

**A NEW SPECIES OF GENUS *Boiga*
(SERPENTES: COLUBRIDAE: COLUBRINAE)
AND COLOR ATLAS OF BOIGAS
FROM BENGKULU PROVINCE (SUMATRA, INDONESIA)**

**Nikolai L. Orlov,¹ Sergei V. Kudryavtzev,²
Sergei A. Ryabov,³ and Oleg V. Shumakov²**

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The description of a new species of the genus *Boiga* is based on the examination of one adult specimen (female) from the Bengkulu Province (Sumatra, Indonesia). A comparative analysis of the new species with all the species of the *Boiga* genus of the Sunda Archipelago (Indonesia), Philippines, Andaman and Nikobar Islands, and Indochina was carried out: *Boiga cynodon*, *B. guangxiensis*, *B. ocellata*, *B. dendrophila* ssp., *B. tanahjampeana*, *B. drapiezii*, *B. angulata*, *B. philippina*, *B. schultzei*, *B. irregularis*, *B. jaspidea*, *B. multomaculata*, *B. nigriceps*, *B. cyanea*, *B. saengsom*, *B. andamanensis*, *B. wallachii*. There given new records of boigas and detailed description of five color forms of *Boiga cynodon* from the Bengkulu Province.

Key words: new species; *Boiga bengkulensis*; Bengkulu Province; Sumatra; *Boiga cynodon* complex; *Boiga drapiezii* complex.

INTRODUCTION

At present for Sumatra there are known seven species and subspecies of the genus *Boiga*: *B. cynodon* (Boie, 1827); *B. dendrophila melanota* (Boulenger, 1896); *B. dendrophila occidentalis* Brongersma, 1934; *B. drapiezii* (Boie, 1827); *B. jaspidea* (Dumeril, Bibron and Dumeril, 1854); *B. multomaculata* (Boie, 1827), and *B. nigriceps nigriceps* (Günther, 1863). We give here description of a new species from Bengkulu Province. Thus in Sumatra there known about 20% forms of *Boiga* genus which is widely distributed in southern and eastern parts of the continental and insular Asia. As for many other groups of Asian amphibians and reptiles for the genus *Boiga* Sumatra island is an important center of recent distribution.

MATERIAL AND METHODS

In total we see three specimens of the described species, two only as images in photos, one was carried alive and was kept in Moscow Zoo, afterwards it was stored in collection of Zoological Museum of Moscow State University (ZMMU). One of the photos of this species figures under the name of *Boiga drapiezii* (Boie, 1827) in the book “Snakes in Thailand” (Nutphand, 2001:176 – 177). The second photo made in Sumatra (Bengkulu Prov.), we noted in zoo-trade company in Jakarta.

All measurements were taken with digital calipers to the nearest 0.01 mm and rounded to 0.1 mm, and with the tape-measure.

The following abbreviations were used:

SVL, snout-vent length (in mm); Lcd, tail length from vent to tip (in mm); HL-1, head length from anterior part of rostral shield to posterior part of the lower jaw (in mm) (Head length 1); HL-2, head length from anterior part of rostral shield to foramen occipitale magnum (in mm) (Head length 2); HD, head depth (in mm); HW, head width at the widest

¹ Zoological Institute, Russian Academy of Sciences, Universitetskaya nab., 1, St. Petersburg 199034 Russia.
E-Mail: azemiops@zin.ru.

² Department of Herpetology, Moscow Zoo, B. Gruzinskaya 1, Moscow 123242, Russia.

³ Tula Exotarium, Oktyabrskaya ul., 26, Tula 300002, Russia.

