 3. Except for color variation described below, our paratypes are quite homogeneous in scalation and body size, and agree well with Taylor's 1923 series (data not shown). Two adult males (PNM 9510–11) and one female (PNM 9514) have light brown transverse body bands overlaying light gray ground color, and resemble the holotype. One adult male (KU 309322) has a dark gray ground color and nearly black transverse bands, whereas one adult female (KU 309323) lacks distinct bands on the posterior half of the axilla–groin region, and is irregularly mottled. Two adult males (PNM 9511 and 9513) lack the distinct nuchal spot of holotype, and have an irregular lateral band across the dorsum of the neck. One adult male (PNM 9511) and two adult females (KU 309325 and PNM 9514) lack the distinct labial banding of holotype. A single juvenile (PNM 9509) resembles adult paratypes (PNM 9510–11, 9514), but appears more brightly colored, with distinctly contrasting light and dark color extremes.

Ventral coloration less variable than dorsal; one adult male (KU 309322) and two adult females (PNM 9508 and KU 309323) have increased ventrolateral speckling on the trunks and tails. Distinctive markings are absent on all regenerated tails examined, with regenerated tail coloration resembling that of the trunk ground color with irregular speckling. Comparisons of specimens with field notes suggest that the color and pattern in life has undergone minimal change following preservation. In life, transverse bands on the trunk and tail were purplish gray; the iris was deep brick-red with orange margins surrounding pupil. The precloacal pores were deep orange and the supraciliaries were light tan to light gray.

Distribution and natural history.—The new species is known only from Palawan Island where it was collected at low elevations in the foothills of Mt. Mantalingajan, in riparian habitats (gallery forests) along low- to mid-elevation streams. Given the island's geological history of isolation (Hall, 1998), we do not expect *Cyrtodactylus tautbatorum* to be discovered in the oceanic portions of the Philippines (Brown and Diesmos, 2002; Brown and Guttman, 2002); instead we expect that the new species is restricted to southern Palawan and possibly the adjacent islands to its south (e.g. Balabac). Our series exhibited an equal sex ratio. The large series collected by E. H. Taylor consists of 46 individuals (25

TABLE 3.—Summary of univariate morphological variation among mensural and meristic characters in the type series of *Cyrtodactylus tautbatorum* and *Cyrtodactylus annulatus* from Mindanao Island (including the neotype). Labial scale counts in this table were counted to the center of the eye and bilaterally symmetrical characters are separated into left (l) and right (r) sides of the body. See Materials and Methods for character abbreviations.

