

Description of a new species of *Carinatogekko* (Squamata: Gekkonidae) from Iran

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Abstract. A new keel-scaled gecko, *Carinatogekko stevenandersoni* sp. n. (Squamata: Gekkonidae) is described from material collected in scattered oak forest habitats of the temperate climatic region on the western slope of the Zagros Mountains in the Delphan region, northern Lorestan province, Iran, in 2007 and 2008. It is a large *Carinatogekko* (snout-vent length more than 35 mm) that is distinct from all other species of its genus by its scales and tubercles all over body being strongly keeled (except labials, nasals and chin scales); 3–4 postmentals; enlarged tubercles on dorsum, head, limbs; enlarged and trihedral tubercles posterior to the labials; ventral scales smaller than dorsals; dorsal body colour brownish, venter dirty white; dark crossbars on dorsum, limbs, digits, and tail. Some information about the ecology, biology and conservation of the new species is provided. Comparisons with other species of *Carinatogekko* are presented and a key to the genus is provided.

Key words. Squamata, Gekkonidae, *Carinatogekko*, *C. stevenandersoni* new species, *C. heteropholis*, *C. aspratilis*, Lorestan, Iran.

Introduction

Carinatogekko GOLUBEV & SZCZERBAK, 1981 comprises two species: *C. aspratilis* ANDERSON, 1973, distributed in Iran, and *C. heteropholis* MINTON, ANDERSON & ANDERSON, 1970, distributed in a few areas in Iran and Iraq (MINTON et al. 1970, ANDERSON 1973, 1999, GOLUBEV & SHCHERBAK 1981, KAMI 1999, NAZARI-SERENJEH & TORKI 2008). In this paper, I describe a new species of *Carinatogekko*. Additionally, I provide information on some ecological and biological aspects of the new gecko.

Based on the characters listed below, the new species belongs to the genus *Carinatogekko* GOLUBEV & SZCZERBAK, 1981: all scales, with the exception of intermaxillars, nasals, chin shields, and upper and lower labials, strongly keeled; 3 nasal scales in contact with nostril; digits weakly angular, clawed, not dilated, not webbed or ornamented (in the new species, the lamellae are deep brownish), with keeled transverse subdigital lamellae; dorsal scales heterogeneous, small juxtaposed scales intermixed with tubercles; pupil vertical; tail segmented, caudal tubercles with bases in the middle of each segment, not in contact with one another, separated by a ring of scales from the posterior margin of a segment.

Material examined

During the 2007–2010 FTEHCR (Farhang Torki Ecology and Herpetology Center for Researches) program about Iranian amphibians and reptiles, I collected a new *Carinatogekko* from Tang-e-Gavshomar, Delphan, Lorestan Province, western slope of the Zagros Mountains (Figs. 1, 2). For

comparison, I examined *Carinatogekko aspratilis* (n = 12; FTHM 003300–003311) and *Carinatogekko heteropholis* (n = 29; FTHM 003400–003428). For the description of the new *Carinatogekko*, I collected eight specimens (five adults and three juveniles). The holotype and seven paratypes were preserved in 95% ethanol and are now in the ZFMK (Zoologisches Forschungsmuseum Alexander Koenig, Bonn, Germany). FTHM 003362 was preserved in 95% ethanol and is now stored in the FTHM (Farhang Torki Herpetology Museum) in the FTEHCR. Most characters of these specimens differ significantly from both currently recognized species of *Carinatogekko*.

Carinatogekko stevenandersoni sp. n. (Fig. 3)

Holotype: adult female, (ZFMK 91901), collected by FARHANG TORKI on 30 September 2007, 1300–1500 m a.s.l., on the western slope of the central Zagros Mountains, Tang-e-Gavshomar region (Ganj-Dare), Delphan City, Lorestan Province, western Iran, 33°49' N, 47°49' E.

Paratypes: ZFMK 91902–907, FTHM 003362, three juvenile specimens (ZFMK 91905–907) and three adult male specimens (ZFMK 91902–904), same locality as holotype. FTHM 003362 (Fig. 4a) was collected 3 km south of the locality of the holotype on the Tang-e-Gavshomar Mountain.

Diagnosis (Figs. 5–7): A relatively small gecko, but a large *Carinatogekko* (snout–vent length more than 35 mm); scales and tubercles all over body strongly keeled (except labials, nasals and chin scales); dorsal scales heterogeneous; enlarged tubercles on dorsum, head, and limbs; en-



Figure 1. Map showing the type locality of *Carinatogekko stevenandersoni* sp. nov. in the Tang-e-Gavshomar region, Lorestan Province, Iran.

larged trihedral tubercles posterior to labials and anterior to eyes; ventral scales smaller than dorsal scales; dorsal scales on limbs homogeneous; 3-4 postmentals; lamellae in adults and juveniles elevated, swollen and broad; ventral side of tail without large plate-like scales; 14-17 regular longitudinal rows of tubercles on back; dorsal body colour brownish, venter dirty white; complete dark crossbars (regular or irregular) across dorsum, limbs, digits, and tail; dorsal side of head spotted; supralabials completely (in juvenile) or partly (in adults) dark; subdigital lamellae distinctly brownish.

