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A new gecko of the genus *Tarentola* (Squamata: Gekkonidae) from Eastern Cuba

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Abstract

A new, diminutive, and cryptic species of the genus *Tarentola* (*T. crombiei* **sp. n.**) is described from the arid south coast of Granma, Santiago de Cuba, and Guantánamo provinces in eastern Cuba. Specimens of this species have been in collections for nearly 100 years but its close resemblance to sympatric *Tarentola americana* delayed its detection. It differs from that species in body size, scalation, clutch size, and molecular phylogeny.

Key words: Caribbean, Cryptic species, Lizard, Reptile, Squamata, West Indies

Introduction

The genus *Tarentola* comprises 19 species, and northern Africa is the center of diversity. In the New World, *Tarentola* only occurs in the West Indies (Schwartz, 1968; Schwartz and Henderson, 1991). *Tarentola americana* Gray (1831) is endemic to Cuba (*Tarentola a. americana*), and the Bahamas (*T. a. warreni*). The largest (and probably extinct) member of the genus, *T. albertschwartzi*, was recently described from Jamaica (Sprackland and Swinney, 1998); the only known specimen was discovered in the collection of the National Museums of Scotland. *Tarentola americana* was placed in a different subgenus (*Neotarentola*) by Joger (1984), and the degree of genetic divergence from the Old World lineages also supported that placement (Carranza *et al*. 2000, Weiss and Hedges, 2007).

In March, 1987, S.B.H. found unusually small, sexually mature individuals of the normally large species *Tarentola americana* on the U.S. Naval Base at Guantánamo Bay in southeastern Cuba. In the following year, Ronald Crombie also collected specimens of the small form on the Naval Base and observed that there were associated differences in scalation between it and *T. americana*. In 1990, on a joint expedition of the National Museum of Natural History (Havana), University of Havana, and Pennsylvania State University, S.B.H. and others encountered the small form at several localities west of the Naval Station: Loma Redonda and 3.9 km N. Hatibonico, Guantánamo Province, and the south side of Laguna Baconao, Santiago de Cuba Province. Subsequently, in 2001 and later, L.M.D. and others encountered the small form at those and nearby localities, and at an additional locality to the east (Río Jauco, Maisí) in the arid coastal zone of southeastern Cuba. L.M.D. and S.B.H. also discovered additional specimens in museum collections dating back to the early twentieth Century, including some which originally were noted as being unusually small (Barbour and Ramsden, 1919). Morphological comparisons, ecological observations, and molecular data (Weiss and Hedges, 2007) provided evidence that those small specimens belong to an undescribed species. Here, we describe these differences and name the new species.

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Material and methods

Measurements were taken with calipers (precision of 0.05 mm). Specimens examined for comparisons are listed in Appendix I. Head length was measured from the tip of snout to the anterior margin of the ear. The eye-naris distance was measured from the posterior margin of the naris to the anterior border of the ocular orbit. Head width is defined as the widest part of the head (usually at the level of the temporal region). Fourth toe dorsal rows of scales were counted transversally on the middle of the digital expansion. Tubercles and ventral scales in the axilla-groin distance were counted paramedially. For interorbital scales we are not including the supraciliary scales; only scales between orbits in a medial point, which differs from Schwartz (1968). Other measurements and counts (supralabial scales, infralabials, transversal rows of ventral scales and enlarged dorsal tubercles, postmental scales, and subdigital lamellae) follow Schwartz (1968).

Line drawings were made from digital pictures of live specimens, using the program Corel Draw 12. Codes for measurements and institutional collections: SVL, snout-vent length; MNHNCu, Museo Nacional de Historia Natural de Cuba; CZACC, Instituto de Ecología y Sistemática, Ciudad de La Habana; CTR, Herpetological Collection of Charles T. Ramsden (in the Instituto de Ecología y Sistemática, Ciudad de La Habana); MCZ, Museum of Comparative Zoology, Harvard University; MFP, Museo Felipe Poey, Universidad de La Habana; MNHN, Muséum National d'Histoire Naturelle, Paris, France; ZMB, Museum für Naturkunde, Humboldt-Universität, Berlin, Germany; USNM, U.S. National Museum of Natural History.

Tarentola crombiei, new species

Fig. 1A, 2A

Holotype. MNHNCu 4624, an adult male from La Mesa de Leo Prada (20º05′11″N, 074º20′42″W), a marine terrace at the W side of the mouth of Río Jauco, Maisí, Guantánamo, collected by Luis M. Díaz on August 4 of 2005.

