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Oligodon saiyok, a new limestone-dwelling kukri snake (Serpentes: Colubridae) from Kanchanaburi Province, western Thailand

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Abstract

We describe *Oligodon saiyok* **sp. nov.** from Benjarat Nakhon Cave Temple, Sai Yok District, Kanchanaburi Province, western Thailand. It is characterized by a maximal known SVL of 626.1 mm; 13 maxillary teeth, the posterior two enlarged; 8 supralabials; 17-17-15 dorsal scale rows; 181–187 ventrals and 38–43 subcaudals; a single anal; hemipenes extending *in situ* to the 18th subcaudal; dorsum with 21–22 dark blotches or white rings without vertebral or lateral stripes; and venter with a dense network of subrectangular dark blotches. It is the 7th squamate species believed to be endemic to Sai Yok District.

Key words: Thailand, *Oligodon saiyok* sp. nov., new species, taxonomy, limestone cave, Buddhist temple

Introduction

The Kukri snakes of the genus *Oligodon* Boie *in* Fitzinger, 1826 are distributed throughout tropical Asia and the genus currently includes about 76 recognized species, which makes of it one of the largest Asian snake genera (Uetz *et al*. 2016). Recent revisions showed that several species are in reality species complexes, and a dozen species have already been described in the 21st Century, with more descriptions to come (David *et al*. 2008a-b, 2011, 2012). All species show a characteristic habitus, without marked neck, with a large rostral in relation to their semi-fossorial habits, and with typical kukri-shaped posterior maxillary teeth. Within the distribution of the genus, the Indochinese Peninsula and Thailand show the highest species diversity. More and more taxa with limited geographic distributions are discovered, some of them restricted to specific ecosystems such as sand dunes or limestone hills (Neang *et al*. 2012; Vassilieva 2015; Nguyen *et al*. 2016).

In the course of our ongoing studies of the zoogeography and systematics of the reptiles of Thailand (see among our most recent contributions, Pauwels & Grismer 2016; Pauwels & Sumontha 2016; Pauwels *et al*. 2016), we collected two *Oligodon* individuals in a Buddhist temple at the entrance of a cave on a limestone mountain in Kanchanaburi Province, western Thailand. These *Oligodon* show a striking chromatical dimorphism comparable to the one found in *O. purpurascens* (Schlegel, 1837) (van Rooijen *et al*. 2011), but differs from the latter species and all other *Oligodon* in the region in pattern and scalation. We thus hereafter describe them as a new species.

Material and methods

Measurements and meristic counts follow David *et al*. (2008a). All measurements were taken with a slide-caliper

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to the nearest 0.1 mm. Ventral scales were counted according to Dowling (1951). The terminal scute is not included in the number of subcaudals. Dorsal scale row counts are given at one head length behind head, at midbody (i.e., at the level of the ventral plate corresponding to a half of the total number of ventrals), and at one head length before vent. Paired meristic characters are given left/right. Maxillary teeth were examined after removal and cleaning of the maxillary.

Comparisons were made using original species descriptions and revisions (see References; David *et al*. 2008a-b; Orlov *et al*. 2010; van Rooijen *et al*. 2011; Zhang *et al*. 2011; Hasan *et al*. 2013; Vassilieva *et al*. 2013; Vassilieva 2015; Nguyen *et al*. 2016 and literature cited therein) and preserved museum material in the Chulalongkorn University Museum of Zoology, Reptile Collection, Bangkok (CUMZ (R)), Institut Royal des Sciences Naturelles de Belgique, Brussels (IRSNB), Muséum national d'Histoire naturelle, Paris (MNHN), Queen Saovabha Memorial Institute, Thai Red Cross Society, Bangkok (QSMI), Royal Forest Department of Thailand, Bangkok (RFD), Natural History Museum, National Science Museum, Technopolis, Pathum Thani (THNHM) and United States National Museum, Washington (USNM) (see Appendix).