point (in mm); ED, eye horizontal diameter (in mm); SL, snout length from the tip of the snout to the anterior edge of the eye (in mm); EN, eye to nostril distance from anterior corner of eye to posterior edge of nostril (in mm); IOa, interorbital distance between anterior corners of orbit (in mm); Iop, interorbital distance between posterior corners of orbit (in mm); BH, height of body (in the middle); BW, width of body (in the middle); SO, number of supraocular; PrO, number of preocular; PtO, number of postocular; SubO, number of subocular; SprO, number of subpreocular; R, rostral; N, nasal; L, loreal; T, number of temporal [Ta, anterior temporal; Tp, posterior temporal]; In, internasal; Pf, prefrontal; F, frontal; P, parietal; M, mental or symphysial; G, genials [Ga, anterior genials or anterior chin shields; Gp, posterior genials or posterior chin shields]; Supralab, number of supralabials [Spl-r, on the right; Spl-l, on the left]; Infralab, number of infralabials [If-l-r, on the right; If-l-l, on the left]; NO, number of shields around the eye; V, number of ventrals; Scd, number of subcaudals; Sq1; Sq2; Sq3, number of dorsal scale rows at body [1, at the level of the 15th ventral shield; from the head; 2, at midbody; 3, at the level of the 15th ventral shield from the anal plate]; A, number of anal plate; RDS, number of row of dorsal scales in the middle of the back; DS, number of rows of dorsal scales from ventrals to row of dorsal scales in the middle of the back; FDS, first row of dorsal scales, in contact between dorsal and ventral scales.

For comparison we use the data of morphological study of *Boiga* species of Sunda Archipelago and Indochina stored in Field Museum of Natural History, Chicago, USA (FMNH); Royal Ontario Museum, Toronto, Canada (ROM); Museum of Vertebrate Zoology, Berkeley, USA (MVZ); California Academy of Sciences, San Francisco, USA; Muséum national d'Histoire naturelle Paris, France (MNNH); Zoological Museum of A. Humboldt University, Berlin, Germany (ZMB); Zoological Museum, Hamburg University, Germany (ZMH); Institute of Ecology and Biological Resources, Hanoi, Vietnam (IEBR); Chengdu Institute of Biology, Chinese Academy of Sciences, Chengdu, China (CIB).

DESCRIPTION OF A NEW SPECIES OF THE GENUS *Boiga*

Boiga bengkuluensis sp. nov.

Figs. 1 – 4

Holotype. ZMMU R-10416; female, SVL 1285 mm, Lcd, 388 mm; Rejiang (region around Curup and Kapahiang Towns), Rejanglebong Prefecture, Bengkulu Province, Sumatra, Indonesia; 3°28' S, 102°32' E; 500 m altitude; collected by Sergei Kudryavtsev and Sergei Mamet; 04/23/1998 (Fig. 5).

Diagnosis. Large, slender boiga (SVL of female 1285 mm, Lcd, 388 mm) with laterally compressed body, with a strongly enlarged central row of dorsal scales. The head is large, not wide. Scale rows oblique [Sq1, 19, Sq2, 19, Sq3, 15 rows]; V, 261; Scd, 146 pairs; anal plate entire; eight – eight supralabials, the third, fourth and fifth supralabials entering the orbit; 13 – 12 infralabials; the rostral shield is not very large, slightly visible from above; loreal shield is large, squarish; three anterior temporals, four posterior temporals; one large preocular, not reaching the upper surface of the head; two large postoculars; symphysial is relatively small, triangular; large genials, anterior genial shields are noticeably larger than the posterior genial shields. Scales are smooth. Ventral shields have by sides well expressed fold forming almost right angle; three dark stripes pass along these folds and middle of belly (Figs. 2 and 3).

Description of the holotype (Figs. 1 – 4). A large female. Total length is 1673 mm [SVL (1285 mm) + Lcd (388 mm)]. The body visibly compressed. The head is large, not wide (Figs. 7 – 9). HL-1 27 mm; HL-2 18 mm; HD 14.9 mm, HW 19.1 mm; the eyes large, ED 6.0 mm; the pupil vertical; SL, the snout length from the tip of the snout to the anterior edge of the eye 10.2 mm; EN, eye to nostril distance from anterior corner of eye to posterior edge of nostril 5.1 mm; IOa, interorbital distance between anterior corners of orbit 10.35; IOp, interorbital distance between posterior corners of orbit 13.9 mm. The row of dorsal scales in the middle of the back consists of strongly enlarged scales and forms a clearly marked keel. Scales smooth, apical pits absent. Scale rows oblique (Sq1, Sq2, and Sq3 are 19, 19, and 15 rows, respectively); V 261, Scd 146 pairs. Supralab, 8 – 8; infralab, 13 – 12; the third, fourth and fifth supralabials entering the orbit; four



Fig. 1. Holotype of *Boiga bengkuensis*, general view.