Paratypes (n=55). **Males (21)**: MNHNCu 4626–28 with same data as the holotype; MNHNCu 4638–42, and 4664, from Siboney, Reserva Ecológica Siboney-Juticí (19º57′40″N, 075º42′59″W), Santiago de Cuba, collected by Luis M. Díaz and Antonio Cádiz on April 19–22 of 2007; MNHNCu 4647, same locality, but collected on June 20 of 2007; CRT 976, 978, 979, 984, 985, 987, and 988, from Puerto Escondido, east of Guantánamo harbor, Guantánamo province, collected by Charles T. Ramsden in June of 1914; USNM 335759–760, peak of John Paul Jones Hill, U.S. Naval Base, Guantánamo Bay, collected on 19 March 1987 by S. Blair Hedges, Carla A. Hass, and George Zustak; USNM 315882, 315884, John Paul Jones Hill, U.S. Naval Base, Guantánamo Bay, collected in 1988 by Ronald I. Crombie, Linda Gordon, and George Zustak. **Females (26)**: MNHNCu 4625, from Reserva Ecológica de Hatibonico, Guantánamo, collected by Luis M. Díaz on April 16 of 2001. MNHNCu 4629–37 with same data as the holotype; MNHNCu 4643–44, from Siboney, Reserva Ecológica Siboney-Juticí, Santiago de Cuba, collected by Luis M. Díaz and Antonio Cádiz on April 19–22 of 2007; MNHNCu 4645–46, same locality, but collected on June 20 of 2007; CTR 974, 975, 977, 980, 981, 983, 986, 989–991, with the same collecting data; MFP 757, Puerto Escondido, collected by C. T. Ramsden on July 6 of 1914; USNM 315883, John Paul Jones Hill, U.S. Naval Base, Guantánamo Bay, collected in 1988 by Ronald I. Crombie, Linda Gordon, and George Zustak; USNM 315880, Kittery Beach Road, near Graffiti Hill, U.S. Naval Base, Guantánamo Bay, collected in 1988 by Ronald I. Crombie and Linda Gordon. **Juveniles (1)**: USNM 315881, Windmill Beach Road, 1.9 km from Windmill Beach, U.S. Naval Base, Guantánamo Bay. **Sex not determined (7):** MCZ 8506, from Cabo Cruz, Granma, collected by Thomas Barbour in 1913; MCZ 11873, 11878, La Patana, Maisí, Guantánamo, collected by V. J. Rodríguez and F. R. Wulsin (respectively) in 1916. MCZ 96531, La Patana, Maisí, Guantánamo, collected by F. R. Wulsin in 1916; MCZ 9435 from Puerto Escondido, east of Guantánamo harbor, Guantánamo province, collected by

Charles T. Ramsden in 1914; MCZ 68937, U.S. Naval Base, Guantánamo Bay, collected by R. V. Lando; MCZ 141573, Cuzco Beach, U.S. Naval Base, Guantánamo Bay, collected in 1974 by W. E. Haas.

Diagnosis. *Tarentola crombiei* has a small adult size: maximum SVL= 57.8 mm *versus* 120 mm in *T. americana americana*, and 92 mm in *T. a. warreni* (Schwartz, 1968). It has inconspicuous transverse folds among rows of enlarged tubercles (as usually present in *T. americana*); a tendency towards a lower number of dorsal tubercles in the axilla-groin distance despite a slight overlap (15–19, *versus* 18–25 in *T. americana*); lower number of ventral scales (35–45 *versus* 47–62 in *T. americana*) in the same distance; dorsal tubercles giving place to ventral scales without a definite zone of transitional scales (as present in *T. a. americana*); tendency for a lower number of subdigital lamellae in the fourth toe with only a slight overlap (10–14, *versus* 14–21 in *T. a. americana*); lower number of subdigital lamellae in the first toe (8–12, *versus* 13–18 in *T. a. americana*); fourth toe dorsal scales arranged in 5–9 transverse rows (10–13 in *T. a. americana*) (see Fig. 2 for pattern comparisons); the toe marginal scales (dorsal view) are not conspicuously different from the submarginal scales (they are distinctive in *T. americana*) (Fig. 2); one egg per clutch (two eggs adhered to each other in *T. a. americana*); eggs fusiform shaped and usually not attached to the substrate (rounded, variably depressed in *T. a. americana*, and commonly attached to different surfaces). Regarding coloration, adult individuals of *T. crombiei* and young *T. a. americana* of similar size are easily separated because the later generally has better defined body bands than the former. The new species shares with *T. a. warreni* the condition of dorsal tubercles transitioning to ventral scales without a conspicuous zone of granules; however, the Bahamian subspecies, beside been larger in size, differs from *T. crombiei* by having a higher number of dorsal tubercles and ventral scales in the axilla-groin distance (which are within the referred range of variation of *T. a. americana*). At the mitochondrial cytochrome b gene, the new species differs from *T. americana* by 22% sequence divergence (Weiss and Hedges, 2007).