Abbreviations of morphological characters are as follows: Morphometry: ED, eye diameter (horizontal); HD, maximum head depth; HL, head length (from the tip of rostral to the posterior end of the jaw); HW, maximum head width; SnL, snout length (from the tip of rostral to the anterior eye margins); SVL, snout-vent length; TaL, tail length; TL, total length. Scalation & others: ASR, number of dorsal scale rows at neck (at one HL behind head); DSR, dorsal scale rows; IL, infralabial scale(s); LOR, loreal scale; MSR, number of dorsal scale rows at midbody (at number of VEN/2); MT: maxillary teeth; PosOc, postocular scale(s); PreOc, preocular scale(s); PreSubOc, presubocular scale (below the preocular and not in contact with the loreal); PSR: number of dorsal scale rows at one head length before vent; PV, preventral(s) (directly preceding the ventrals, unpaired, wider than long but not in contact with the 1st dorsal scale row); SC, subcaudal scale(s); SL, supralabial scale(s); SnL, snout length (from the tip of rostral to anterior eye margin); Tem, temporal formula; VEN, ventral scale(s).

Results

Description of *Oligodon saiyok* sp. nov.

(Figs 1–7)

Holotype. QSMI 1506 (field number MS 469); adult male from Wat Tham Benjarat Nakhon (= Benjarat Nakhon Cave Temple), Sai Yok District, Kanchanaburi Province, western Thailand; collected by K. Kunya, M. Sumontha and S. Dangsri on 7 October 2009 at 18.00.

Paratype. QSMI 1507 (field number MS 470), adult female, same locality and collector as holotype. It was found two hours later than the holotype.

Diagnosis. *Oligodon saiyok* **sp. nov.** can be distinguished from all other congeneric species by its maximal known SVL of 626.1 mm, 8 SL, 17-17-15 DSR, 181–187 VEN, single anal, 38–43 SC, 13 MT, a dorsal pattern with 21 or 22 large blotches or rings, and venter with a dense network of subrectangular dark blotches.

Description of holotype. Adult male. Body robust but elongate. Head short, neck moderately marked. Pupil round. SVL 626.1 mm. TaL 92.2 mm. Tail robust, tapering, accounting for 12.8 % of the TL (718.3 mm). HL 17.4 mm; HW 8.7 mm; HD 6.2 mm. SnL 4.7 mm. Snout short (27 % of HL, 1.9 times as long as ED). ED 2.5 mm.

Body scalation. DSR 17-17-15, all smooth. DSR reduction from 17 to 15 occurs above the 133rd VEN by fusion of rows 4 and 5 (left) and 3 and 4 (right). Two PV + 187 VEN, laterally angulated. Anal plate single. SC 43, all divided.

Head scalation. Rostral thick, curved onto upper snout surface, well visible from above, separating internasals by about one third of their length. Rostral width 2.6 mm, rostral height 2.1 mm. Nasals vertically divided. Nostril large, piercing top of middle of nasal. Internasals in broad contact, shorter than prefrontals. Prefrontals subrectangular, distinctly wider than long. Length of suture between internasals shorter than length of suture between prefrontals. Frontal pentagonal, 1.5 times as long as wide (frontal length 4.8 mm, frontal width 3.3 mm); 1/1 supraoculars, distinctly longer than wide; SL 8/8, 2nd and 3rd in contact with LOR, 4th and 5th in contact with orbit. LOR 1/1, distinctly longer (1.8 mm) than high (0.7 mm). PreOc 1/1, tall and narrow; no PreSubOc. PosOc 2/2, the upper one larger. Tem 1+2 on each side. Mental width 1.9 mm, mental length 1.2 mm. IL 8/8, 1st pair in

contact behind mental, IL 1 to 4 in contact with anterior chin shields. First pair of chin shields distinctly longer than 2nd pair.

Dentition. Thirteen MT, curved backwards, sharp, the two posterior ones enlarged, kukri-like.

Hemipenes. The hemipenes *in situ* reach the 18th SC.

FIGURE 1. Live holotype of *Oligodon saiyok* **sp. nov.** Photograph by K. Kunya.

Coloration in life. Dorsal surface of head grayish brown as the dorsum, but paler on the sides of the snout and rostral. Four chevron marks pointing frontwards on the head and neck. Chevrons blackish brown, somewhat paler grayish brown in their center, edged by darker pigmentation. Anteriormost chevron with its apex at the level of the posterior edge of the rostral, covering part of the internasals, prefrontals and frontal, and descending through the eye to cover part of the 5th and 6th SL. Second chevron with its tip in the middle of the frontal, covering part of the frontal, parietals, temporals and descending behind the mouth angle to the ventrals. Third chevron with its anterior tip on the parietals, covering part of the parietals and the nape. Fourth chevron smallest, located midway between the third chevron and the first dorsal blotch. Dorsum surface grayish brown, with all dorsal scales finely but densely dotted with blackish brown. A series of 21 blackish brown blotches on dorsum, somewhat paler grayish brown in their center, edged by darker pigmentation, 2 or 3 DSR long and 5 or 6 DSR broad, i.e. covering the vertebral scale row and 2 or 3 adjacent rows. First blotch located at 14 scales behind parietals. An irregular blackish transversal zig-zag separates chevrons. Some irregular blackish marks on lower flanks under each chevron. Five similarly colored blotches above tail. No dorsal stripes. Ventral surface of head uniform cream. Belly cream with numerous subrectangular dark grayish brown blotches increasing in density posteriorly. Underside of tail cream with some subrectangular dark grayish brown blotches anteriorly. Iris light golden brown, speckled with black.