Fig. 2. Holotype of *Boiga bengkuensis*, head.



Fig. 3. Holotype of *Boiga bengkuluensis*, dorsal view.



Fig. 4. Holotype of *Boiga bengkuluensis*, ventral view.

infralabials in contact with the anterior genial shields. R, is not very large, wide (width 6.0 mm, height 4.8 mm). A large nostril is cut between two nasal shields. Internasal's width is 3.5 mm, height is 3.0 mm. Pf 5.3×5.1 mm. F 16.9×6.8 mm (from the



Fig. 5. Type locality of *Boiga bengkuensis*.

base divided on a quarter of the length); P 9.9×7.5 mm. L is large, almost squarish (2.0×1.8 mm). One relatively large PrO (length is 3.0 mm, width is 5.1 mm) not reaching the upper surface of the head. Two relatively large PstO. Ta 3, Tp 4. M, is small, triangular (width is 5.2 mm, height is 2.5 mm). Ga, anterior genial shields 7.9×3.0 mm, in contact with four Infralab; Gp — posterior genial shields 5.5×2.2 mm. V 261; Scd 146 pairs. Anal plate is entire.

Eleven ($9 + 2$) maxillary teeth, nine (third-seventh are somewhat increased), are separated from two grooved fangs by a small diastema; nine subequal in size palato — pterygoid teeth; twelve dentary teeth (five anterior are considerably longer than posterior).

Coloration. The coloration of the back and the head is greenish-brown, consists of 41 wide bifurcated transverse dark-green bands which do not connect on the underside. Between each pair of bands on lighter background there is irregular spot of the same color stretched downwards. Small dark spots pass along all the body. Belly is gray-brown, noticeably lighter than dorsal surface, also it is cov-



Fig. 6. Ventral view of *Boiga bengkuensis* with dark longitudinal bands.



Fig. 7. *Boiga bengkuluensis*. Head, dorsal view.



Fig. 8. *Boiga bengkuluensis*. Head, ventral view.

ered with dark specks. Along the lateral flexion of ventral shields there pass clear dark stripes. Somewhat less noticeable stripe pass along the middle line of belly, so, along ventral surface from throat to cloaca there pass three dark stripes. In total, the color of tail corresponds to the color of body; across its dorsal surface pass 17 bands; ventral surface of the tail is darker than of the belly, because dense distribu-

tion of dark spots creates almost continuous dark background and only by middle line remains light area. On the lateral sides of dark-green head passes light stripe from back angle of upper maxilla to posterior temporal shields. Lower edge of supralabials is a little lightened.

Coloration in alcohol. Main background of the body is gray-brown, color is the same as in life.



Fig. 9. *Boiga bengkuluensis*. Head, lateral view.



Fig. 10. Habitat of *Boiga bengkuluensis*.



Fig. 11. Habitat of *Boiga bengkuluensis*.





Fig. 12. Comparison of proportions of specimens of *Boiga drapiezii* (a, at the left page), *B. bengkulensis* (b, at the left page), and *B. cynodon* (c) with equal body length.

TABLE 1. Morphometric and Pholidosis Characters of *B. bengkulensis*, *B. drapiezii*, and *B. cynodon*

Species/NN	SVL	Lcd	V	Scd, No. of pairs	Sq1-Sq2-Sq3	T a/p	Supralab	Infralab	Coloration of belly	Sex
ZMMU 10416, <i>B. bengkulensis</i>	1285	388	261	146	19–19–15	3/4	8–8	13–12	Gray, with three dark longitudinal stripes	♀
ZISP 22470, <i>B. drapiezii</i>	1050	370	259	164	15–19–15	2/3	8–8	11–11	Gray, with two dark longitudinal stripes	♂
ZISP 22471, <i>B. drapiezii</i>	1190	365	257	158	15–19–15	2/3	8–8	11–11	Gray, with two dark longitudinal stripes	♀
ZISP 22472, <i>B. drapiezii</i>	1360	350	256	156	15–19–15	2/3	8–8	10–11	Gray, with two dark longitudinal stripes	♀
ZISP 22469(1), <i>B. cynodon</i>	1620	515	279	145	21–23–15	2/3	9–9	14–13	Uniform, without stripes	♀
ZISP 22469(2), <i>B. cynodon</i>	1655	442	283	144	21–23–15	3/3	9–8	11–12	Uniform, without stripes	♀
ZISP 22469(3), <i>B. cynodon</i>	1675	530	275	151	23–23–15	3/4	8–9	13–12	Uniform, without stripes	♂
ZISP 22086, <i>B. cynodon</i>	2040	497	279	156	25–23–15	3/3	9/9	13–14	Uniform, without stripes	♀
ZISP 22469(5), <i>B. cynodon</i>	1820	470	275	147	21–23–13	2/3	9/9	13/13	Uniform, without stripes	♀