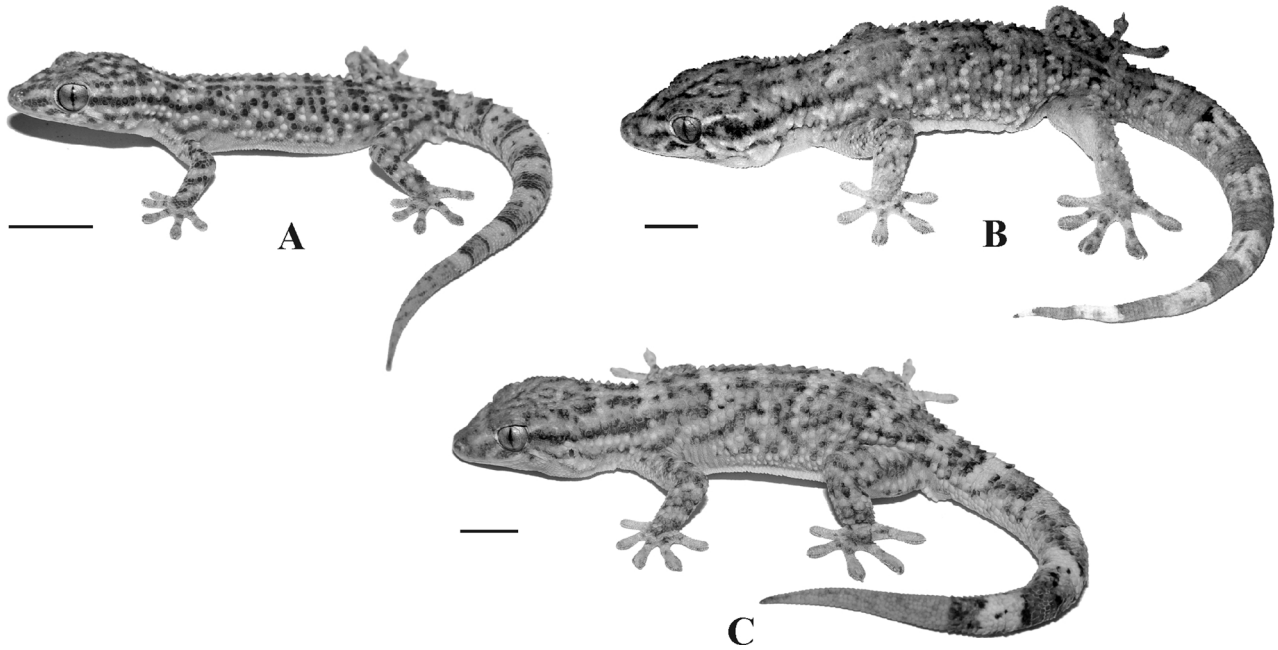

FIGURE 1. Male MNHNCu 4664 of *Tarentola crombiei* n. sp. (A), from Siboney (Reserva Ecológica Siboney-Juticí), Santiago de Cuba, (B) an adult male of *T. a. americana* from the same locality, and (C) an adult male of *T. a. americana* (MNHNCu 4653) from Cueva Ambrosio, Península de Hicacos, Matanzas province. Escale bar= 1cm.

Description. Size small [males SVL: 45.7–57.8 (x=51.8; n=16), females: 36.3–56.6 (x=48.4, n=18)]; head length 25–31% (x=27%, n=34) of SVL; head width 72–82% (x=78%, n=34) of head length; snout width 71–81% (x=75%, n=34) of head width; eye diameter 25–37% (x=31%, n=34) of head length; tail 1.1–1.2

times longer than body. Dorsum covered by slightly pointed, enlarged keeled tubercles arranged in 14–17 (mode 16, n=33) transversal rows at midbody; ventral scales smooth, cicloid, and imbricated, forming 26–38 (n=34) rows at midbody; interorbital scales 12–15 (n=33); 0–3 scales bordering the mental; scales around naris 3 (n=34); first toe lamellae 8–12 (n=34); ventrolateral folds present, delimiting dorsal tubercles and ventral scales; ear opening height/width: 0.6–1.5 (x=1.1)/ 0.3–1.0 (x=0.5). Males with hemipenial bulges at the base of tail, bearing arched series of 3–4 enlarged and projected rounded scales. All measurements and counts are shown in Table 1, compared with those of Cuban *Tarentola americana*.

TABLE 1. Measurements and meristic data for two species of the genus *Tarentola*. Values are the mean and the range (in parenthesis), or the range and the mode (in parenthesis) for the supra- and infralabial scales, and postmental scales, respectively.