Variation. Table 1 presents the main meristic and morphometric characters for the holotype and the paratype. The largest known specimen is the holotype. The relative tail length (TaL/TL) for the female paratype is 11.6 %, i.e., slightly shorter than in the male. The paratype's frontal is 1.4 times as long as wide (frontal length 4.2 mm, frontal width 2.9 mm). In the paratype, the DSR reduction from 17 to 15 occurs above the 131st VEN by fusion of rows 4 and 5 on the left side and fusion of rows 3 and 4 on the right side. The most noticeable difference between the holotype and the paratype is the dorsum color pattern (see Figs. 5 and 7). Contrary to the male holotype, the

female paratype does not show dorsal dark blotches but well-defined white rings bordered by a black line, in a number that is comparable to the number of blotches in the male holotype. Excluding the similarly colored chevron on the nape, the dorsum displays 22 such rings and the tail 4. These rings do not fully encircle the body as they do not reach the ventrals. The posterior rings are less contrasted than the anterior ones. The color of the iris in life is the same as in the holotype.

FIGURE 2. Ventral view of the preserved holotype of *Oligodon saiyok* **sp. nov.** Photograph by M. Sumontha.

Distribution and natural history. *Oligodon saiyok* **sp. nov.** is currently known only from its type locality in Sai Yok District (Figs. 8 and 9). Both individuals were found active at night (18.00 and 20.00 respectively) in a Buddhist temple at the entrance of a cave on a limestone hill. They were rather aggressive when caught.

Other reptiles we found in syntopy at the type locality include *Cyrtodactylus cf. peguensis* (Boulenger) and *C. tigroides* Bauer, Sumontha & Pauwels, 2003, *Dixonius hangseesom* Bauer, Sumontha, Grossmann, Pauwels & Vogel, 2004, *Gekko gecko* (Linnaeus) and *G. nutaphandi* Bauer, Sumontha & Pauwels, 2008 (Gekkonidae), and *Trimeresurus kanburiensis* Smith (Viperidae). Syntopic amphibians we observed included *Duttaphrynus melanostictus* (Schneider) (Bufonidae), *Kaloula pulchra* Gray, *Micryletta inornata lineata* (Taylor) (Microhylidae) and *Polypedates megacephalus* Hallowell (Rhacophoridae). A color pattern dimorphism similar to the one observed in *Oligodon saiyok* **sp. nov.** has been documented for *O. purpurascens* by van Rooijen *et al*. (2011). The blotched pattern provides a cryptic coloration in the leaf litter, while the conspicuous ringed pattern suggests a mimicry of an aposematic signal, as noted by van Rooijen *et al*. (2011); these latter authors did not mention any link between the pattern observed and the sex of the individuals.

Etymology. The specific epithet is an invariable noun in honor of the administrative district where the type-locality lies. We suggest the following common names: *Ngu Ngod Sai Yok* (Thai), Sai Yok Kukri Snake (English), *Oligodon de Saï Yok* (French), and *Sai Yok Kukrinatter* (German).

FIGURE 3. Dorsal view of the head of the preserved holotype of *Oligodon saiyok* **sp. nov.** Photograph by M. Sumontha.

FIGURE 4. Left view of the head of the preserved holotype of *Oligodon saiyok* **sp. nov.** Photograph by M. Sumontha.

FIGURE 5. Live paratype of *Oligodon saiyok* **sp. nov.** Photograph by K. Kunya.

FIGURE 6. Ventral view of the preserved paratype of *Oligodon saiyok* **sp. nov.** Photograph by M. Sumontha.

FIGURE 7. Left view of the head of the preserved paratype of *Oligodon saiyok* **sp. nov.** Photograph by M. Sumontha.