Description of holotype: all tubercles and scales of body, limbs, tail and head strongly keeled; dorsum covered with enlarged tubercles and heterogeneously-sized scales, enlarged tubercles arranged in 14-16 regular rows, distributed on neck, posterior and lateral faces of head; ventral scales uniform, keeled and sharp, in 38-40 longitudinal rows; precloacal scales larger than ventral scales; no plate-like scales on ventral side of tail; large tubercles form whorls on the dorsal side of the tail, 2-3 scales between rows of large tubercles; dorsal tail scales more or less the same size as ventral scales; regenerated tail without whorls of enlarged tubercles, but covered with large keeled scales; in regenerated sections, the ventral scales are smaller than the dorsal scales; few tubercles in the interorbital area; small keeled scales (20 rows) between eyes; several trihedral and strongly keeled tubercles in front of eye; mental trihedral, small and wide (W/H: 1.29/1.85); rostral wide (1.68/0.72), 0.61 of rostral divided (44/72:0.61); 3 pairs of postmentals, decreasing in size from medial to lateral, 1st are in contact with one another, 2nd separated by two scales, 3rd separated by seven scales, postmentals in contact with infralabials; nostril surrounded by 1st upper labial, rostral and three small scales posteriorly; eight lower labials, 1st to 4th lower labials are complete, in contrast, 5th to 8th lower labials are

divided; scales on dorsal and ventral faces of arm homogeneous, ventral scales are smaller than dorsals; palms and soles covered with globular scales (sharp and keeled; 16 lamellae under 4th finger and 18 lamellae under 4th toe; lamellae on digits of both limbs elevated, swollen and broad; without preanal pores.

Colour pattern in preservative: background colour of dorsum, head, limbs and tail brownish; 1st to 3rd toes with four crossbars, 4th toe with three crossbars, and 5th without complete crossbars; 1st finger with three crossbars, 2nd



Figure 2. Habitat of *Carinatogekko stevenandersoni* sp. nov. at the type locality in the Tang-e-Gavshomar region, Lorestan Province.

with four, 3rd and 4th with three complete crossbars, and 5th finger without complete crossbars; six irregular crossbars on dorsal face of forelimbs; five irregular crossbars on upper face of hindlimbs; nine uniform crossbars on the dorsal side (two on the head, six on dorsum, and one in the proximal portion of tail); venter dirty white; ventral scales with little pigment, visible only under magnification; lamellae on both limbs strongly pigmented; lamellae (especially on pes) brownish; ventral side of tail strongly pigmented and less intensely brownish (dirty); mental, postmentals and infralabials pigmented, but hardly visible without magnification; dorsum strongly pigmented, brownish, head and dorsal side of tail darker than dorsum; several large dark spots on supralabials in front of eyes.

In life: all colouration characters in life are similar to those in preserved specimens, but the pattern in life is darker and more contrasting. Measurements are summarized in Table 1.

Description of paratypes; ZFMK 91905: enlarged tubercles arranged in 15-16 regular rows; tubercles on neck, head, and sides of head and neck mostly whitish; original tail with whorls of enlarged tubercles, which extend to near the end of the tail, but not onto the ventral side; mental pentagonal, about as long as wide; rostral wide and divided from above; three pairs of postmentals, 1st pair in contact, 2nd separated

by two scales, 3rd separated by seven scales, postmentals in contact with infralabials, reduction formula for postmentals: 1st > 2nd > 3rd; eight lower labials, 1st to 3rd lower labials entire, 4th through 6th lower labials divided and enlarged, 7th and 8th small; 17 lamellae under 4th toe, lamellae under fingers and toes elevated, swollen, and broad.

Colouration in preservative: regular or irregular crossbars on limbs and fingers; six irregular crossbars on dorsum; a single crossbar on occiput; 12 complete and regular crossbars on dorsal side of original tail; colour of proximal portion of tail similar to that of dorsum, contrasting with the remainder of the tail that is yellowish; head lighter than dorsum; forelimbs lighter than hindlimbs; dorsolateral faces (especially on neck) are brightest; most large tubercles on dorsal faces (dorsal, limbs, neck and head) stand out by their brightness; ventrals dirty white, with faint pigmentation, visible under magnification; lamellae under fingers and toes strongly pigmented; lamellae (especially under toes) brownish; ventral side of tail strongly pigmented and less intensely brownish (dirty); mental, postmentals and infralabials pigmented, but hardly visible to the naked eye, pigmentation of supralabials clearly visible; dorsal body strongly pigmented more or less brownish; supralabials dark brown.