Distribution and habitat. We know this species from type locality on Sumatra and from southern Thailand (Nutphand, 2001:176–177, as *B. drapiezii*). Besides, zoo-trader Buntje Soetanto told us that he repeatedly received from western Sumatra this

species of boiga. Probably it could be met also in other countries of southern Indochina. It looks as if it could be mixed with *B. drapiezii* or *B. cynodon*. Type specimen was collected in dense thicket of secondary forest on 500 m elevation (Figs. 5, 10, 11).

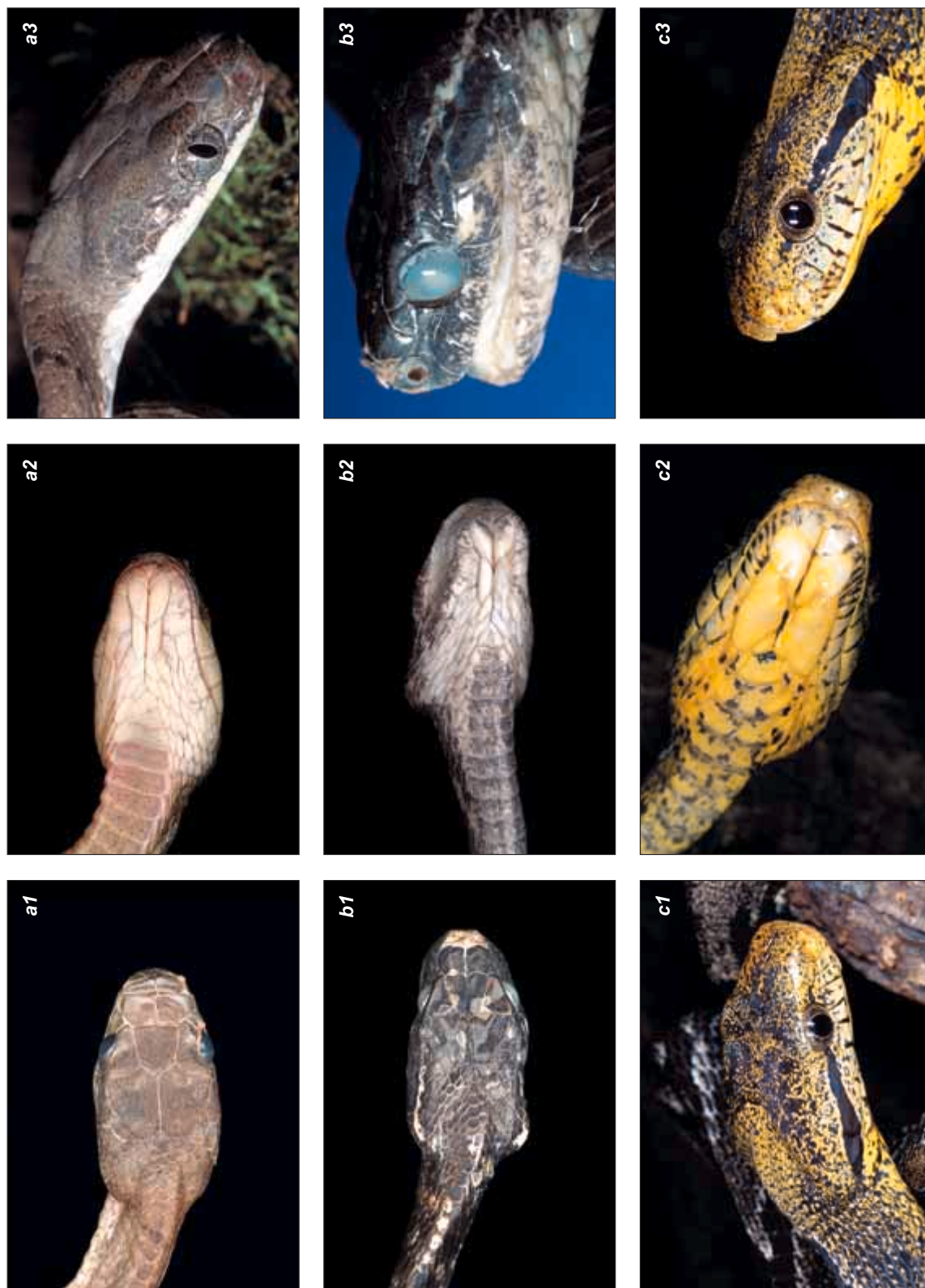


Fig. 13. Comparison of the head proportions of the heads *Boiga drapiezii* (a), *B. bengkulensis* (b), and *B. cynodon* (c).