	tautbatorum Male (n = 8)	*tautbatorum* Female (n = 8)	*annulatus* Male (n = 4)	*annulatus* Female (n = 6)
SVL	47.2–68.7 (62.8 ± 7.9)	57.8–66.0 (62.2 ± 3.5)	68.8–79.4 (74.1 ± 5.6)	59.3–80.5 (67.3 ± 8.3)
FS III	16–17 (16 ± 0.4)	15–17 (16 ± 0.8)	17–21 (19 ± 1.0)	15–18 (17 ± 1.2)
TS IV	19–20 (19 ± 0.5)	17–21 (19 ±1.7)	20–22 (21 ± 1.0)	17–21 (19 ± 1.5)
Fin1L	2.7–3.1 (2.9 ± 0.2)	2.7–3.0 (2.8 ± 0.1)	3.2–4.1 (3.8 ± 0.4)	2.6–4.0 (3.2 ± 0.6)
Fin3L	4.8–5.0 (4.9 ± 0.1)	4.8–5.0 (4.9 ± 0.1)	4.0–6.2 (5.3 ± 1.1)	4.0–5.9 (5.0 ± 0.8)
Toe1L	2.2–3.3 (2.9 ± 0.5)	2.4–3.0 (2.8 ± 0.3)	3.0–3.9 (3.4 ± 0.4)	2.0–3.8 (3.2 ± 0.7)
Toe4L	6.6–7.4 (7.1 ± 0.3)	6.9–7.6 (7.2 ± 0.3)	6.6–9.7 (8.1 ± 1.4)	5.5–8.7 (7.4 ± 1.2)
SUL (l)	6–8 (7 ± 0.8)	6–8 (7 ± 1.0)	8–10 (9 ± 1.0)	7–10 (9 ± 1.2)
SUL (r)	6–8 (7 ± 0.6)	6–8 (7 ± 1.0)	8–10 (9 ± 1.0)	7–10 (9 ± 0.8)
IFL (l)	6–8 (6 ± 0.8)	6 (6 ± 0.0)	7–8 (7 ± 1.0)	7–8 (8 ± 0.5)
IFL (r)	6–7 (6 ± 0.5)	6 (6 ± 0.0)	7–8 (7 ± 1.0)	7–8 (7 ± 0.5)
CO	23–28 (25 ± 1.7)	24–28 (26 ± 1.8)	28–32 (30 + 1.7)	27–33 (30 ± 2.4)
PS (l)	2–3 (3 ± 0.5)	N/A	0–2 (2 ± 0.5)	N/A
PS (r)	2–3 (2 ± 0.5)	N/A	3	N/A
PStot	4–5 (5 ± 0.4)	N/A	3–5 (4.5 ± 1.0)	N/A
MBDS	79–87 (83 ± 3.4)	76–93 (84 ± 7.7)	87–95 (91 ± 3.7)	81–91 (85 ± 4.0)
MBTR	15–17 (16 ± 0.9)	13–16 (15 ± 1.5)	15–18 (16 ± 1.3)	14–17 (16 ± 1.0)
MBVS	52–58 (54 ± 2.3)	46–56 (51 ± 5.0)	49–54 (51 ± 2.5)	50–60 (53 ± 3.7)
PVS	140–170 (158 ± 13.7)	148–167 (155 ± 8.5)	124–166 (152 ± 18.9)	137–163 (151 ± 12.5)
PVT	23–28 (26 ± 1.8)	23–27 (26 ± 1.9)	17–27 (24 ± 4.7)	21–28 (24 ± 2.4)
END	6.1–6.7 (6.3 ± 0.3)	5.8–6.2 (6.0 ± 0.2)	5.4–7.7 (6.7 ± 1.1)	4.6–7.5 (6.0 ± 1.1)
EED	4.7–5.7 (5.2 ± 0.4)	4.7–5.2 (5.0 ± 0.2)	5.4–6.6 (6.0 ± 0.5)	5.0–6.4 (5.7 ± 0.6)
IOD	3.8–3.3 (3.1 ± 0.2)	2.7–3.2 (2.9 ± 0.2)	2.9–3.9 (3.3 ± 0.5)	2.6–3.4 (2.9 ± 0.3)
SNL	6.9–7.8 (7.3 ± 0.3)	6.3–7.3 (6.8 ± 0.5)	6.5–9.3 (8.2 ± 1.3)	5.5–8.9 (7.0 ± 1.4)
IND	1.9–2.2 (2.1 ± 0.1)	1.9–2.0 (1.9 ± 0.0)	2.2–2.5 (2.4 ± 0.1)	2.1–2.6 (2.3 ± 0.2)
ED	4.0–4.6 (4.3 ± 0.2)	3.6–4.1 (3.9 ± 0.2)	4.3–4.8 (4.6 ± 0.2)	3.6–5.2 (4.3 ± 0.6)
UAL	7.6–9.2 (8.2 ± 0.6)	6.9–9.0 (8.0 ± 0.9)	6.2–9.6 (7.9 ± 1.5)	5.1–10.4 (7.4 ± 2.2)
FAL	8.2–8.9 (8.5 ± 0.3)	8.1–8.5 (8.3 ± 0.2)	8.6–11.1 (10.1 ± 1.2)	7.6–11.5 (9.4 ± 1.4)
FL	10.4–11.9 (11.2 ± 0.7)	9.9–11.9 (11.0 ± 0.8)	11.4–13.3 (12.6 ± 0.9)	9.0–13.6 (11.6 ± 1.7)
TFL	9.5–10.7 (9.9 ± 0.5)	9.0–10.0 (9.4 ± 0.4)	10.2–13.0 (11.4 ± 1.3)	9.5–13.1 (10.7 ± 1.4)
HL	6.7–7.4 (7.0 ± 0.3)	6.5–7.3 (6.9 ± 0.4)	7.2–10.9 (8.9 ± 1.8)	5.4–8.6 (7.3 ± 1.2)
FoL	8.6–9.5 (9.2 ± 0.4)	8.8–9.4 (9.1 ± 0.2)	10.2–12.1 (11.2 ± 0.9)	7.6–11.3 (9.4 ± 1.5)
AGD	27.3–30.9 (29.2 ± 1.2)	24.6–31.2 (27.5 ± 2.7)	26.3–35.0 (31.6 ± 4.1)	26.0–36.8 (29.9 ± 4.5)
TB	3–4 (4 ± 0.4)	4–5 (4 ± 0.5)	3	3–4 (3 ± 0.4)
PCS	2–4 (3 ± 0.5)	1–3 (2 ± 1.0)	2–4 (3 ± 1.2)	2–4 (3 ± 1.0)
PM	4–6 (6 ± 0.8)	4–6 (6 ± 1.0)	8–10 (9 ± 1.0)	6–11 (8 ± 1.9)