	Tarentola crombiei **n. sp.**		*Tarentola americana*	
	Males (N=16)	Females (N=18)	Males (N=17)	Females (N=11)
Snout-vent length	51.8 (45.7–57.8)	48.4 (36.3–56.6)	99.8 (78.0–114.5)	92.2 (75.2–112.0)
Head length	14.2 (12.0–16.4)	13.2 (11–15.8)	25.3 (19.9–28.8)	23.4 (18.5–27.7)
Head width	11.1 (9.4–13.0)	10.2 (8.5–13.0)	21.3 (17–25.4)	19.2 (15.0–25.3)
Eye-naris distance	4.4 (3.8–5.1)	4.1 (3.2–5.0)	8.3 (6.4–9.4)	7.8 (5.9–9.4)
Eye diameter	4.4 (3.2–5.0)	3.9 (2.8–5.0)	7.2 (5.8–8.4)	6.8 (5.7–8.3)
Axilla-groin distance	21.3 (17.3–25.0)	20.3 (13.9–23.9)	42.5 (33.4–50.4)	38.5 (32.2–48.0)
Supralabial scales	6–8 (mode 7)	6–8 (mode 6)	7–9 (mode 8)	7–9 (bimodal 7–8)
Infralabial scales	5–7 (mode 6)	5–7 (mode 6)	6–8 (mode 6)	7–8 (mode 7)
Postmental scales	0–3 (mode 1)	0–3 (mode 2)	0–3 (mode 1)	0–3 (mode 2)
Interorbital scales	13.4 (12–15)	13.2 (12–15)	15.2 (11–18)	14.6 (13-16)
Dorsal tubercles in the axilla-groin distance	16.3 (15–18)	17.2 (15–19)	21.4 (18–23)	21.9 (17–25)
Ventral scales in the axilla-groin distance	41.3 (36–45)	41.2 (35–44)	53.7 (47–62)	54.6 (44–61)
Transversal series of dorsal tubercles	16.2 (15–17)	15.7 (14–17)	18.7 (17–20)	18.3 (16–22)
Transversal series of ventral scales	31.3 (26–38)	32.1 (29–36)	36.2 (31–43)	36.7 (32–40)
First toe lamellae	10.3 (8–12)	10.1 (9–12)	15.5 (13–18)	14.7 (12–18)
Fourth toe lamellae	12.2 (11–14)	12.1 (10–13)	17.0 (14–19)	18.0 (15–21)
Fourth toe dorsal rows of scales	7.2 (6–9)	7.3 (5–9)	11.4 (10–13)	11.4 (10–12)

Color in life: Pale gray to brownish gray. A wide dark postocular stripe extends to the insertion of the forelimbs. This stripe is flanked below by a longitudinal row of white to light cream colored tubercles. The lines on the top of head are narrow, diffuse or fragmented, often forming reticulations, but sometimes they are nearly absent. There are specimens with such lines fused at the level of the occiput. Generally, there are 6–7 barely defined transvere zones on the body between the limbs, containing scattered black tubercles bordered by transvere rows of white tubercles. Some specimens have no defined transverse dark zones, but only a scattered arrangement of white and dark brown to black tubercles. Tail with gray to dark brown bands which are sharper and more intensely colored distally. Regenerated tails have small dots and flecks. Enlarged supraciliary scales at the anterior border of eyes are whitish cream.

Color in alcohol: The body is tan or whitish gray, with black and white blotches and stripes not conspicuously arranged in bands.

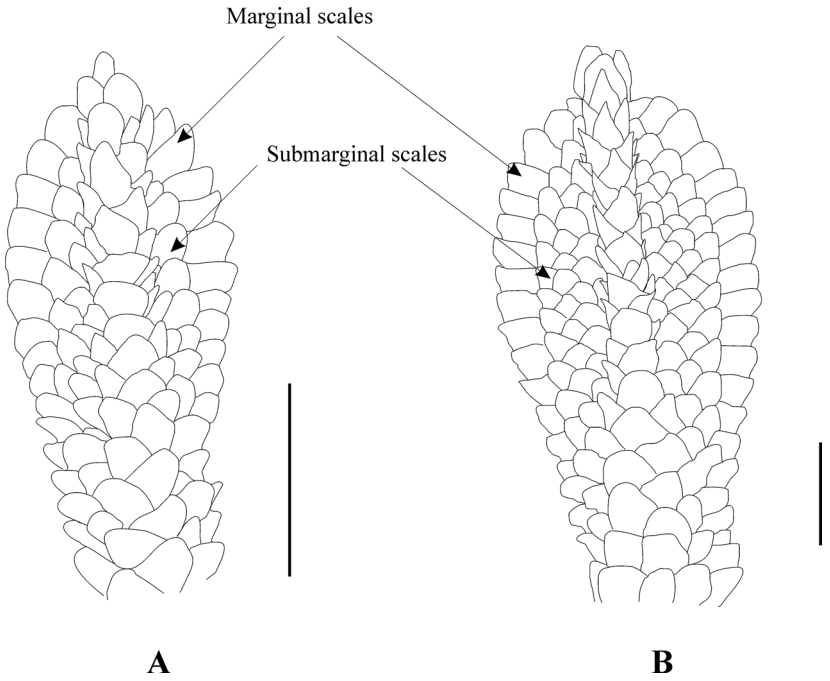

FIGURE 2. Fourth toe dorsal arrangement of scales in (A) *Tarentola crombiei* (paratype male MNHNCu 4646), and (B) *T. americana*, both from Siboney (Reserva Ecológica Siboney-Juticí), Santiago de Cuba Province. Scale bar= 1 mm.