TABLE 1. Meristic and morphometric (in mm) data for the holotype and paratype of *Oligodon saiyok* **sp.** nov. Paired meristic characters are given left/right. Paired measurements are given for the right side. Supralabial numbers are followed in brackets by the ones contacting the orbit. Infralabial numbers are followed in brackets by how many contact the anterior chin shields. A = anal plate; S = single. For the other abbreviations, see Material and methods.

Specimen number	Sex	SVL	TaL	HL	HW	HD	ED	DSR	PV + VEN	A
QSMI 1506, holotype	M	626.1	92.2	17.4	8.7	6.2	2.5	17-17-15	2 + 187	S
QSMI 1507, paratype	F	494.0	65.1	14.9	9.0	5.9	2.4	17-17-15	1 + 181	S

continued.

Specimen number	Sex	SC	SL	IL	LOR	PreOc	PreSubOc	PosOc	Tem
QSMI 1506, holotype	M	43, D	8 (4-5) / 8 (4-5)	8 (4) / 8 (4)	1 / 1	1 / 1	0 / 0	2 / 2	1+2 (L) / 1+2 (R)
QSMI 1507, paratype	F	38, D	8 (4-5) / 8 (4-5)	8 (4) / 8 (4)	1 / 1	1 /1	0 / 0	2 / 2	1+2 (L) / 1+2 (R)

Comparisons with other species

The hemipenial structure, as well as the scalation, the dorsal color pattern and the number of maxillary teeth, were used as main criteria to gather *Oligodon* species of the Indochinese Peninsula and Thailand into several informal groups (Smith 1943; Wagner 1975; David *et al*. 2008b; Green 2010; Green *et al*. 2010; Orlov *et al*. 2010; Jiang *et al*. 2012; Neang *et al*. 2012; Neang & Hun 2013; Vassilieva 2015). Because the hemipenes of the holotype of *Oligodon saiyok* **sp. nov.** were not everted during its preservation, the hemipenial structure, except its length *in situ*, are unknown to us. Hemipenial characters are unavailable for a number of other *Oligodon* species. We

consequently provide a comparison of our new species with all *Oligodon* species found in Thailand, Myanmar, Laos, Cambodia and Vietnam, using morphological and chromatical characters except the hemipenes structure.