males, 18 females [8 gravid at the time of preservation], and 3 juveniles) that were collected in a few days during September 1923 in the general vicinity of Brooke's Point. Because the species is extremely common and abundant in highly disturbed habitat at the type locality and surrounding areas, we suspect that it is probably not severely threatened by forest disturbance as long as some natural vegetation is maintained in riparian habitats at low elevation on southern Palawan.

Other gekkonids from Palawan include *Cyrtodactylus redimiculus*, *Gekko palawanensis*, *G. monarchus*, *G. athymus*, *G. gecko*, *Hemidactylus frenatus*, *H. platyurus*, *Gehyra mutilata*, *Hemiphyllodactylus typus*, and *Luperosaurus palawanensis*. An additional new species of *Luperosaurus* has recently been collected at high elevation on Mt. Mantalingajan (Brown et al., in press *b*).

Etymology.—The specific epithet *tautbatorum* is chosen in recognition of the Tau't-Bato peoples of the Singnapan Basin volcano crater, western Mt. Mantalingajan, southern Palawan Island. The Tau't-Bato ("People of the Rock") possess a highly distinct cultural identity that celebrates fierce protection of their natural resources, respect for the forest, and appreciation of forest animals.

Designation of a Neotype for *Cyrtodactylus annulatus*

In the absence of an existing holotype (Taylor's holotype for *Cyrtodactylus annulatus* [Philippine Bureau of Science No. R 1686–7, collected July 1913] was destroyed in WWII), and in accordance with article No. 75 of the International Code of Zoological Nomenclature (ICZN, 1979), we consider the designation of a neotype specimen desirable. Accordingly, we choose an adult male specimen from as close to the original type locality as possible. Well-preserved adult specimens from Taylor's (1915) type locality (Bunawan, Agusan del Sur Province, Mindanao) are unavailable in museum collections, but MCZ collections contain specimens from the Diwata Mountains to the northeast (Fig. 1). This is the closest locality for which true *C. annulatus* specimens are available. The neotype is an adult male, collected as part of a series of both sexes, all of which clearly demonstrate the salient diagnostic characters. The Diwata Mountains sample agrees with Taylor's (1915) holotype description, is well preserved, and is in excellent condition. Lastly, this action has the added benefit of restricting the (neo) type locality to a definite, easily accessible location where a known population of *C. annulatus* can be found and studied further.

Cyrtodactylus annulatus *(Taylor, 1915)*
Figs. 2, 4

Neotype.—CAS 133694, an adult male, collected by A. C. Alcala in Agusan del Norte Province, west side of Mt. Hilonghilong (520 m), Mindanao Island, Philippines, on 26 May, 1971.

Referred specimens.—See Appendix.

