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A NEW ROCK-DWELLING *HEMIDACTYLUS* (SQUAMATA: GEKKONIDAE) FROM MAHARASHTRA, INDIA

Varad B. Giri

Herpetology Section, Collection Department, Bombay Natural History Society,
Hornbill House, S. B. Singh Road, Mumbai 400 023, India.
Email: varadgiri@gmail.com

(with seven text-figures)

ABSTRACT.– A distinctive new species of rock dwelling gecko of the genus *Hemidactylus* is described from the forests of the northern Western Ghats of Maharashtra, India. It is most similar in morphology to *Hemidactylus giganteus* Stoliczka, 1871, but can be distinguished by its large size, dorsum with small granules, intermixed with 18–20 rows of irregularly arranged enlarged tubercles; 11–13 lamellae under fourth toe and 15–19 pairs of femoral pores in males.

KEY WORDS.– *Hemidactylus aaronbaueri,* new species, Gekkonidae, Maharashtra, Western Ghats, India.

INTRODUCTION

With > 85 species inhabiting warm continental land masses and hundreds of intervening continental and oceanic islands, *Hemidactylus* Gray, 1845 is one of the most species-rich and widely distributed of all reptile genera (Carranza and Arnold, 2006). Although the genus is widely distributed throughout much of the Old and New World tropics and sub-tropics, it achieves its greatest species richness in the Horn of Africa and adjacent regions (Bauer and Pauwels, 2002). A great majority of *Hemidactylus* species have relatively small distributions, confined to southern Asia and Africa, and just eight species are responsible for most of the huge geographical area covered by the genus, namely, *H. mabouia*, *H. turcicus*, *H. brookii*, *H. frenatus*, *H. garnotii*, *H. persicus*, *H. flaviviridis* and *H. bowringii*. The first five of these are especially widespread and are present in both the Old and New Worlds, with *H. mabouia* also occurring on islands in the Atlantic and Indian Oceans and *H. frenatus* and *H. garnotii* being widespread in the Pacific (Carranza and Arnold, 2006). In India, this genus is represented by 19 species. Smith (1935) listed 14 species of *Hemidactylus* (*H. maculatus* (in part) Duméril and Bibron, 1836; *H. triedrus* Daudin, 1802; *H. subtriedrus* Jerdon, 1853; *H. brookii* Gray, 1845; *H. prashadi* Smith, 1935; *H. gracilis* Blanford, 1870; *H. reticulatus* Beddome, 1870; *H. frenatus* Duméril and Bibron, 1836; *H. leschenaultii* Duméril and Bibron, 1836; *H. flaviviridis* Rűppel, 1835; *H. giganteus* Stoliczka, 1871; *H. bowringii* (Gray, 1845); *H. garnotii* Duméril and Bibron, 1836; *H. karenorum* (Theobald, 1868). Loveridge (1947) considered *Lophopholis* a synonym of *Hemidactylus* and thus added one more species to this genus, *H. scabriceps* Annandale, 1906. Later, Sharma (1981) described *H. porbandarensis* from Porbandar, Gujarat. This species is known only from the type locality. In 1983, Shukla described *H. mahendrai* from Kanpur, Uttar Pradesh. Based on the similarity in the digit morphology, the monotypic Indian genus *Dravidogecko* was synonomised with *Hemidactylus* by Bauer and Russell (1995). There is one more addition to this genus: Vyas et al. (2006) reported *H. persicus* from the Indian Republic. Grandison and Soman, 1963 described *H. albofasciatus* from Maharashtra. This species is now listed as *Teratolepis albofasciatus* by Kluge (2001) and Das (2003), but its generic allocation is under re-evaluation (Bauer et al., in prep.).