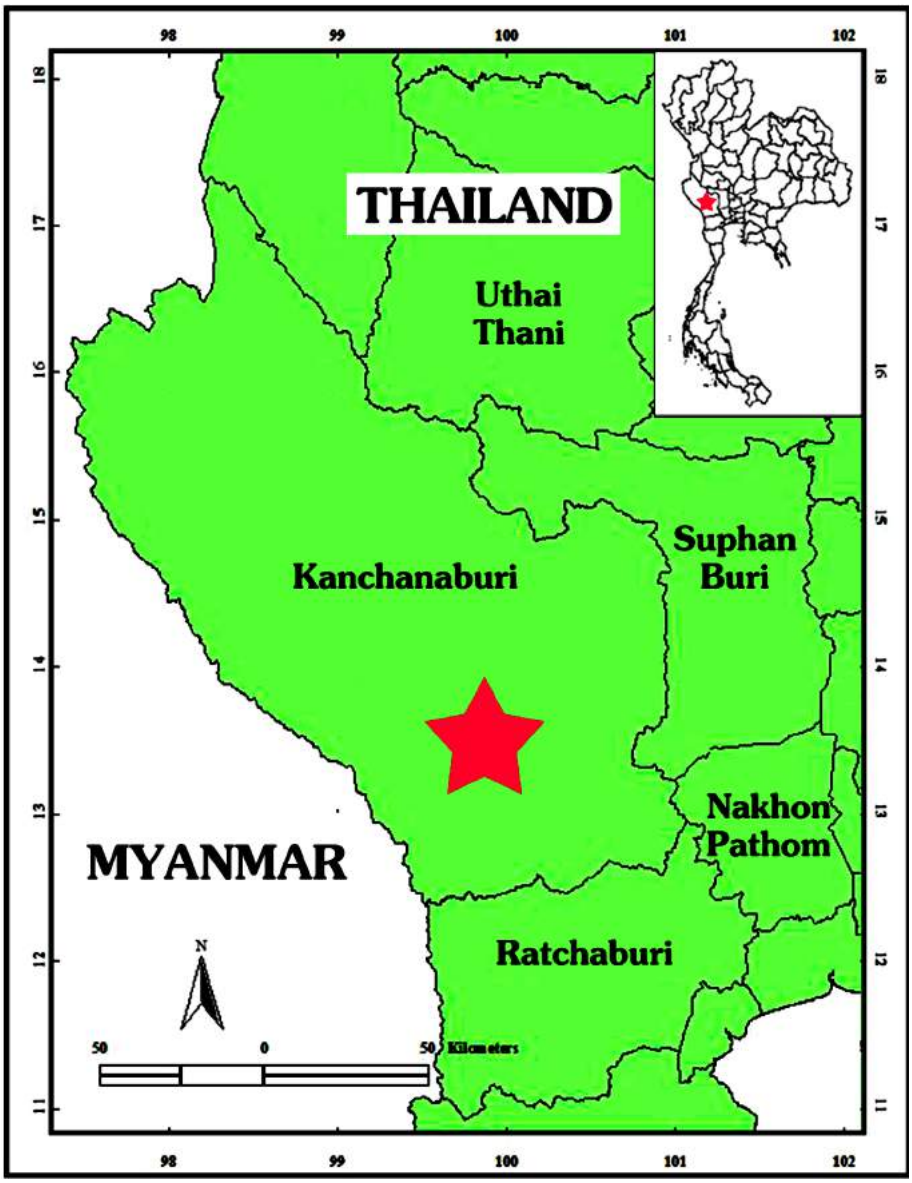

FIGURE 8. Geographical location of the type-locality (red star) of *Oligodon saiyok* **sp. nov.** in Kanchanaburi Province, western Thailand. Map by W. Sodoab.

Compared to the informal ''*Oligodon cinereus* group'', the new species is distinguished from *O. albocinctus* (Cantor, 1839) by its 17 MSR (vs. 19 or rarely 21), generally lower SC number (38–43 vs. 42–69), 13 (vs. 10–12) MT (*O. saiyok* **sp. nov.** also differs from *O. amabilis* (Günther, 1868), described from the ''Arrakan Hills'' and regarded by some authors as a synonym of *O. albocinctus*, by its 17 [vs. 19] MSR, much lower SC number [38–43 vs. 75] and much lower number of dorsal rings [22 vs. 41], cf. the original description by Günther 1868); from *O. cinereus cinereus* (Günther, 1864) by its blotched or ringed (vs. uniform or reticulate) dorsal pattern, its higher VEN number (181–187 vs. 156–178) and longer hemipenes, reaching the 18th (vs the 14th at most) *in situ*; from *O. cinereus pallidocinctus* Bourret, 1934 by its 13 (vs. 11–12) MT, its higher VEN number (181–187 vs. 164–176), its longer hemipenes, reaching the 18th SC (vs the 12th at most) *in situ*, its 21 or 22 dorsal blotches or rings (vs. 27–34 rings), presence of a chevron in adults (vs. only in young individuals), and its heavily maculated venter (vs. unspotted); from *O. cinereus tamdaoensis* (Bourret, 1935) by its 13 (vs. 11–12) MT, more SC in males (43 vs. 30–42) and in females (38 vs. 30–36, cf. David *et al*. 2011) and longer hemipenes, reaching the 18th SC (vs the 11th at most) *in situ*; from *O. inornatus* (Boulenger, 1914) by its ASR and MSR of 17 (vs. 15), higher VEN number (181–

187 vs. 169–174), 13 (vs. 11–12) MT, presence (vs. absence) of a chevron, and blotched or ringed pattern (vs. no pattern or with reticulations); from *O. joynsoni* (Smith, 1917) by its 13 (vs. 11 or 12) MT, one (vs. 2, exceptionally one) anterior temporal, lower VEN number in females (181 vs. 193–200, see Jiang *et al*. 2012), its blotched or ringed (vs. reticulate) dorsal pattern, and its longer hemipenes, reaching the 18th SC (vs the 14th at most) *in situ* (we agree with David *et al*. 2011 in the re-identification as *O. joynsoni* of the Thai records of *O. cinereus multifasciatus* Jan and *O. cinereus swinhonis* Günther, 1864 by Taylor 1965); from *O. macrurus* (Angel, 1927) by its 13 (vs. 14 or 15) MT, much higher VEN number (181–187 vs. 139–162), lower SC number (38–43 vs. 45–94), and much shorter hemipenes, reaching the 18th SC at most (vs. 28th) *in situ*; from *O. nagao* David, Nguyen, Nguyen, Jiang, Chen, Teynié & Ziegler, 2012 by its 13 (vs. 9 or 10) MT with last 2 (vs. 3) enlarged, and 21 or 22 blotches or rings on dorsum (vs. 27–37 blotches); from *O. purpurascens* by its 17 (vs. 19 or 21) MSR, 13 (vs. 9 or 10) MT, one (vs. 2) anterior temporals, and 21 or 22 rings or blotches on dorsum (vs. 10–18 blotches); and from *O. splendidus* (Günther, 1875) by its 13 (vs. 10 or 11) MT, 17 (vs. 21) MSR, and 21 or 22 blotches or rings on dorsum (vs. 14–17 blotches). Based on its dorsal color pattern and its scalation, we suggest that *Oligodon saiyok* **sp. nov.** is a member of the "*O. cinereus* group", possibly more closely related to *O. nagao* with which it shares a similar dorsal pattern (at least for the males known in both species) and karst-dwelling habits.