Description of the holotype: SVL: 49 mm; tail length: 56.5 mm; head length: 12.8 mm; head width: 10.5 mm; eye-naris distance: 3.8 mm; eye diameter: 4.6 mm; axilla-groin distance: 19.1 mm; ear opening height/width: 1.0/0.5 mm; supralabial scales: 6; infralabial scales: 5; scales around naris: 3; postmental scales: 2; interorbital scales: 15; dorsal tubercles in the axilla-groin distance: 16; ventral scales in the axilla-groin distance: 36; transversal series of dorsal tubercles: 16; transversal series of ventral scales: 33; first toe lamellae: 12; second toe lamellae: 13; fourth toe dorsal rows of scales: 7.

Distribution. Known from seven localities along of the southern coast of Granma, Santiago de Cuba, and Guantánamo provinces (Fig. 3).

Etymology. The species name is a patronym for Ronald I. Crombie in recognition of his contributions to West Indian herpetology and for his early recognition of this distinct species.

Ecological observations. The region inhabited by *Tarentola crombiei* is the driest part of Cuba and receives annually about 400–800 mm of rain (Fig. 4A–C). The mean habitat is a coastal xerophytic scrub that grows over semidesertic lowlands and karstik marine terraces. During the day, all the lizards collected at the type locality were found inside dry plants of the genus *Agave* (Fig. 4C). In Siboney (Reserva Ecológica Siboney-Juticí), nine specimens were collected actively at night in less than five square meters while perching on scrubs, at heights of 0.5–3.0 meters above the ground (perch diameter <5 cm). A female obtained at this locality was in the process of shedding and was observed rubbing her snout on the leaf of a small epiphytic bromeliad (*Tillandsia* sp.) to assist in the process. At Reserva Ecológica de Hatibonico, a female (MNHNCu 4625) was found during the night on the walls of small volcanic elevations known as “monitongos.”

Several communal nests of *Tarentola crombiei* were collected at the type locality and Reserva Ecológica de Hatibonico in dry clumps of *Agave* sp. (Fig. 4D). Eggs were white, slightly fusiform shaped, and measured 11.0–13.3 x 8.2–9.9 mm (mean= 12.1 x 9.1 mm, n=12). Single eggs were seen through the ventral skin of females, or were laid in captivity by pregnant individuals. *Tarentola crombiei* and *T. americana* occur together in the same habitat, although the later is more easily seen than the former because it frequents human dwellings. Clutches of *T. crombiei* and *T. americana* were both found in the same dry plants of *Agave* sp. (in Reserva Ecológica de Hatibonico). Eggs of *T. americana* were bigger, usually depressed, round shaped, and

always laid in pairs strongly attached to each other and to the substrate. Hatchlings of *T. crombiei* obtained in the laboratory from collected communal nests measured 23.8–25.7 mm (mean= 24.6, n= 5) in SVL, and 20.3–23.2 mm (mean= 21.7, n= 5) in tail length.

The following insects were found in the feces of *Tarentola crombiei* (from six adult specimens kept in the same collecting bag): cockroaches (Blaberinae and Blattidae), crickets, an elaterid beetle, and ants (*Camponotus* sp.). Very small stones were also present in several stools.

In the surroundings of Río Jauco, local people use the vernacular name "*pega*" (singular) for both species of Cuban *Tarentola*, considering adults of *T. crombiei* as young individuals of *T. americana*.