The Western Ghats of India is a global biodiversity hotspot, and is also known for its rich

and endemic diversity of reptiles and amphibians. With its varied topography and geography, the northern Western Ghats, which mainly comprises of Maharashtra and parts of Goa and Gujarat, is also the home to some unique species of reptiles and amphibians. Apart from its diversity and endemicity, the region is not thoroughly studied and there are reasons to believe that the species diversity may be greater than currently recognized. A rapid explosion in the number of newly recognised species of amphibians in the Western Ghats despite previous research (Biju, 2001; Gower et al., 2004), suggests that new species of the less-studied lizards also await description. As one of the contributions towards the documentation of the herpetofauna of Maharashtra State, south-western India, I am describing a distinctive new species of *Hemidactylus*.

MATERIALS AND METHODS

The following measurements were taken with Bruder Mannesmann Werkzeuge Digit-cal Plus digital calipers (to the nearest 0.1 mm): snout-vent length (SVL; from tip of snout to vent), trunk length (TRL; distance from axilla to groin measured from posterior edge of forelimb insertion to anterior edge of hindlimb insertion), body width (BW; maximum width of body), crus length (CL; from base of heel to knee); tail length (TL; from vent to tip of tail), tail width (TW; measured at widest point of tail); head length (HL; distance between retroarticular process of jaw and snout-tip), head width (HW; maximum width of head), head height (HH; maximum height of head, from occiput to underside of jaws), ar length (EL; longest dimension of ear); forearm length (FL; from base of palm to elbow); orbital diameter (OD; greatest diameter of orbit), nares to eye distance (NE; distance between anteriormost point of eye and nostril), snout to eye distance (SE; distance between anteriormost point of eye and tip of snout), eye to ear distance (EE; distance from anterior edge of ear opening to posterior corner of eye), internarial distance (IN; distance between nares), interorbital distance (IO; shortest distance between left and right supraciliary scale rows). Scale counts and external observations of morphology were made using a Wild M5 dissecting microscope. Mensual data is given in Table 1. Nine derived variables were used to compare *Hemidactylus giganteus* (HG) and the new species of *Hemidactylus* being described herein (HN). Considering the fact that no two individuals of a species of gecko are necessarily of the same size, use of proportions to explain and compare a species with other species is a widely accepted methodology. Table 1 explains these variables individually. Principal Component Analysis (PCA) was used to investigate the cumulative effect of these variables.

SYSTEMATICS

Hemidactylus aaronbaueri sp. nov.

Figs. 1–5

Holotype.– Bombay Natural History Society (BNHS) 1739, adult male; on the rock cliffs near Ghatghar, Taluka Junnar, District Pune, Maharashtra, India (19°17’28 N, 73°40’36 E; 248 m asl), 22 November 2006. Collected by Ashok Captain and Varad Giri.

Paratypes.– BNHS 1737, 1738, 1740 and 1741, same data as holotype.

Diagnosis.– A large *Hemidactylus*, snout-vent length at least 128 mm; 18–20 rows of irregularly arranged, enlarged, rounded and feebly keeled dorsal tubercles; first labial touching nasal; two well developed pairs of postmentals, the inner pair elongate and larger than outer; ventrolateral folds not clearly visible; ca. 41–43 scale rows across venter between lowest rows of tubercles; 12–13 enlarged scansors beneath fourth toe of pes; digits with indistinct basal webs; ca. 19 femoral pores on each side separated by at least six scales in adult males; original tail tuberculate, with median subcaudal scales forming broad transverse plates; dorsal pattern comprising a series of dark, transverse undulating crossbars bordered anteriorly and posteriorly with pale cream, first on nape followed by four more, all bands inconspicuous on flanks; and tail alternately banded with pale and dark brown.