In life: colouration in live specimen lighter than after preservation and pattern more distinct; most of dorsal side of tail yellowish in life. Measurements are summarized in Table 1.



Figure 3. (a) Dorsal and (b) ventral views of the holotype of *Carinatogeko stevenandersoni* sp. nov.

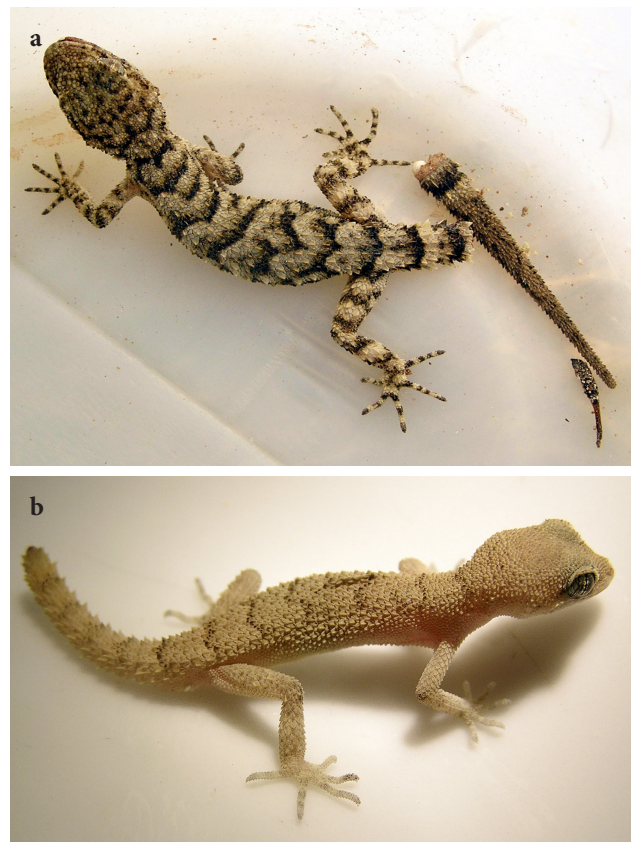


Figure 4. (a) Dorsal views of *Carinatogeko stevenandersoni* sp. nov. (in life); (b) dorsal views of *Carinatogeko aspratilis* (in life).



Figure 5. Comparison of the dorsal aspects of all species of *Carinatogekko*. (a) *C. aspratilis*; (b) *C. heteropholis* and (c) *Carinatogekko stevenandersoni* sp. nov.