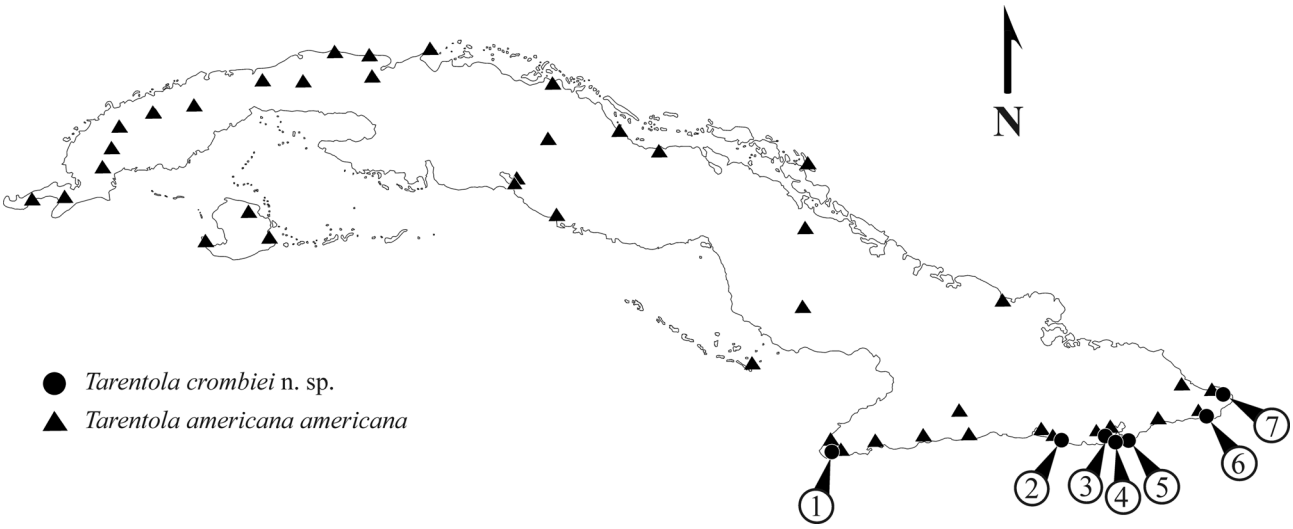

FIGURE 3. Distribution map of *Tarentola crombiei* and *T. americana* in Cuba. Numbers refer to the following localities: (1) Cabo Cruz, Granma; (2) Siboney (Reserva Ecológica Siboney-Juticí, Santiago de Cuba); (3) Reserva Ecológica de Hatibonico, Guantánamo; (4) U. S. Naval Base, Guantánamo (including four sublocalities within a range of 6 km, referred in the list of paratype specimens); (5) Puerto Escondido, Guantánamo; (6) La Mesa de Leo Prada, Maisí, Guantánamo (type locality of *T. crombiei*); (7) La Patana, Maisí, Guantánamo.

Discussion

Three names have been applied to Cuban members of the genus *Tarentola*: *T. americana* (Gray, 1831), *T. milbertii* (Duméril and Bibron, 1836), and *T. cubana* Gundlach and Peters 1864 (in Peters, 1864). *Tarentola milbertii* was a redescription of *T. americana*, using the same specimen as holotype. With limited material in hand, Boulenger (1885) concluded that *T. cubana* was a valid species and distinguished it from *T. americana* by the number of dorsal rows of tubercles, height of the tubercles, and coloration. Several years later (Boulenger, 1893), and after examining the types of the two taxa, he maintained that *T. cubana* was a valid species but made no mention of coloration and the number of tubercle rows as characters. Instead, he focused on two characters that distinguished *T. cubana* from *T. americana*: strongly keeled tubercles (weakly keeled in *T. americana*) and a longer mental scale (twice as long as broad, versus 1.5 times as long as broad in *T. americana*). Loveridge (1944) disagreed with both characters and placed *T. cubana* (and *T. milbertii*) in the synonymy of *T. americana*. Subsequent authors (Schwartz, 1968; Brygoo, 1990) have agreed, and only a single species, *T. americana*, has been considered to occupy Cuba (Schwartz and Henderson, 1991).

During this study, we examined—through photographs—the type specimens of *Platydactylus* (=*Tarentola*) *americanus* (Gray, 1831) and the type of *P.* (=*Tarentola*) *americanus* var. *cubanus* (Gundlach and Peters, 1865) (Appendix I). We agree with Loveridge (1944) that the later is a junior synonym of the former.

Guibé (1954) and Brygoo (1990) confirmed that MHNH 6700 is the type specimen of *Tarentola americana*. Brygoo (1990:25) also illustrated this specimen. Gray's (1831) original description was brief, but

Duméril and Bibron (1836) gave useful morphological information naming the same specimen as *Platydactylus milbertii* (now a synonym of *T. americana*). The type specimen is a juvenile, 94 mm in total length (Brygoo, 1990). As with most individuals of *T. americana* we studied, and differing from those of *T. crombiei* (Table 1), this specimen has the following combination of characters: 1) a higher number (24) of dorsal tubercles between axillae and groin, 2) more ventral scales (51) in the same distance, 3) distinct dorsal transverse folds, 4) a zone of transitional scales among dorsal tubercles and ventral scales, 5) a well defined banded pattern, and 6) supernumerary pointed tubercles around the ear opening. The presence of pointed tubercles around the ear was referred as diagnostic by Duméril and Bibron (1836) and Loveridge (1947), but it is actually a variable character in *T. a. americana*, with sporadic individuals lacking them. In *T. crombiei* those tubercles tend to be absent or barely defined in the inner border of the ear. However in syntopic *T. americana* they are usually present and conspicuous.