FIGURE 9. Biotope of *Oligodon saiyok* **sp. nov.** at the type locality. Photograph by M. Sumontha.

Within the "*Oligodon cyclurus* group", *O. saiyok* **sp. nov.** is distinguished from *O. cattienensis* Vassilieva, Geissler, Galoyan, Poyarkov, Wayne Van Devender & Böhme, 2013 by its higher number of VEN (181–187 vs. 167–178) and SC (38–43 vs. 31–35), 13 (vs. 8–10) MT whose last 2 (vs. 3) are enlarged, and 21 or 22 rings or blotches on dorsum (vs. 24–35 blotches); from *O. chinensis* (Günther, 1888) by its lower SC number (38–43 vs. 47–64), 13 (vs. 9 or 10) MT, and longer hemipenes, reaching the 18th SC (vs. 12–13th) *in situ*; from *O. condaoensis* Nguyen, Nguyen, Le & Murphy, 2016, endemic to Hon Ba Island in southern Vietnam, by its higher number of VEN (181–187 vs. 168–176) and SC (38–43 vs. 33–37), longer hemipenes, reaching the 18th SC (vs. 13–14th) *in*

situ, and presence (vs. absence) of dorsal rings or blotches; from *O. cyclurus* (Cantor, 1839) by its 13 (vs. 9 or 10) MT, ASR and MSR of 17 (vs. 19), and higher VEN number (181–187 vs. 160–173); from *O. fasciolatus* (Günther, 1864) by its 17 ASR (vs. 21 or 23), 17 MSR (vs. 21) and 15 PSR (vs. 17); from *O. formosanus* (Günther, 1872) by its 13 MT (vs. 10 or 11), 17 ASR and MSR (vs. 19), and the absence (vs. presence) of dorsal stripes (see also patterns of live individuals illustrated by Huang *et al*. 2011); from *O. kampucheaensis* Neang, Grismer & Daltry, 2012 by its 17 ASR and MSR (vs. 15), higher VEN number (181–187 vs. 164), 13 MT (vs. 11), much longer hemipenes, reaching the 18th SC (vs. 11th) *in situ*, and 21 or 22 rings or blotches on dorsum (vs. 17 rings); from *O. ocellatus* (Morice, 1875) by its 17 ASR and MSR (vs. 19), higher VEN number (181–187 vs. 152–180), and 13 (vs. 9–11) MT; from *O. saintgironsi* David, Vogel & Pauwels, 2008 by its ASR of 17 (vs. 19), 13 (vs. 10–12) MT with last 2 (vs. 3) enlarged, lower SC number (38–43 vs. 53–59), and much shorter hemipenes, reaching *in situ* at most the 18th (vs. 28th) SC.