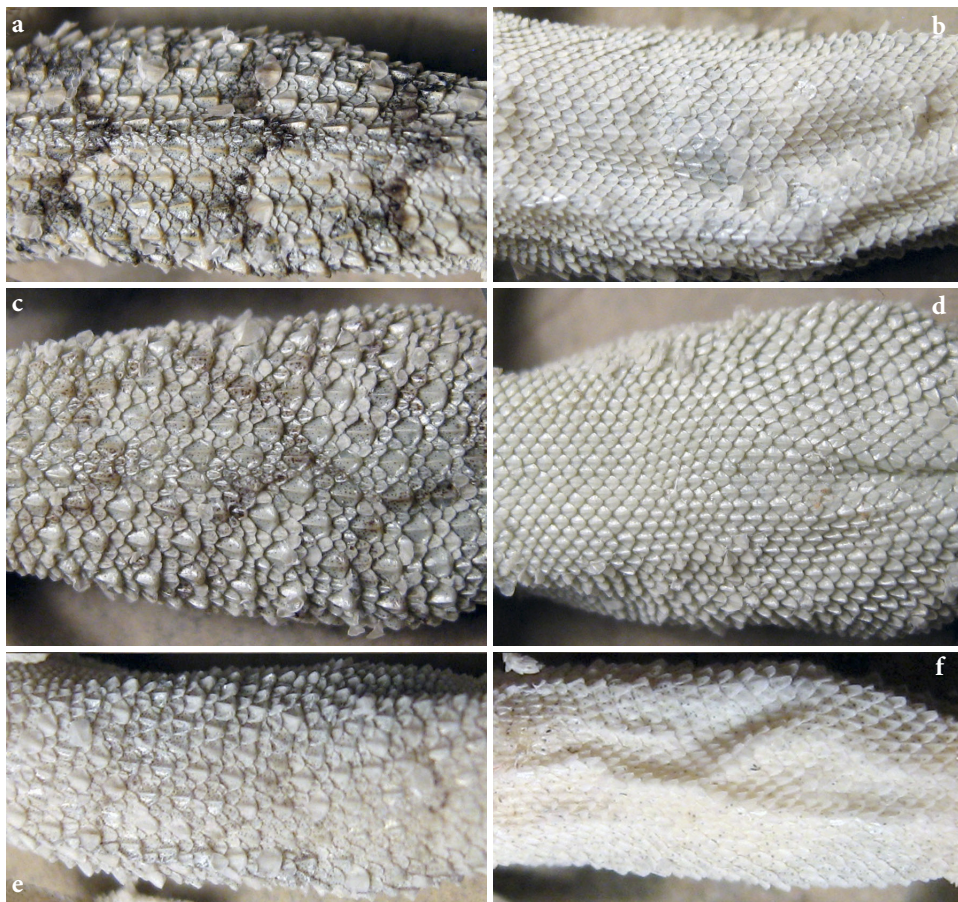


Figure 6. Comparison of dorsal tubercles (right) and ventral scales (left) of all species of *Carinatogekko*. (a-b) *Carinatogekko stevenandersoni* sp. nov.; (c-d) *C. heteropholis*; and (e-f) *C. aspratilis*.

Table 1. Comparison of 20 character states of *Carinatogekko stevenandersoni* sp. n. (only adult specimens). Abbreviations (all in mm): RA: Rostrum–anus; TL: Tail length; HW: Head width; HL: Head length; HD: Head depth; EED: Eye to eye distance; EDV: Eye diameter (vertical); EAD: Ear to ear distance; EAV: Ear diameter (vertical); EEA: Eye to ear distance; END: Eye to nostril distance; EYH: Eye diameter (horizontal); EDH: Ear diameter (horizontal); RL: Rostral length; RW: Rostral width; MW: Mental width; ML: Mental length; ILD: Interlimb distance; FLD: Forelimb length (from insertion point to end of 4th finger); HLD: Hind limb length (from insertion point to end of 4th toe).

	ZFMK 91901	FTHM 003362	ZFMK 91902	ZFMK 91903	ZFMK 91904
RA	36.49	35.50	35.13	31.15	31.61
TL	32.74	27.77	38.15	36.82	43.32
HW	7.16	6.47	6.73	6.5	6.62
HL	10.72	10.35	10.64	10.57	9.7
HD	3.90	4.02	3.89	3.82	4.05
EED	5.19	4.71	4.99	4.38	4.55
EDV	1.65	1.75	1.85	1.75	1.54
EAD	7.09	6.66	6.64	6.87	6.06
EAV	0.51	0.66	0.65	0.46	0.65
EEA	3.15	2.86	3.2	3.01	2.54
END	3.78	2.88	3.02	3.29	2.76
EYH	2.38	2.66	2.71	2.22	2.09
EDH	0.58	0.49	0.51	0.79	0.29
RL	1.26	0.52	1.03	1.49	0.81
RW	1.57	1.43	1.45	1.49	1.32
MW	1.77	2.13	1.62	0.81	1.55
ML	1.31	1.05	1.31	1.65	1.19
ILD	18.15	16.31	16.09	13.12	15.55
FLD	12.79	13.67	15.01	14.25	13.66
HLD	17.32	18.49	16.71	17.99	19.13

FTHM 003362: Adult male; enlarged tubercles on dorsum arranged in 15–17 regular rows; only two, more or less uniform tubercles in centre of head; mental small, wide and hemispherical in shape; four pairs of postmentals, 1st pair in contact, 2nd pair separated by 4th postmentals, 3rd pair separated by ten scales, 4th pair of postmentals differ in shape from other postmentals, size reduction formula: 1st > 2nd > 3rd > 4th; seven lower labials, 1st through 3rd lower labials complete, 4th through 7th divided; 14 lamellae under 4th finger and 16 lamellae under 4th toe, lamellae under digits of both pairs of limbs are elevated, swollen and broad; one pair of preanal pores.

Colouration in preservative: 1st to 3rd toes with four complete regular crossbars, 4th toe with three complete regular crossbars, and 5th with two irregular crossbars; 1st finger with three complete crossbars, 2nd and 3rd with four, 4th with three pale crossbars, and 5th finger without complete crossbars (but is brownish); six irregular crossbars on dorsal face of forelimbs; six irregular crossbars on upper face of hind limbs; ten uniform and irregular crossbars on dorsal side (one on head, eight on dorsum, and one on proximal, unregenerated portion of tail); venter dirty white; ventral scales more densely pigmented than in holotype, visible under magnification; lamellae under fingers and

toes strongly pigmented, visible with the naked eye; lamellae (especially under toes) deep brownish; ventral side of tail strongly pigmented and brownish (dirty); mental, postmentals and infralabials pigmented, hardly visible with the naked eye; several large spots on each supralabial; dorsal side of body strongly pigmented, brownish; head and dorsal face of tail darker brown than dorsum.

In life: colouration similar to preserved specimens, but more distinct. Background colour of dorsum brownish; head and tail darker; crossbars on dorsal face of head, limbs and tail are darker than in preservative; spots are obvious in live specimen. Measurements are summarized in Table 1.