Diagnosis.—*Cyrtodactylus annulatus* is larger than, and readily diagnosable from its phenotypically most similar Philippine congener, *C. tautbatorum*, by having three "barbell" shaped (vs. 4 or 5 "bow-tie" shaped; Fig. 4) transverse body bands between limb insertions, contact between the first infralabial and two (vs. 3) enlarged postmentals, internasals comprised of single anterior and two posterior scales (versus single internasal), single internasal not contacting supralabials, ventrolateral tubercle row non-protuberant or absent (vs. highly protuberant), and dorsal trunk tubercles conical or sharply pointed (vs. convex and rounded; Table 1). *Cyrtodactylus annulatus* is smaller than *C. agusanensis*, and further differs from this species by having a precloacal groove, invariably six precloacal pores (vs. 6–9), and fewer post-cloacal tubercles and midbody dorsal scales. *Cyrtodactylus annulatus* also lacks femoral pore-bearing scales and pores (present in *C. agusanensis*; Table 1). It is smaller than *C. philippinicus*, from which it can further be distinguished by the invariable presence of three (vs. 3–6) transverse bands, fewer precloacal pores, and a reduced or absent (vs. protuberant) ventrolateral tubercle row. *Cyrtodactylus annulatus* is diagnosed from *C. redimiculus* by having a precloacal groove, near-consistent dorsal body tuberculation (vs. reduced tuberculation on anterior trunk, nuchal region, and head of *C. redimiculus*), a reduced or absent (vs. protuberant) ventrolateral tubercle row, and fewer midbody dorsal scales and paravertebral scales. *Cyrtodactylus annulatus* is further distinguished from *C. redimiculus* by the absence of a reticulate head color pattern. These and other differences between congeners are summarized in Tables 1 and 2.

Description of neotype.—Adult male, snout–vent length 68.3 mm; head moderately long, distinct from neck, 28.1% snout–vent length; head width 67%, height 38.4% head length; head triangular and tip of snout rounded in dorsal aspect; snout elongate, 39.3% head length; lores flat; eye diameter 22.2% head length, 84.0 % eye–ear distance; auricular opening inverted tear-shape, longer (vertical) axis 7.2% head length.

Dorsal head scalation homogeneous, scales small and granular; superciliaries increasing in size (laterally elongated and approximately triangular) anteriorly; rostral rectangular, wider than tall, bordered by large anterior internasal, two smaller posterior internasals, supralabials, and supranasals; anterior internasal not in contact with supranasals; internarial distance 1.9 mm; nares bordered by rostral, supranasals, first supralabials, and two (left) and three (right) postnasals; supralabials and infralabials rectangular and decreasing in size posteriorly, 9/9 to midpoint of eye (12/13 total) and 8/8 to beneath midpoint of eye

(13/12 total) respectively; supralabials bordered dorsally by secondary, slightly differentiated row of scales, extending to midpoint of eye; infralabials bordered ventrally by similar secondary row, extending to anterior margin of eye.

Ventral head scalation heterogenous; mental bordered by first infralabials, paired postmentals, with triangular projection posteriorly; six differentiated scales posterior to postmentals; gular scales heterogeneous, small and granular, increasing in size and elongating in nuchal region.

Body elongate, axilla–groin distance 38.3% snout–vent length, lacking distinct ventrolateral folds; dorsal scalation granular, heterogeneous, with semi-regular rows of round, slightly convex, moderately distributed tubercles; 16 longitudinal midbody and 17 transverse paravertebral tubercle rows; paravertebral scales 124; transverse mid-body dorsal and ventral scales 95 and 52 respectively, between lateral tubercle rows; ventral scales imbricate, 2–3 times larger than dorsals; precloacal scales in 4 chevron-shaped, differentiated transverse rows; posterior row of six scales (3 per side) pierced with enlarged pores, surrounding moderately depressed precloacal groove.

Forelimbs slender; forearm and upper arm 12.3% and 8.5 % snout–vent length respectively; dorsal scalation heterogeneous, scales larger than ventrals, as well as dorsal head and trunk scales; tubercles absent from upper arm, sparse on forearm; ventral scalation homogeneous, lacking tubercles; fingers well developed, Fingers I and III 30.5% and 56.9% forearm length respectively; lamellae enlarged and slightly raised, those proximal to inflection larger than distal lamellae, slight increase in size from inflection to claw (Fig. 3); finger number followed by subdigital lamellae (in parentheses): I (12), II (15), III (18), IV (18), V (15); all fingers clawed; claws well developed, sheathed by single dorsal and ventral scale.

Hind limbs relatively robust, diameter at insertion more than twice that of forelimb; femur long, 16.5% snout–vent length; dorsal scalation heterogenous, with tubercles regularly distributed and tuberculation similar to that of dorsal trunk; ventral scalation homogeneous, scales slightly smaller than dorsals, lacking tubercles; enlarged femoral scales (and pores) absent; toes well developed, as on hand, Toes I and IV 23.0% and 68.0% tibia length respectively; lamellae enlarged and slightly raised, proximal to inflection larger than distal lamellae, slight increase in size from inflection to claw; toe number followed by subdigital lamellae (in parentheses): I (13), II (17), III (20), IV (20), V (17); all toes clawed; claws well developed, sheathed by single dorsal and ventral scale.