Compared with species of the "*Oligodon taeniatus* group", largely present in Thailand, *O. saiyok* **sp. nov.** differs from *O. barroni* (Smith, 1916) by its much larger size (maximum TL 718.3 vs. 401 mm), much higher VEN number (181–187 vs. 136–160), and longer hemipenes, reaching the 18th SC (vs. 10–12th) *in situ*; from *O. deuvei* David, Vogel & van Rooijen, 2008 by its larger size (maximum TL 718.3 vs. 530 mm), much higher VEN number (181–187 vs. 140–155), longer hemipenes, reaching the 18th SC (vs. 12th) *in situ*, and absence (vs. presence) of dorsal stripes; from *O. moricei* David, Vogel & van Rooijen, 2008 by its much larger size (maximum TL 718.3 vs. 442 mm), higher VEN number (181–187 vs. 175), and absence (vs. presence) of dorsal stripes; from *O. mouhoti* (Boulenger, 1914) by its much larger size (maximum TL 718.3 vs. 339 mm), much higher VEN number (181–187 vs. 145–163), 13 MT (14–16) and absence (vs. presence) of dorsal stripes; from *O. pseudotaeniatus* David, Vogel & van Rooijen, 2008 by its much larger size (maximum TL 718.3 vs. 320 mm), much higher VEN number (181–187 vs. 137–156), longer hemipenes, reaching the 18th SC (vs. 14–16th) *in situ*, 13 (vs. 15) MT, and absence (vs. presence) of dorsal stripes; and from *O. taeniatus* (Günther, 1861) by its much larger size (maximum TL 718.3 vs. 447 mm), higher VEN number (181–187 vs. 142–165), 17 ASR and MSR (vs. 19), longer hemipenes, reaching the 18th SC (vs. 14–16th) *in situ*, 13 (vs. 14–18) MT, and absence (vs. presence) of dorsal stripes. *Oligodon saiyok* **sp. nov.** is distinguished from *O. arenarius* Vassilieva, 2015 by its much larger size (maximum TL 718.3 vs. 389 mm), much higher VEN number (181–187 vs. 131–144), 13 (vs. 6–8) MT, presence (vs. absence) of blotches or rings on dorsum, and heavily maculated (vs. immaculate) belly.

Oligodon saiyok **sp. nov.** differs from the "*O. cruentatus-planiceps-theobaldi-torquatus* group": from *O. cruentatus* (Günther, 1868) by its higher VEN number (181–187 vs. 148–173), single (vs. divided) anal plate, 13 (vs. 14–16) MT and absence (vs. presence) of dorsal stripes; from *O. planiceps* (Boulenger, 1888) by its 17 (vs. 13) MSR, 8 (vs. 5) SL, much higher VEN number (181–187 vs. 132–145), higher SC number (38–43 vs. 22–27), single (vs. divided) anal, and 13 (vs. 10) MT; from *O. theobaldi* (Günther, 1868) by its 13 (vs. 15 or 16) MT, single (vs. divided) anal, and a blotched or ringed (vs. reticulated) dorsum; and from *O. torquatus* (Boulenger, 1888) by its higher number of VEN (181–187 vs. 144–169) and SC (38–43 vs. 25–34), 17 (vs. 15) MSR, single (vs. divided) anal, 13 (vs. 15 or 16) MT, a blotched or ringed (vs. reticulated) dorsum and the absence (vs. presence) of dorsal stripes.

The new species differs from *Oligodon annamensis* Leviton, 1953 by the presence (vs. absence) of a LOR, two (vs. one) PosOc, 8 (vs. 6) SL, more VEN (181–187 vs. 159–170), and 17 (vs. 13) MSR; from *O. catenatus* (Blyth, 1854) by the presence (vs. absence) of a LOR and internasals, 8 (vs. 6) SL, 17 (vs. 13) MSR, single (vs. divided) anal, and absence (vs. presence) of dorsal stripes; from *O. dorsalis* (Gray, 1835) by its 17 (vs. 15) MSR, single (vs. divided) anal, and absence (vs. presence) of dorsal stripes; from *O. eberhardti* Pellegrin, 1910 by its 8 (vs. 6) SL, 17 (vs. 13) MSR, single (vs. divided) anal, and 13 (vs. 7) MT; from *O. hamptoni* Boulenger, 1918 by its 17 (vs. 15) MSR, 8 (vs. 5) SL, single (vs. divided) anal, higher number of VEN (181–187 vs. 160–175) and of SC (38–43 vs. 30–32), and the absence (vs. presence) of dorsal stripes; from *O. jintakunei* Pauwels, Wallach, David & Chanhome, 2002, still known only by its holotype from Krabi Province, by its distinct (vs. fused) internasals and prefrontals, 17 (vs. 15) MSR, lower number of VEN (181–187 vs. 189) and SC (38–43 vs. 46), single (vs. divided) anal, 13 (vs. 6) MT, and heavily maculated (vs. immaculate) belly; from *O. lacroixi* Angel & Bourret, 1933 by the presence (vs. absence) of a LOR and internasals, 8 (vs. 5) SL, 17 (vs. 15) MSR, higher number of VEN (181–187 vs. 162–178) and SC (38–43 vs. 25–33), single (vs. divided) anal, 13 (vs. 8–12) MT, and the absence (vs. presence) of dorsal stripes; and from *O. mcdougalli* Wall, 1905 by the presence (vs. absence) of a LOR, 17 (vs. 13) MSR, lower VEN number (181–187 vs. 199), anal single (vs. divided), and the absence (vs. presence) of dorsal stripes.