Variation in other paratypes: ZFMK 91902–904, ZFMK 91906–907: Variation is most apparent with regard to the rugosity of the tubercles and the scales of the dorsal and ventral body: in some specimens, the tubercles on the occiput are more rugose and less in others; the number of enlarged tubercles on the upper side of the head or between eyes is variable among specimens; scale heterogeneous on forearm in some specimens, homogenous in the middle section in some others; scales on occipital differ in size, with most being hexagonal or cycloid; heterogeneity in scalation most prominent on upper faces of neck; colour of crossbars on dorsal body and tail ranges from dark brownish to lighter brownish; one or two complete crossbars in the head region; some specimens without complete crossbars, but with large blotches or small bars instead; dorsal crossbars zigzag-shaped in all specimens, but incomplete in some; colour of dorsal crossbars always darker in the posterior parts (Fig. 8c–d); more variation is shown in Tables 1 and 2.

Juvenile vs. adult morphology: head length in juveniles is proportionately greater than in adults; eye–ear distance in juveniles is proportionately greater than in adults; ventral scales do not overlap and are not pointed (or sharp) in juveniles, but pointed and more or less imbricate in adults; mental pentagonal in juveniles and trihedral in adults; mental wider than long in adults and about as long as wide in juveniles; tubercles in front of eye are small and less distinctly trihedral in juveniles than in adults.

Colouration: large dorsolateral tubercles on body, limbs, head and especially on neck and sides of neck are light in colour in juveniles, but not in adults; most of the tail is yellowish in juveniles, but dark in adults; supralabials completely dark in juveniles, but with a spotted pattern in the centre of the supralabials in adults.

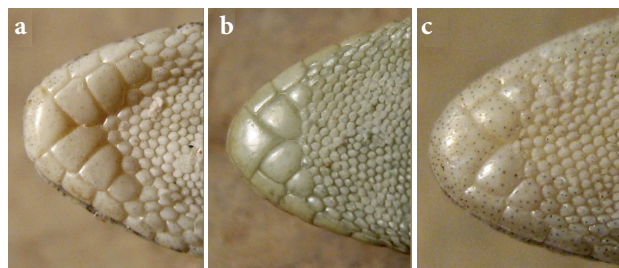


Figure 7. Comparison of postmentals of all species of *Carinatogekko*. (a) *Carinatogekko stevenandersoni* sp. nov.; (b) *C. aspratilis*; and (c) *C. heteropholis*.

Table 2. Comparison of 9 character states of adult *Carinatogekko stevenandersoni* sp. n. Abbreviations PM: postmentals; BSM: number of scales between secondary postmentals; BTM: number of scales between third postmentals; L4T: number of lamellae under 4th toe; UL: upper labials; LL: lower labials; IOS: number of interorbital scales; DC: number of dorsal crossbands; TC: number of caudal crossbands; *: 2nd postmentals separated by 4th postmentals; **: tail is not original.

	ZFMK 91901	ZFMK 91905	FTHM 003362	ZFMK 91906	ZFMK 91907	ZFMK 91902	ZFMK 91903	ZFMK 91904
PM	3	3	4	3	3	3	3	3
B2PM	2	2	*	3	2	2	3	2
B3PM	7	7	10	7	7	7	7	7
L4T	18	17	16	19	17	20	19	18
UL	9	9	8	9	10	11	10	10
LL	8	8	7	7	7	7	8	8
IOS	20	22	21	24	24	20	21	24
DC	6	6	8	7	7	7	6	5
TC	**	12	**	12	12	5**	11	13

Habitat and Ecology (Fig. 2): The type locality of the new *Carinatogekko* lies in a mountainous area in the Tang-e-Gavshomar region (Delphan, Iran). The natural habitat consists of oak forest (*Quercus brandti*) that is denser at the base and mid-elevations than at the summit. One river (Gavshomar River) flows through this area, which is characterized by a warm-temperate climate. I collected the holotype in the valley of this mountain (Tang-e-Gavshomar), and the paratypes above it (Tang). The holotype was collected in the afternoon, having emerged from its shelter under a large stone. Both the orientation of the mountain and the foliage of the forest cause an early sunset, therefore, *Carinatogekko stevenandersoni* sp. nov. and other geckos in this area, such as *Asaccus nasrullahi* become active early, too. In contrast, outside the valley, *C. stevenandersoni* sp. nov. and other geckos retain their normal nocturnal activity patterns. I collected the juvenile paratype specimens from under stones around midday. This species feeds mostly on dipterans of small size, for example, flies, gnats, small beetles, small arachnids and other soft-bodied insects. Its style of predation is similar to that of *Carinatogekko aspratilis* (NAZARI-SERENJEH & TORKI 2008); in fact, it is similar to *C. aspratilis* in most biological aspects (NAZARI-SERENJEH & TORKI 2008).