Tail original, length 75.6 mm, tapering abruptly posterior to hemipenal bulge, then gradually to terminus; six annuli discernable, posterior to which whorls cannot be distinguished, owing to the absence of differentiated scales associated with annuli; tubercles conical to sharply pointed, similar to those on trunk, and decreasing in size distally and laterally; one enlarged post-cloacal tubercle on either side of cloaca; posterior margin of hemipenal bulge with paired, post-cloacal glandular openings.

Coloration of neotype in ethanol.—Dorsal base coloration (of neck, body, limbs, and tail) light brown to gray, with indistinct dark gray speckling; vertebral region of trunk with dark brown transverse bands, varying from "V"-shaped in the nuchal region, to a distinct oval spot immediately anterior to forelimb insertions, to barbell shaped throughout the trunk; head ground color medium gray with dark brown, indistinct blotches; laterally, dark brown bands extend from posterior margin of orbit to auricular opening; snout and labial regions without distinguishing markings; limbs with irregular, dark brown bands; fingers and toes banded dark brown; ground color of distal two-thirds of tail light cream, with dark gray to black bands, and with greater contrast than body.

Ventral portions of head, trunk, and limbs light tan; subcaudal region light brown anteriorly, becoming speckled medially, with darker brown banding posteriorly; hands and feet dark gray, contrasting with light gray of wrists and ankles; subcaudal coloration light brown to light gray; dark brown to black bands discernable along the terminal third of the tail. Neotype coloration in life unrecorded.

Variation.—Summaries of univariate morphological variation in the series are presented in Table 3. Our sample consists of representatives from multiple populations, allowing for some consideration of geographic variation in color. One adult male, two adult females, and seven juveniles (KU 305567–70, CAS 125082, 139048, 28009, 28037–38, and 28010) from Cebu Island have light gray ground color with dense speckling between dark transverse trunk bands; limb banding is more distinct in one juvenile (KU 305570) and an adult male (KU 305567), whereas banding is faded and less distinct in an adult female from Ponson Island (CAS 125082).

Seven males and six females from the Cotobato Coast samples (western Mindanao Island), have distinctive, transverse, barbell-shaped dorsal bands; two females (MCZ 162951–52) completely lack transverse dorsal bands and have patterning in the nuchal region, from completely absent (MCZ 26011, 25012, and 26016), to small, dark, partial bands (MCZ 26010), to a single dark spot (MCZ 162947–48, and 26013–15).

Distribution and natural history.—Cyrtodactylus annulatus, as currently recognized, is a widespread species known from throughout the Visayan and Mindanao Pleistocene Aggregate Island Complexes (PAICs; Brown and Diesmos, 2002). It has been recorded from the islands of Cebu, Ponson, and Pacijan (Cebu Province), Inampulugan (Iloilo Province), Mindanao (Agusan Del Norte, Davao City, Sultan Kudarat, South Cotobato, and Zamboanga del Norte provinces), Camiguin Sur (Camiguin Province), Bohol (Bohol Province), Siquijor (Siquijor Province), and Leyte (Leyte and Southern Leyte provinces). Populations from Jolo (Sulu Province) Basilan (Basilan Province) and the southern tip of the Zamboanga peninsula (Zamboanga City Province) are referable to another species (L. Welton, C. D. Siler, A. Diesmos, and R. Brown, unpublished data). *Cyrtodactylus annulatus* is abundant at many localities, suggesting that it is not threatened by forest disturbance as long as some natural vegetation is preserved in riparian habitats.

Discussion

The description of *Cyrtodactylus tautbatorum* brings the total number of endemic Philippine *Cyrtodactylus* species to five. This is certain to be an underestimate of the total species diversity of the archipelago. The combination of new discoveries of morphologically distinct taxa, plus enumeration of cryptic species continues to elucidate underappreciated gekkonid diversity throughout the Philippines (Brown et al., 2007, 2008, in press, *a,b*; Roesler et al., 2006). The results of another study (L. Welton, C. D. Siler, A. Diesmos, and R. Brown, unpublished data) strongly support our conclusions and demonstrate that *C. tautbatorum* is genetically distinct and highly divergent from *C. annulatus* throughout the range of the latter species.