Hemidactylus aaronbaueri sp. nov. may be distinguished from all other mainland Indian congeners on the basis of (sympatric taxa with differing or non-overlapping character states indicated parenthetically): 18–20 rows of enlarged, rounded, feebly keeled dorsal tubercles (usually few in number, sometimes absent in *H. leschenaultii*, with fewer enlarged tubercles, more often absent altogether in *H. flaviviridis*, no enlarged tubercles in *H. giganteus*, large trihedral tuber-

cles arranged in 20 fairly regular longitudinal rows in *H. maculatus*, conical, keeled, or subtrihedral tubercles arranged in from 16–20 more of less regular longitudinal series in *H. brookii*), femoral pores in male 15–19 on each side separated by six scales (10–17 in *H. leschenaultii*, 5–7 in *H. flaviviridis*, 16–22 femoral pores separated by eight scales in *H. giganteus*, 19–25 femoral pores on each side in *H. maculatus*, from 7–12 (16) preano-femoral pores on each side, usually interrupted mesially in *H. brookii* (Smith, 1935, Giri et al., 2003, pers. obs.)

The new species is most similar in general appearance to *Hemidactylus giganteus*, but differ with respect to (*H. giganteus* vs. *H. aaronbaueri* sp. nov.): maximum size (115 vs. 128 mm SVL), dorsal pholidosis (uniform smooth granules without enlarged tubercles vs. 18–20 rows of enlarged, rounded tubercles), tail (covered above with uniform small scales versus small scales and a series of eight rows of enlarged dorsal tubercles), scansors beneath the fourth toe (13–15 vs. 11–13).

Description of holotype.– Some morphometric and meristic data are given in Table 1. The holotype is in good condition generally. Body shape dorsoventrally flattened throughout most of body (a little more so in preservative); head short (HL/SVL ratio 0.27), wide (HW/HL ratio 0.81), not strongly depressed (HH/HL ratio 0.50), and not markedly distinct from neck; loreal region slightly rounded, canthus rostralis not prominent.

Snout short (SE/HL ratio 0.42); longer than eye diameter (OD/SE ratio 0.43); scales on snout and forehead minute, granular; hinder part of the head with small granular ones, intermixed with larger tubercles; scales on canthus rostralis are slightly larger than those on occipital region; eye small (OD/HL ratio 0.18); pupil vertical with crenelated margins; supraciliaries large, mucronate; posterior scales of outer row forming short, stout, projecting spines; ear opening oval, vertically oriented and small (EL/HL ratio 0.05); eye to ear distance much greater than diameter of eyes (EE/OD ratio 1.65); rostral wider (4.5 mm) than deep (2.8 mm), incompletely divided dorsally by weakly developed rostral groove; two enlarged supranasals separated by a longitudinal series of two rounded internasals; rostral in contact with supralabial I, supranasals, and anterior internasal; nostrils circular and large (width of nostril 0.8 mm); each surrounded by supranasal, rostral, first labial and four postnasals, of which the posterior is larger than the remaining three; 2–3 rows of scales separate orbit from supralabials; mental subtriangular, slightly deeper (4.8 mm) than wide (4.5 mm); two pairs of enlarged postmentals, inner pair longer (3.2 mm) than outer (2.5 mm) and in contact (1.0 mm) behind mental, the outer postmental is medially divided in two, both inner and outer postmentals are in touch with first infralabial; infralabials bordered by a row of enlarged scales, decreasing in size posteriorly; supralabials (to midorbital position) 11 (right)- 11 (left); supralabials to angle of jaws 13 (right)- 13 (left); infralabials 9 (right)-9 (left). Body relatively stout, not so elongate (TRL/SVL ratio 0.42) with weakly developed ventrolateral folds with scattered denticulate scales; dorsal scales heterogeneous, granular; regularly arranged intermixed with small, flattened to weakly conical tubercles extending from posterior interorbital and temporal regions to tail; tubercles more or less uniform across dorsum, somewhat more prominent on flanks enlarged; tubercles surrounded by rosettes of smaller scales of varying sizes, 2–5 smaller scales between two adjacent enlarged tubercles; tubercles in approximately 19–20 rows at midbody; ventral scales larger than dorsal, weakly subimbricate; a bit larger on abdomen than on chest, gular region with still smaller and granular scales; midbody scale rows across belly to denticulate edge of ventrolateral fold 43; femoral pores 18 on left thigh and 19 on right thigh, with left and right series separated by a median gap of six scales.