In spite of the fact that the Tange-Gav-Shomar region is used by local people as a recreational site, the area appears to be well preserved, as people remove most of their rubbish when they leave. The type locality, therefore, has good prospects for remaining intact enough to support the new species. A problem in this context can be expected from the construction of a large dam in this area, though. This dam will obviously impact on all biological aspects of the new *Carinatogekko* and other wildlife (e.g., TORKI 2009, TORKI et al. in press) living in this area, as it will change their habitat. Fortunately, this artificial barrier will affect only individuals in the immediate vicinity and not so much those in other areas, so that the prospects for the survival of this gecko are still good. Tang-e-Gavshomar is a historical region dating back to the Sassanian Kings. People have lived here for more than 2000 years, yet there are only a few villages at present.

Distribution (Fig. 1): The new species is as yet known only from the type locality in the Tang-e-Gavshomar region, Delphan City, Lorestan Province, western Iran.

Sympatric lizards and snakes: Several species lizards and snakes occur in this region: *Asaccus nasrullahi*, *Cyrtopodion heterocercum*, *Tropicolotes helenae fasciatus*, *Acanthodactylus boskianus*, *Lacerta princeps*, *Ophisops elegans*, *Ablepharus pannonicus*, *Trachylepis aurata*, *Laudakia nupta*, *Varanus griseus*; and *Macrovipera lebetina*, *Spalerosophis diademata*, *Natrix tessellata*, *Rhynchocalamus melanocephalus*, *Malpolon monspessulanus*, and *Typhlops vermicularis*.

Etymology: *Carinatogekko stevenandersoni* sp. nov. is named for STEVEN C. ANDERSON, in recognition of his great contributions to the knowledge of the herpetology of the Middle East as well as the Iranian Plateau.

Comparison with other *Carinatogekko*
GOLUBEV & SZCZERBAK, 1981 (Figs. 4-10)

For a comparison of *Carinatogekko stevenandersoni* sp. n. with other *Carinatogekko* (*C. aspratilis* and *C. heteropholis*), I used FTHM specimens (see Material and methods) and existing literature (e.g., MINTON et al. 1970, ANDERSON 1973, 1999, GOLUBEV & SZCZERBAK 1981, NAZARI-SERENJEH & TORKI 2008). *C. stevenandersoni* is distinguishable from the other species (their character states are given in brackets where applicable) as follows: The colour pattern is completely different from those of *C. heteropholis* and *C. aspratilis*; *C. stevenandersoni* sp. nov. has 3-4 postmentals (2); the subdigital lamellae in *C. stevenandersoni* are swollen and brownish (flattened and dirty white); it has large scales posterior to the postmentals (Fig. 7a) (small scales) (Fig. 7b,c); enlarged dorsal tubercles extend onto occiput, upper head, to between eyes, and into temporal region in *C. stevenandersoni* (extend onto occiput and run before reaching the interorbital region in *C. heteropholis*, and run out in the occipital region in *C. aspratilis*); ventral scales weakly imbricate in *C. stevenandersoni* (strongly imbricate in *C. aspratilis*, not imbricate in *C. heteropholis*); ends of ventral scales pointed (not pointed in *C. heteropholis*, weakly pointed in *C. aspratilis*); scales posterior to the labials much enlarged (enlarged in *C. heteropholis*, not enlarged in *C. aspratilis*); dorsal scales larger than ventrals and caudal tubercles raised (not so in *C. heteropholis*, similar in *C. aspratilis*); number of subdigital lamellae under 4th toe 16-20 (15 in *C. heteropholis*); large SVL