In addition to the suspected presence of numerous endemics inhabiting currently unsurveyed deep-water islands, full appreciation of Philippine *Cyrtodactylus* diversity may only be realized by careful attention to the widespread species *C. annulatus* and *C. philippinicus*. In the case of *C. annulatus*, remaining populations referred to this species span two PAICs (Visayan, and Mindanao and Sulu geologic platforms) and conservatively, may be expected to represent two or three evolutionary lineages (Brown and Diesmos, 2002; Gaulke et al., 2007; L. Welton, C. D. Siler, A. Diesmos, and R. Brown, unpublished data). However, we do not advocate the recognition of additional taxa until the full distribution of these suspected lineages has been documented (with additional field survey work) and additional specimens have been assessed for diagnostic morphological and genetic differences. *Cyrtodactylus philippinicus*, more significantly, has a range encompassing most of the Philippines (Brown and Alcala, 1978); this widespread taxon may also harbor cryptic species. Thorough studies of both genetic and morphological data (C. Siler, J. Oaks, J. Esselstyn, A. Diesmos, and R. Brown, unpublished data) will be necessary to resolve the taxonomic status of both species fully.

As with the remainder of the Philippines, the island of Palawan requires additional survey work before species diversity can be understood with reasonable certainty. Continued faunal survey efforts are badly needed on small islands near mainland Palawan, especially to the south where the near complete lack of biodiversity surveys hampers conservation efforts. Contrary to expectations, surveys conducted on small, land-bridge islands, continually turn up startling and unexpected new species discoveries (Brown and Alcala, 1978; Brown and Alcala, 2000; Brown et al., 2008, in press *a, b*; Taylor, 1922*a*).

We encourage field workers to survey varieties of habitat types when surveying for gekkonid diversity in the Philippines. In our experience, gekkonids often have highly specific microhabitat preferences. In addition to forests, non-forested areas, riparian corridors, and lowland and montane regions, field workers should target limestone karsts and caves. These habitats are patchily distributed and, as such, promote evolutionary divergence (Brown and Alcala, 2000). Karsts are also increasingly under threat from overexploitation by humans (Clements et al., 2006) and numerous cave and limestone species of *Cyrtodactylus* recently have been described from the Asian mainland (Bauer et al., 2002; Hoang et al., 2007; Ngo, 2008; Ngo et al., 2008; Pauwels et al., 2004). The large islands of Mindanao, Palawan, and Luzon all possess distinct upland geological components (isolated mountain ranges) now separated by extensive low elevation expanses. We expect that badly needed comprehensive herpetological surveys of the large islands of the Philippines will show fine-scale differentiation and the presence of numerous montane endemics (Brown et al., 2000*a*, 2002, 2007, in press; Gaulke et al., 2006).

Finally, as biodiversity studies on Palawan accumulate, the simplistic view of Palawan Island as a mere faunal extension of northern Borneo (Heaney, 1985; Esselstyn et al., 2004) will likely require reevaluation. All available phylogenetic studies involving endemic amphibians and reptiles of Palawan (Brown and Diesmos, 2000; Brown and Guttman, 2002; Evans et al., 2003; McGuire and Kiew, 2001) have demonstrated affinities to taxa from the truly oceanic portions of the Philippines (Brown and Diesmos, 2002; 2009; Brown et al., 2009*b*). The clear phenotypic similarity of *C. tautbatorum* to oceanic Philippine taxa (*C. annulatus*), plus genetic data (L. Welton, C. Siler, A. Diesmos, and R. Brown, unpublished data) indicate clearly that the new species is more closely related to Philippine taxa than it is to Bornean taxa. Thus, *Cyrtodactylus tautbatorum* is yet another lineage that fails to fit the generalization of Palawan as a mere biogeographic peninsula of northern Borneo. Comparative studies of the phylogenetic relationships of multiple vertebrate groups on Palawan will be required to determine the extent of faunistic admixture on this unique and imperiled island (Brown and Diesmos, 2009; Quinnell and Balmford, 1988; Widmann, 1998).