The type specimen of *Tarentola cubana* is 96 mm in SVL, and has 21 rows of dorsal tubercles and 60 ventral scales between axilla and groin, a distinctive banded pattern, pointed tubercles around the ear, distinctive dorsal transverse folds, and transitional scales among dorsal tubercles and ventral scales. All of these characters are within range of variation of *Tarentola americana*. Therefore, *T. crombiei* is not a synonym of *T. cubana*.

Barbour and Ramsden (1919) first commented on the existence of small adults of *Tarentola* (as *T. cubana*) collected by Charles T. Ramsden in Puerto Escondido (see figure 3), living inside dry cactus, compared with the typical larger individuals from the karstic cliffs of Maisí (also in the Guantánamo Province). Some of those specimens (including eggs) present in the Ramsden herpetological collection at the Instituto de Ecología y Sistemática (Havana, Cuba) are assignable to *T. crombiei* (see paratypes), as are two Ramsden specimens from the same locality housed in a U.S. collection (MCZ 9435) and the University of Havana (MFP 757).

In his revision, Schwartz (1968) analyzed 86 Cuban specimens of *Tarentola americana*, including some pertaining to the new species that evidently were not noted as a different taxon by him. As a consequence, Schwartz gave some scale ranges that overlap with our own data of *T. crombiei*. Access to Schwartz's original data sheets, supplemented by our own data of additional specimens, assisted us in distinguishing these two species based on morphological traits.

Weiss and Hedges (2007) sequenced portions of the mitochondrial cytochrome b gene and nuclear amelogenin gene in 11 populations of Cuban *Tarentola*, including *T. americana* (eight populations) and *T. crombiei* (three populations). In phylogenetic analyses together with Old World species, they found that the Cuban populations were monophyletic. Nonetheless, they found that the small form (here named as *T. crombiei*) was substantially divergent (22% at cytochrome b, 1.6% at amelogenin) from *T. americana*, including sympatric populations, thus providing genetic evidence for the recognition of the smaller form as a distinct species. In the same study, Weiss and Hedges (2007) included a single specimen from near Trinidad in Central Cuba and found it to be divergent (9.7% at cytochrome b, 1.3% at amelogenin) from all other *T. americana* sampled (in eastern Cuba).