Oligodon saiyok **sp. nov.** increases the already exceptionally high number of squamates endemic to Sai Yok District, still unexplained to date: *Cnemaspis huaseesom* Grismer, Sumontha, Cota, Grismer, Wood, Pauwels & Kunya, 2010, *Cyrtodactylus saiyok* Panitvong, Sumontha, Tunprasert & Pauwels, 2014 and *C. tigroides* Bauer, Sumontha & Pauwels, 2003, *Dixonius hangseesom* Bauer, Sumontha, Grossmann, Pauwels & Vogel, 2004, *Gekko nutaphandi* Bauer, Sumontha & Pauwels, 2008, and *Trimeresurus kanburiensis* Smith, 1943 (see David *et al*. 2004). Apiwathnasorn *et al*. (2011: 1406) indicated that Wat Benjarat Cave is a popular touristic attraction. Like a number of other Thai endemic reptiles living in cave or their direct surroundings, *Oligodon saiyok* **sp. nov.** has to cope with a high degree of human disturbance (Pauwels *et al*. 2016), in this case due to religious activities and tourism. We have never encountered *Oligodon saiyok* **sp. nov.** in the pet trade, and we do not believe that it is currently under any specific conservation threat besides its habitat's degradation.

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APPENDIX. Comparative material examined.

Oligodon fasciolatus: CUMZ (R) 1998.12.11.2, ''Km 22, road 3219 from Hua Hin to Pala-U Waterfall, Thailand''; IRSNB 1188β, ''Pak-Chong, Siam''; IRSNB 15491, ''Chiang Mai city, Muang District, Chiang Mai Province, Thailand''; IRSNB 15492, ''Ban Khao Tao, Hua Hin District, Prachuap Khiri Khan Province, Thailand''; IRSNB 16552, ''Cha-am, Cha-am District, Phetchaburi Province, Thailand''; MNHN 1998.0530, ''Ban Khao Kling, Kaeng Krachan District, Phetchaburi Province, Thailand''; QSMI 223–224, ''Thailand''; QSMI 359, ''Thailand''; QSMI 381, ''Thailand''; QSMI 533, ''Korat Zoo, Nakhon Ratchasima Province, Thailand'' (albino specimen, see Pauwels *et al*., 2008).

Oligodon jintakunei: QSMI 385, ''Krabi Prov., Thailand'' (holotype).

Oligodon maculatus (Taylor): IRSNB 14935–37, ''Manobo Tasaday Special Forest Reserve, around Mt. Tasaday, 6°18'10''N-124°32'52''E, alt. 1000-1100 m, Barangay Ned, Municipality of Lake Sebu, South Cotabato Province, Mindanao Island, Philippines''.

Oligodon mouhoti: IRSNB 16553, ''Khao Nakwang, Nayang subdistrict, Cha-am District, Phetchaburi Province, Thailand''; IRSNB 16554 and MNHN 1999.7635, ''Ban Salakern, Ban Lat District, Phetchaburi Province, Thailand''; MNHN 1998.0572, ''Ban Ton Kaet, Kaeng Krachan District, Phetchaburi Province, Thailand''; THNHM 1295, ''Forestry Training Center, Cha-am, Cha-am District, Phetchaburi Province, Thailand''.

Oligodon purpurascens: IRSNB 527, ''Java''; IRSNB 1188, ''Trang. P. [= Peninsular] Siam''; IRSNB 2802, ''Telokbetong''; RFD (field number P243), ''Sanang Mahnora Forest Park, Muang District, Phang-Nga Province, Thailand''.

Oligodon taeniatus: IRSNB 436β, ''Cochinchine''; IRSNB 1403, ''Pak-Chong, Siam''.

Oligodon theobaldi: USNM 520624, ''Burma: Sagaing; Kanbalur Township; Chatthin, ca. 2 km WNW of Chatthin Wildlife Sanctuary, San Myaung Camp, 360 ft, 23°34'46"N, 095°44'26"E'' (see David *et al*., 2008b: 17).