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Appendix I

Additional Specimens Examined

Numbers in parentheses indicate the number of specimens examined per species. ***Cyrtodactylus agusanensis***.—(17) LEYTE ISLAND: Leyte Province: *Municipality of Baybay*: Barangay Pilim, San Vicente: KU 309336–46; MINDANAO ISLAND: Agusan del Norte Province: Tagibo River, S side Mt. Hilonghilong: CAS-SU 133424–26; Tagibo and Dayadayan rivers, S side Mt. Hiloghilong: CAS-SU 133506; DINAGAT ISLAND: Surigao del Norte Province: *Municipality of Loreto*: Barangay Esparanza: KU 305564–65; SAMAR ISLAND: Eastern Samar Province: *Municipality of Taft*: Barangay San Rafael, Taft Forest: KU 305566. ***Cyrtodactylus annulatus***.—(37) CAMIGUIN SUR ISLAND: Camiguin Province: *Municipality of Mambagao*: Barangay Pandan, Sitio Pamahawan: KU 309363–66; CEBU ISLAND: Cebu Province: *Municipality of Alcoy*: "Nug-As" Area, CBCF Field Station: KU 305567–70; PONSON ISLAND: Cebu Province: 2 km SW of Pilar Town: CAS 125082; San Isidro area: CAS-SU 131982; Minglanilla area: CAS-SU 139048; *Municipality of Cebu City*: Taptap Barrio: CAS-SU 142063; INAMPULUGAN ISLAND: Iloilo Province: ca. 8 km West Pulupandan Town: CAS-SU 28009–10, 28036–38; MINDANAO ISLAND: Sultan Kudarat or South Cotobato Province: "Tatayan to Saub, Cotobato coast:" MCZ R-26009–16, and R-162947–52; Agusan del Norte Province: W. side Mt. Hilonghilong: CAS-SU 133556–57, 133574, 133694; *Municipality of Bunawan* (type locality): MCZ R-20102 and R-20104, and KU 314944–46. ***Cyrtodactylus baluensis***.—(6) MALAYSIA:

BORNEO ISLAND: *Sabah*: Lahad Datu District: FMNH 246203, 246205, 230090, and 246204; Tenom District: FMNH 243734 and 243746. ***Cyrtodactylus philippinicus*.**—(35) BOHOL ISLAND: BOHOL PROVINCE: just outside Raja Sikatuna National Park: PNM 9544; CATANDUANES ISLAND: CATANDUANES PROVINCE: *Municipality of Gigmoto*: Barangay San Pedro: KU 308141; LUZON ISLAND: ALBAY PROVINCE: *Municipality of Malinao*: Barangay Tagoytoy, Sitio Kumangingking, Mt. Malinao: PNM 9550, 9551; *Municipality of Tiwi*: Barangay Banhaw, Sitio Purok 7, Mt. Malinao: PNM 9548, 9549; SORSOGON PROVINCE: *Municipality of Irosin*: Barangay San Roque, Mt. Bulusan, ridge above Lake Bulusan: PNM 9552; QUEZON PROVINCE: *Municipality of Atimonan*: Barangay Malinao Ilaya, Quezon National Park: PNM 9553 and 9554; ZAMBALES PROVINCE: *Municipality of Ilongapo*: Ilanin Forest, "Nav-Mag" area, SBMA Naval Base: PNM 9555; NEGROS ISLAND: Negros Oriental PROVINCE: *Municipality of Valencia*: Mt. Talinis: PNM 9547; SIBUYAN ISLAND: ROMBLON PROVINCE: *Municipality of Magdiwang*: Barangay Tampayan, edge of Guiting-Guiting National Park: PNM 9554; MINDORO ISLAND: Mindoro Occidental PROVINCE: *Municiplity of Sablayan*: Barangay Batong Buhay, Mt. Siburan: KU 303866, 303870, 303873–75, 303879, 303881–83, 303886, 303888–89, 303891–94, 303896, 303898, and 305425; POLILLO ISLAND: QUEZON PROVINCE: *Municipality of Polillo*: Barangay Pinaglubayan: KU 307452; "PHILIPPINES": PNM 9556–58. ***Cyrtodactylus redimiculus*.**—(21) PALAWAN ISLAND: PALAWAN PROVINCE: *Municipality of Brooke's Point*: Barangay Samariñana, Mt. Mantalingajan, 900m: KU 309526–30; Mt. Mantalingajan, 1200 m: KU 309342, 309347–61. ***Cyrtodactylus tautbatorum*.**—(63) See holotype, paratypes, and referred specimens sections for this species.