Scales on palm and sole smooth, rounded; scales on dorsal aspect of limbs heterogeneous, larger than those on the back, intermixed with larger domed to conical tubercles, scales on dorsal aspects limbs heterogeneous- granular, intermixed with conical to moderately keeled tubercles, more pronounced than those of body dorsum, enlarged tubercles on forelimbs are relatively smaller than those on the hind limbs, particularly on knees and shanks, moreover scales on shoulder are comparatively larger than those on the back and thighs.

Fore- and hind limbs relatively short, stout; forearm short (FL/SVL ratio 0.13); tibia short

Table 1. Mensural data for holotype and paratypes of *Hemidactylus aaronbaueri* sp. nov. Abbreviations in Materials and Methods; all measurements in mm. Asterisks refer to damaged/missing tails.

BNHS	SVL	TRL	BW	CL	TL	TW	HL	HW	HH	EL	FL	OD	NE	SE	EE	IN	IO
1737	115.77	49.53	40.58	14.63	110.67	17.88	29.53	27.49	14.26	1.81	16.45	5.90	10.68	12.68	9.87	2.50	9.43
1738	77.06	31.83	22.27	12.43	82.00	9.00	21.58	22.48	10.22	0.48	9.75	4.40	7.68	9.50	7.27	2.16	8.27
1739	123.28	51.67	37.06	20.32	115.67*	16.34	33.67	27.35	17.10	1.78	16.80	6.29	12.03	14.33	10.39	3.38	10.80
1740	122.74	57.03	39.74	17.67	111.95*	16.76	32.85	26.77	16.75	1.85	15.77	5.84	11.92	14.32	11.53	3.25	12.20
1741	128.30	57.46	42.10	20.50	99.65*	17.80	33.46	27.92	16.20	1.80	16.91	6.57	11.71	14.10	11.19	3..30	10.52

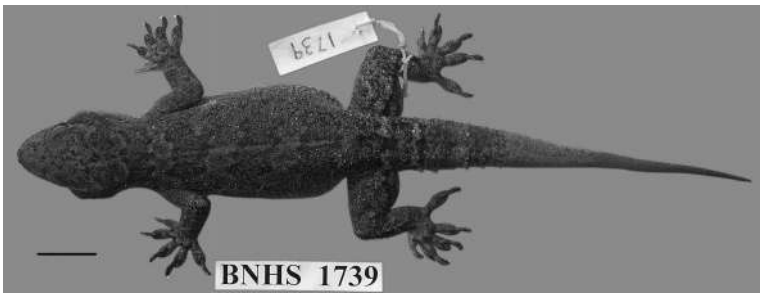

Figure 1. Dorsal view of the holotype of *Hemidactylus aaronbaueri*, sp. nov. (BNHS 1739). Scale bar = 20 mm.

Figure 2. Dorsal view of the head of the holotype of *Hemidactylus aaronbaueri*, sp. nov. (BNHS 1739) showing the head scalation. Scale bar = 20 mm.

(CL/SVL ratio 0.16); digits moderately short, strongly clawed; all digits of manus and digits I–IV of pes indistinctly webbed; distal portions of digits curved, arising from distal portion of expanded subdigital pad; scansors beneath each toe divided except distalmost and few basal scansors are single, there are more number (7) of undivided or notched scansors on first toe: 13–12–12–12–13 (right manus), 11–13–13–13–13 (right pes). Relative length of digits (measurements in mm in parentheses): V (12.50) > II (11.88) > III (11.58) > IV (11.47) > I (11.20) (right manus); IV (14.60) > III (13.64) > II (13.55) > V (13.30) > I (11.37) (right pes).