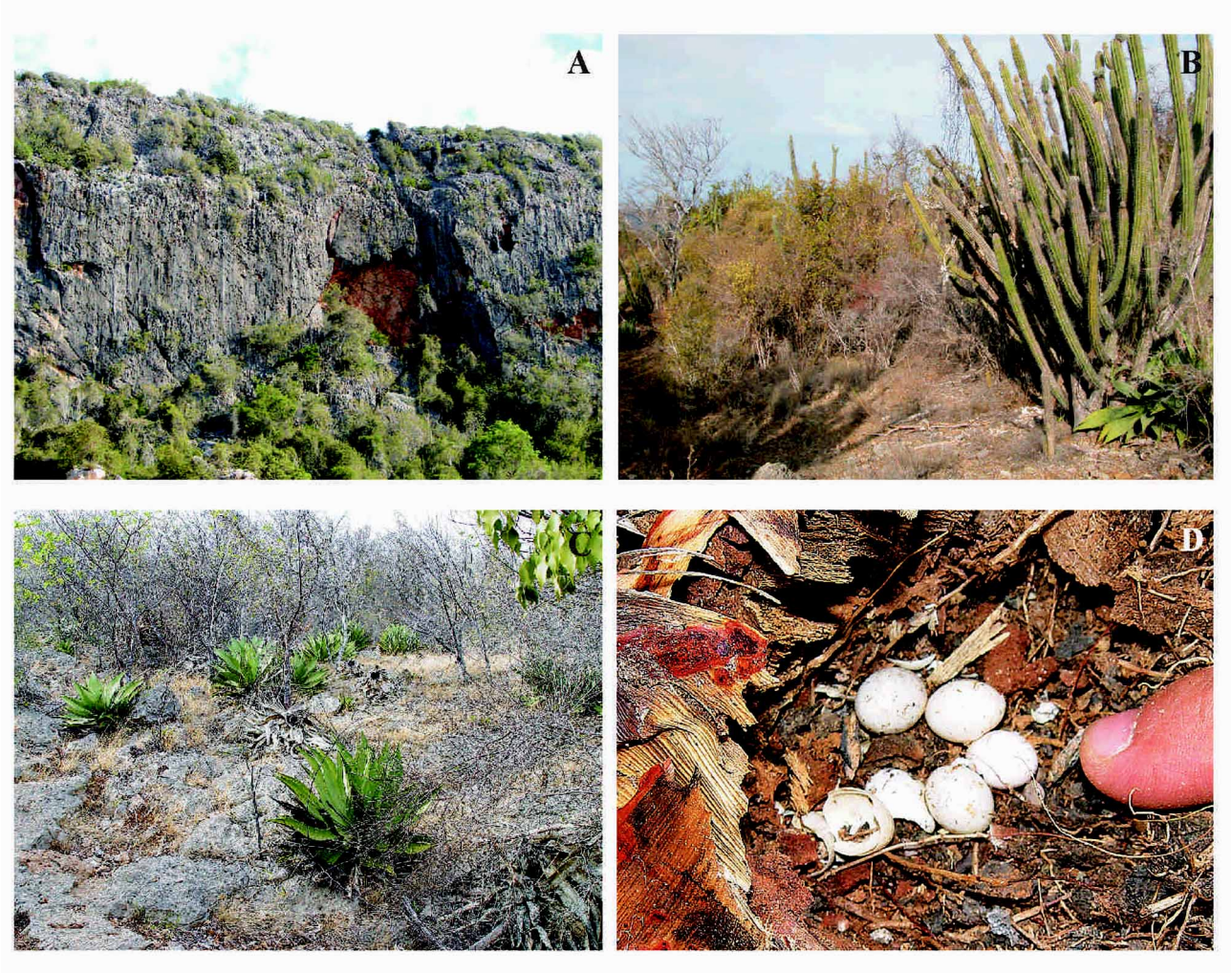

FIGURE 4. Habitats of *Tarentola crombiei* in the arid south coast of Eastern Cuba. (A) General landscape: a marine terrace in Siboney, Santiago de Cuba, covered by typical xerophytic vegetation; (B) xerophytic scrub at La Mesa de Leo Prada (type locality), surroundings of Boca del Jauco, Maisí, Guantánamo; (C) dry clumps of *Agave* sp., on rocky soil, one of the diurnal microhabitats of species in the type locality; (D) communal nest of *T. crombiei* in a dry *Agave* sp. (finger nail about 8 mm). Photos: A and B, by Arturo Kirkconnell; C and D, by Gerardo Begué.

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Appendix 1. Specimens examined for comparisons

Tarentola americana americana (n=66)

Cuba (no specific locality)._MNHN 6700, type specimen of *Platydactylus* (=*Tarentola*) *americanus* Gray; ZMB 5107, type specimen of *Platydactylus* (=*Tarentola*) *americanus* var. *cubanus* Gundlach *et* Peters (probably collected in Cabo Cruz, Granma). **Pinar del Río.**_CZACC (without number), Cueva del Indio, Viñales; CZACC 4.5101, Hoyo de la Jutía, Viñales; CZACC 4.9816, Cueva del Indio, Viñales. **La Habana.**_CZACC 4.9296, Cueva Don Martín, Jaruco. **Isla de La Juventud.**_ MFP 756 (2 specimens), Punta del Este. **Matanzas.**_MNHNCu 4653–4654, Cueva Ambrosio, Península de Hicacos. **Villa Clara.**_ CZACC 4.9295, Punta Caguanes; CZACC 4.9297, Sierra La Esperanza; CZACC 4.9425, Loma del Mogote, Sagua La Grande. **Cienfuegos.**_CZACC (without number), Cueva de Guanayara; MCZ 43801, Soledad. **Sancti Spiritus**._ MCZ 59319–20**,** Trinidad. **Camagüey.**_CZACC 4.9413, Cueva Bonita, Sierra de Cubitas; MCZ 56358–63, 56365, Cayo Cabeza; MCZ 56373–84, Cayo Levisa. **Granma.**_MNHNCu 4218, surroundings of Villa Punta Piedra, Cabo Cruz; CZAAC 4.9294, Cabo Cruz. **Santiago de Cuba.**_CZACC 4.9412, Chivirico, Guamá; CZACC 4.9426**,** El Cobre; CZACC 4.9277, Cueva de Los Majáes; MNHNCu 4655–4662**,** Reserva Ecológica Siboney-Juticí; MFP 754, Ciudamar; MCZ 6919, Santiago de Cuba. **Guantánamo.**_MNHNCu 1633, Cueva del Agua, Maisí; MNHNCu 4648–4651**,** Reserva Ecológica de Hatibonico, Caimanera; CZACC 4.7367, Río Duaba, Baracoa; CZACC 4.9421, Caimanera; CZACC 4.8599, Río Yumurí, Maisí; MNHN 1959, Guantánamo; MCZ 47047 and 96530, Baracoa; MCZ 67917, 93702, 146390, U.S. Naval Base.

Tarentola americana warreni._ USNM 160725 (Holotype), Gray's Settlement, Long Island, Bahama Islands.