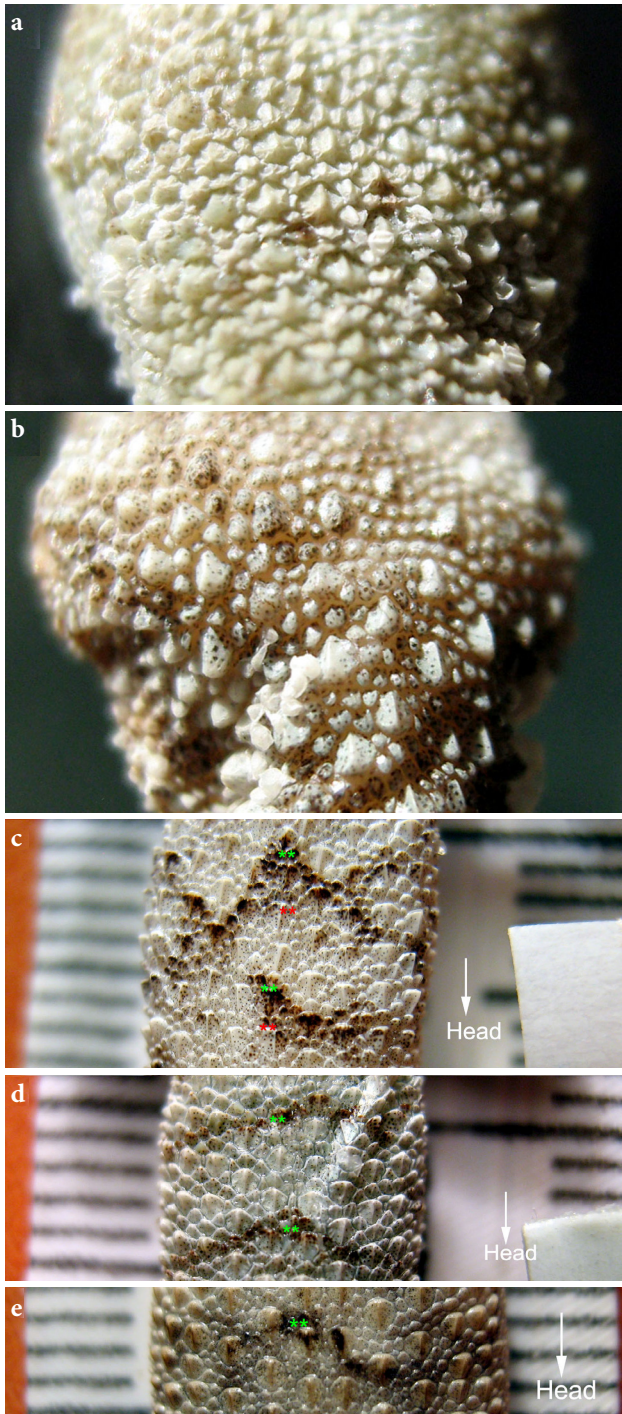


Figure 8. (a-b) Comparison of occipital scales between (a) *Carinatogekko heteropholis* (maximum rugosity, flattened scales) and (b) *Carinatogekko stevenandersoni* sp. nov. (less rugose, scales round); (c-e) dorsal bands in *Carinatogekko stevenandersoni* (c) and *Carinatogekko heteropholis* and (e) *Cyrtopodion heterocercum* (e). Spectrum bands (darken to lighten) in *C. stevenandersoni* (c) and minimally visible in other species (d, e). Green stars: darker part of band; **Red stars: lighter part of band.

(*C. aspratilis* is smaller) (Fig 5); scales in occipital region are round and a little rugose (maximum rugosity of scales in the occipital region in *C. heteropholis*) (Fig. 8); 4th and 5th lower labials divided (entire in both *C. heteropholis* and

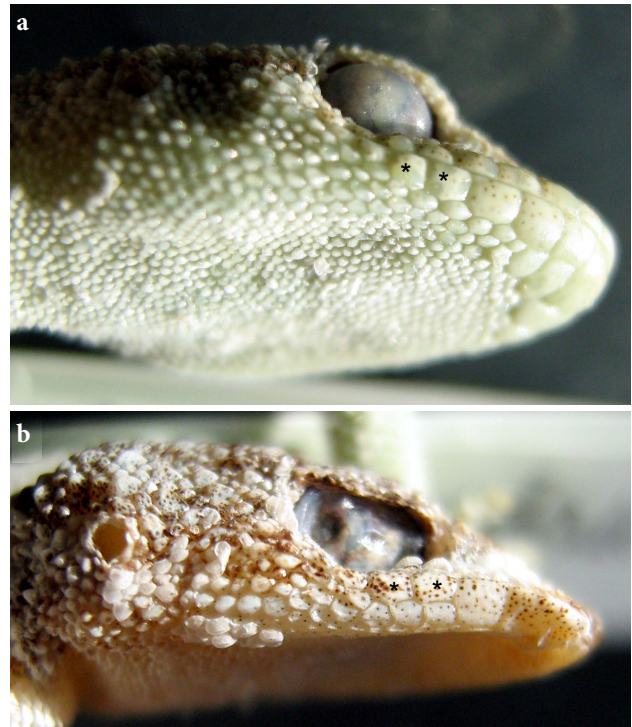


Figure 9. Comparison of lower labials in (a) *C. heteropholis* and (b) *Carinatogekko stevenandersoni* sp. nov. Stars indicate the 4th and 5th lower labials.

C. aspratilis) (Fig. 9); scales on upper side of forearm are heterogeneous (homogeneous); spectrum bands are visible (not so in *C. heteropholis* and *C. aspratilis*).

Recently, CERVENKA et al. (2010) worked on the phylogeny of *Cyrtopodion* spp. of Iran. They described *Carinatogekko* cf. *heteropholis* to which I compare the new species below based on their description of specimens and photographs (Figure 2 in CERVENKA et al. 2010; character states are given in brackets).