Original portion of tail (34.8 mm) slightly depressed, flat beneath, verticillate; regenerated portion (80.9 mm) also slightly depressed and slender; length of partly regenerated tail slightly less than snout-vent length (TL/SVL ratio 0.93); original part of tail covered above with small (larger than those on dorsum), posteriorly-pointed, subimbricate to imbricate scales and a series of eight enlarged tubercles, continuing from body dorsum; ventral scales much larger, imbricate, ca. 3–4 scales in a median row near base of tail which greatly enlarged into subcaudal plates extending nearly across width of tail distally; 3–5 enlarged postcaudal spurs on either side of tail base; regenerated portion of tail covered above with small, pointed, keeled scales, below with enlarged subcaudal plates.

Figure 3. Dorsal view of the midbody of the holotype of *Hemidactylus aaronbaueri*, sp. nov. (BNHS 1739) showing the dorsal pholidosis. Scale bar = 20 mm.

Figure 4. Dorsal view of the tail and hindlimb of holotype of *Hemidactylus aaronbaueri*, sp. nov. (BNHS 1739) showing the enlarged dorsal tubercles. Scale bar = 20 mm.

Colouration (in life).– Dorsum, ground colour of head, body and tail, greyish-brown. Upper surface and sides of head, especially posterior to eyes has vermiform dark brown and pale cream markings; a diffuse dark brown streak on can-

Figure 5. *Hemidactylus aaronbaueri* sp. nov. (not collected) feeding on grasshopper. Scale bar = 20 mm.

Table 2. Statistically significant differences between morphometric variables in *Hemidactylus aaronbaueri* sp. nov. and *H. giganteus*, using Student's *t*-test. Head length = HL/SVL; Head width HW/HL; Head depression = HH/HL; Snout = SE/HL; Eye diameter = OD/SE; Eye-ear length = EE/OD; Elongation = TRL/SVL; Hind limb length = CR/SVL; Fore limb length = FL/SVL; Tail width = TW/SVL. * = not significantly different.

	Hemidactylus aaronbaueri sp. nov. (n = 5)		*Hemidactylus giganteus* (n = 5)		t-test	p
	Mean	± SD	Mean	± SD		
Variable						
Head length	0.267	0.010	0.294	0.009	-4.51	0.002
Head width	0.887	0.099	0.750	0.042	2.84	0.022
Head depression	0.492	0.016	0.428	0.019	5.74	0.000
Snout length	0.431	0.008	0.425	0.041	0.28	0.784*
Eye diameter	0.448	0.025	0.505	0.037	-2.84	0.022
Eye-ear length	1.731	0.138	1.387	0.047	5.27	0.001
Trunk length	0.435	0.021	0.412	0.013	1.99	0.082*
Hind limb length	0.151	0.016	0.173	0.005	-2.93	0.019
Fore limb length	0.133	0.006	0.150	0.003	5.52	0.001
Tail width	0.136	0.013	0.153	0.005	-2.63	0.047

thus rostralis usually present; all specimens with a narrow pale cream postocular streak, bordered above, below and posteriorly by a wide brown and black mottled region; anterior supralabials whitish, mottled with pale brown, which gives them a brownish appearance; posterior supralabials cream; back of head, body and tail with a regular series of dark brown bands, the anterior and posterior margins of which are undulating; these bands have an anterior and posterior pale cream margin; bands confined to upper back and not produced onto flanks; usually an indistinct band on occiput, followed by a series of distinct bands– one on nape, four on body and 10–11 on tail; venter, enamel white.

Coloration (in preservative).– In preservative, colouration similar to that in life, except bands on dorsum and tail inconspicuous and visible when specimens are in preservative.

Etymology.– The species name is a patronym, applied in the genitive singular case, honouring Dr. Aaron M. Bauer of Villanova University for

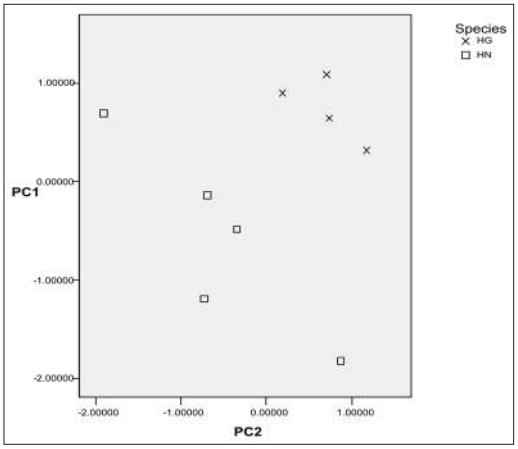

Figure 6. Scatter plot of *Hemidactylus aaronbaueri* (squares) and *Hemidactylus giganteus* (crosses) in ordination space of Principal Components. PC1→ Positively correlated with hind limb length and head length and negatively correlated with head depression and eye-ear length. PC2→ Positively correlated with tail width, fore limb length and eye diameter, and negatively correlated with head width.

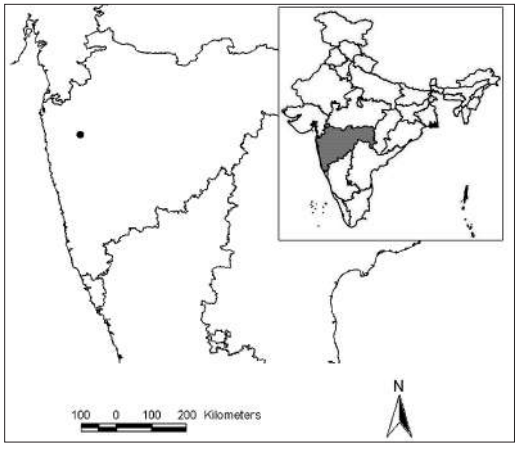

Figure 7. Map of India (right). showing Maharashtra State. The type locality of Hemidactylus aaronbaueri sp. nov. is indicated with a black dot on the map of Maharashtra (left).

his major contribution towards work on systematics and morphology of the lizards, especially geckos.

Variation shown by paratypes.– Mensural data for type series are given in Table 1. Specimens range in size from 77–128 mm. This table provides a restricted understanding of variation about this species. All paratypes resemble hototype in most respects except as follows: outer pair of postmentals is single (BNHS 1738, 1741, 1740); in BNHS 1737 second pair of postmental is divided and first postmental on right side is also divided. Apart from the holotype (BNHS 1739) one paratype is appears to be a subadult male (BNHS 1788). This specimen differs from holotype in having a lower number of femoral pores, 15 on either side with a gap of six scales. In BNHS 1737 and 1740 supralabials (to midorbital position) 10 (right)- 10 (left); supralabials to angle of jaw 12 (right)- 12 (left). In BNHS 1741 supralabials (to midorbital position) 9 (left)- 11 (right); supralabials to angle of jaw 10 (right)- 12 (left). A adult female paratype (BNHS 1741) subdigital scansors 10–10–11–10–11 (right manus), 9–11–12–12–11 (right pes).

Distribution.– At present this species is only known from the type locality which is in the northern parts of the Western Ghats region of Maharashtra (Fig. 7). The northern Western Ghats, which pass through Goa, Maharashtra and part of the Gujarat state, lie roughly between 72° 50'E to 74°40'E and 15°00'N to 20°15'N. The forest in the Western Ghats south of Goa (20°N latitude) is of wet-evergreen type and changes as one moves northwards. In the northern Western Ghats the forest is of semi-evergreen and deciduous type. Along with the forest types the ecological conditions also changes. The northern areas have a longer dry season with moderate rainfall (ca. 2,500 mm annually). A number of peaks in the Maharashtran part of the Western Ghats rise over 1,200 m asl, the tallest being Kalsubai (1,640 m). Unlike southern parts of the Western Ghats of Maharashtra, the type locality is mainly composed of flat-topped hills with steep high basalt cliffs with forest at their base. This is a common feature of the northern part of the Western Ghats in Maharashtra, especially in the Pune and Nasik districts.