Carinatogekko stevenandersoni sp. n. has 3-4 postmentals (2); pattern on head more blotched in *C. stevenandersoni*; dorsal crossbars wider in *C. stevenandersoni* and body size smaller; snout is significantly broader than in *Carinatogekko* cf. *heteropholis*; two scales between secondary postmentals (five scales); scales on upper side of forearm are heterogeneous (homogeneous); spectrum bands are visible (not so). I collected *Cyrtopodion heterocercum* in Lorestan near the locality of CERVENKA et al. (2010), and Fig. 10 serves to illustrate the similarity of *Carinatogekko* cf. *heteropholis* with *Cyrtopodion heterocercum*.

Comparisons with *Mediodactylus*

A recent phylogenetic study by CERVENKA et al. (2010) suggested that *Carinatogekko* GOLUBEV & SZCZERBAK, 1981 and some species of *Cyrtopodion* be transferred to the genus *Mediodactylus*. My morphological studies do not support this proposal for which reason it is not adopted here. Anyway, I compare the new species with all members of the genus *Mediodactylus sensu* CERVENKA et al. (2010) below.

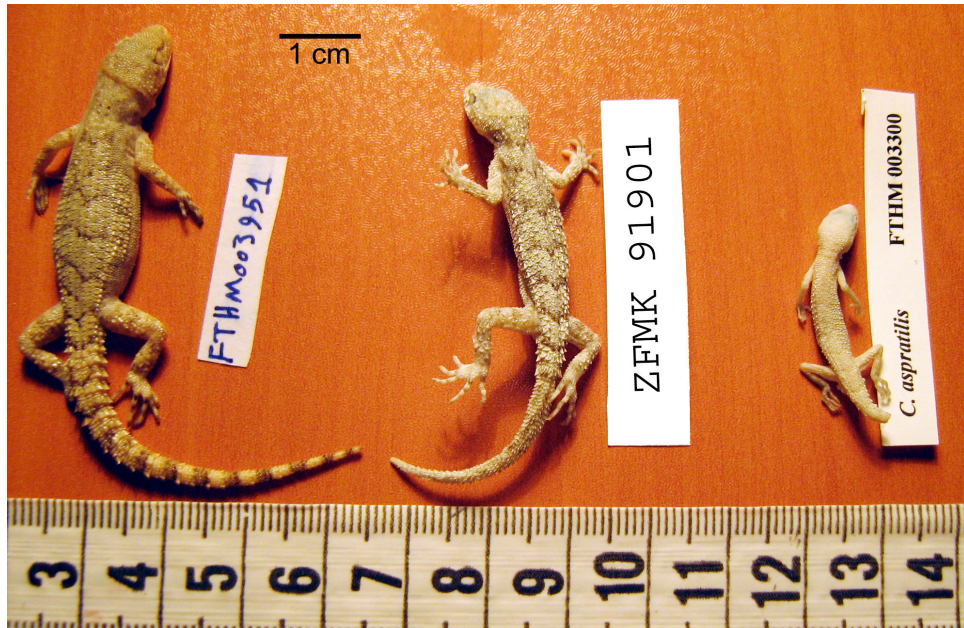


Figure 10. Comparison of *Cyrtopodion heterocercum* (left) with *Carinatogekko stevenandersoni* sp. nov. (centre) and *Carinatogekko aspratilis* (right).

In general, *Carinatogekko stevenandersoni* sp. n. differs from *Mediodactylus amictophole*, *M. dehakroense*, *M. heterocercum*, *M. kotschyi*, *M. narynense*, *M. russowii*, *M. sagittiferum* and *M. spinicaudum* by having keeled tubercles all over on the dorsal and ventral body. It is distinct from *M. russowii* by having the first pair of postmentals in contact;

M. kotschyi has four preanal pores whereas *C. stevenandersoni* sports only two; *M. spinicaudum* is different from *C. stevenandersoni* by having rounded tubercles on the dorsum.

Consequently, I propose that *Carinatogekko* be retained as a separate genus that includes three species: *C. aspratilis*, *C. heteropholis*, and *C. stevenandersoni* sp. n.

Key to the species of the genus *Carinatogekko* GOLUBEV & SZCZERBAK, 1981

I here provide a key to the species of *Carinatogekko* including *Carinatogekko* cf. *heteropholis* of CERVENKA et al. (2010) based on all existing data (MINTON et al. 1970, ANDERSON 1973, 1999, GOLUBEV & SZCZERBAK 1981, NAZARI-SERENJEH & TORKI 2008) and my collection (FTHM).

- 1a small body size (adults: SVL less than 27 mm) *Carinatogekko aspratilis* (ANDERSON, 1973)
- 1b large body size (adults: SVL more than 35 mm) 2
- 2a three or four pairs of postmentals *Carinatogekko stevenandersoni* sp. n.
- 2b two pairs of postmentals 3
- 3a 16-17 lamellae under 4th toe, 9 bands on original tail *Carinatogekko* cf. *heteropholis* CERVENKA et al., 2010
- 3b 15 lamellae under 4th toe, 11-13 bands on original tail
 *Carinatogekko heteropholis* (MINTON, ANDERSON & ANDERSON, 1970)

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