Natural history.– The holotype and paratypes were caught late at night (0120 h) on rocky cliffs (Fig. 1). We had also seen about 10 additional specimens in the same area. *Hemidactylus aaronbaueri* sp. nov. seems to be the commonest species at the type locality. All specimens were seen on rock cliffs, ca. 1–7 m above ground. They are nocturnal and actively move on rocky cliffs, and were seen feeding on grasshoppers at 2430 h. Juveniles were observed in syntopy with the adults, and the types were found sympatrically with *H.* cf. *brookii.* Red coloured ectoparasites were observed on all live individuals.

DISCUSSIONS

The Indian *Hemidactylus* is one of the least studied groups of squamates and their relationships remain largely uncertain. Though Carranza and Arnold (2006) have established patterns of relationships among several major groups within the genus, but their study did not sample heavily from tropical Africa (Bauer et al., 2006). This is also true for the Indian species. The type specimens range in size from 77–128 mm and this indicates that this is one of the largest *Hemidactylus* in mainland India. Based on its superficial resemblance, large size, overlapping numbers of digital scansors, supralabials and femoral pores *H. aaronbaueri* sp. nov. may be allied to *H. giganteus*.

Ten morphometric variables were compared between type series of *H. aaronbaueri* sp. nov. and *H. giganteus* (two males and three females) to test the null hypothesis that the two species are morphometrically indistinguishable. Using a Student's *t*-test, snout-vent length and trunk length were not significantly different, but the eight remaining variables were (Table 2) thus supporting the alternate hypothesis that the two species are morphometrically dissimilar. Principal Component Analysis (PCA) was also performed on the eight variables found to differ between the species. The first two Principal Components explained 83% of the total variance in the data. On plotting the PC scores of each of the specimens on these Principal Axes, a clear difference between the morphometrics of the two species could be observed (Fig. 6).

Hemidactylus aaronbaueri sp. nov. is currently known only from the type locality in the northern Western Ghats of Maharashtra. *H. giganteus* is reportedly a widely distributed species and has been recorded from Andhra Pradesh,

Karnataka, Maharashtra, Kerala, Chhattisgarh and Tamil Nadu (Giri et al. 2003). In Maharashtra, *H. giganteus* has been reported from Pandava Caves, Kolaba District (Soman, 1966) and Ozar, Nasik District (Chopra, 1968). The related specimens are not traceable. Fresh material from these two localities needs to be examined to determine if indeed the geckos found here are *H. giganteus*, or actually *H. aaronbaueri* sp. nov. Apart from this, there are four *H. giganteus* specimens (BNHS 1259/1–4) in the collection of the BNHS which were from Sirauncha, West Chanda, Maharashtra (Giri et al., 2003). There is one more specimen from Yawal Wildlife Sanctuary in Jalgaon district (BNHS 1590). Both these localities are in the Satpura Range, which is separated from the Western Ghats by ca. 200 km. The present known distributional range of these species in Maharashtra do not overlap. More surveys need to be undertaken to determine if the two species are sympatric.

The herpetofauna of northern Western Ghats, especially the parts in Maharashtra, is poorly known (Giri et al., 2003). With its varied habitat features this region supports unique, though not rich diversity of amphibians and reptiles. In the recent past three new species of caecilians have been discovered from this region with little effort (Giri et al., 2003; Ravichandran et al., 2003, Giri et al., 2004). Thus with intensive and systematic surveys it is possible to enhance knowledge of reptiles of the northern Western Ghats. In Maharashtra, there are excellent examples of the northern extremity of the richer forests of the Western Ghats, but here the forest is more fragmented and is increasingly degraded by human exploitation (Rodgers and Panwar, 1988). The discovery of a new, large rock-dwelling species of *Hemidactylus* adds to the body of knowledge on the region's diversity of herpetofauna. Although the new species is being reported from a single locality, its habitat preference suggests that it may be present in other regions of the northern Western Ghats, and therefore highlights the need for more intensive surveys to document the region's biodiversity.

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LITERATURE CITED

BAUER, A. M. & O. S. G. PAUWELS. 2002. A new forest-dwelling *Hemidactylus* Squamata: Gekkonidae) from Gabon, West Africa. African Journal of Herpetology 51:1–8.

____ & A. P. RUSSELL. 1995. The systematic relationships of *Dravidogecko anamallensis* (Günther, 1875). Asiatic Herpetological Research 6:30–35.

_____, S. TCHIBOZO, O. S. G. PAUWELS & G. LENGLET. 2006. A review of the gekkotan lizards of Bénin, with the description of a new species of *Hemidactylus* (Squamata: Gekkonidae). Zootaxa 1242:1–20.

BIJU, S. D. 2001. A synopsis to the frog fauna of the Western Ghats, India. ISCB Occasional Publication 1:1–24.

CARRANZA, S. & E. N. ARNOLD. 2006. Systematics, biogeography, and evolution of *Hemidactylus* geckos (Reptilia: Gekkonidae) elucidated using mitochondrial DNA sequences. Molecular Phylogenetics and Evolution 38:531–545.

CHOPRA, R. N. 1968. On a new locality and habitat of *Hemidactylus giganteus*. Science & Culture 38:376.

DAS, I. 2003. Growth of knowledge on the reptiles of India, with an introduction to systematics, taxonomy and nomenclature. Journal of Bombay Natural History Society 100(2&3):446–501.

GIRI, V., M. WILKINSON & D. J. GOWER. 2003. A new species of *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) from southern Maharashtra, India, with a key to the species of the genus. Zootaxa 351:1–10.

GIRI, V., D. J. GOWER & M. WILKINSON. 2004. A new species of *Indotyphlus* Taylor (Amphibia: Gymnophiona: Caeciliidae) from the Western Ghats, India. Zootaxa 739:1–19.

GOWER, D. J., G. BHATTA, V. GIRI, O. V. OOMMEN, M. S. RAVICHANDRAN & M. WILKINSON. 2004. Biodiversity in the Western Ghats: The discovery of new species of caecilian amphibians. Current Science 87(6):739–740.

KLUGE, A. G. 2001. Gekkotan lizard taxonomy. Hamadryad 26:1–209.

LOVERIDGE, A. 1947. Revision of African lizards of the family Gekkonidae. Bulletin of Museum of Comparative Zoölogy, Harvard University 98(1):1– 469.

RAVICHANDRAN, M. S., D. J. GOWER & M. WILKINSON. 2003. A new species of *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) from Maharashtra, India. Zootaxa 350:1–8.

RODGERS, W. A. & H. S. PANWAR. 1988. Planning a Wildlife Protected Area Network in India Vol. II. Wildlife Institute of India, Dehra Dun. 267 pp.

SHARMA, R. C. 1981. *Hemidactylus parabandarensis*, a new geckonid lizard from Gujarat, India. Bulletin of Zoological Survey of India 4(1):1–2.

SHUKLA, V. N. 1983. A new species of the lizard *Hemidactylus* from Kanpur, India. Indian Journal of Zootomy 24:81–83.

SMITH, M. A. 1935. The fauna of British India, including Ceylon and Burma. Reptilia and Amphibia. Vol. II.– Sauria. Taylor and Francis, London. xiii + 440 pp + 1 pl.

SOMAN, P. W. 1966. A new gekkonid in Maharashtra. Science & Culture 32:427.

VYAS, R., V. GIRI & A. M. BAUER. 2006. First record of *Hemidactylus persicus* Anderson, 1872 (Squamata: Sauria: Gekkonidae) from the Republic of India, with notes on its distribution. Hamadryad 30(1):209–211.

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