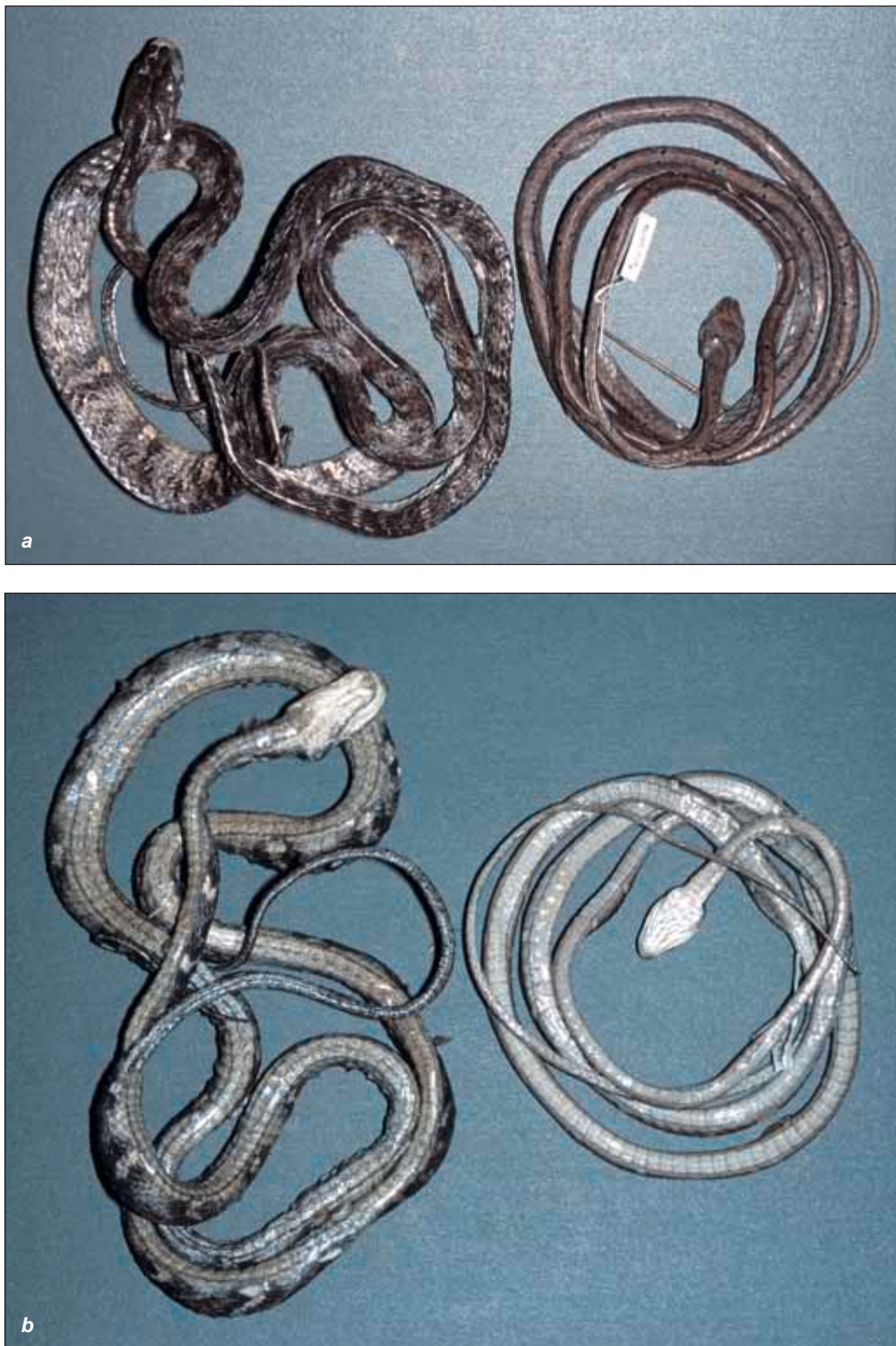


Fig. 14. *Boiga bengkuensis* and *B. drapiezii*, dorsal (a) and ventral (b) views.



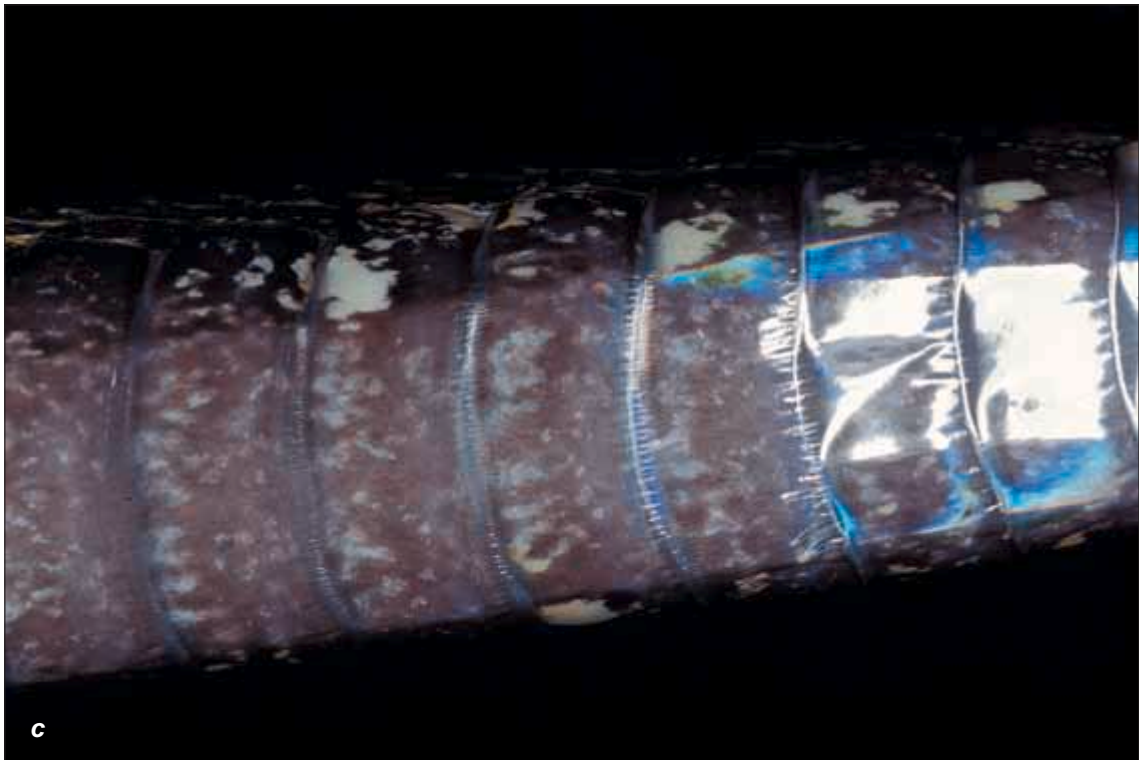


Fig. 15. *Boiga drapiezii* (a, at the left page), *B. bengkulensis* (b, at the left page), and *B. cynodon* (c), ventral view.

TABLE 2. Morphometric Characters of *B. bengkulensis*, *B. drapiezii*, and *B. cynodon*

Species/NN	SVL	BH	BW	HL1	HL2	HD	HW	SL	EN	IOa
ZMMU 10416, <i>B. bengkulensis</i>	1285	21	14.3	27	18	14.9	19.1	10.2	5.1	10.35
ZISP 22470, <i>B. drapiezii</i>	1050	10	5.6	22	15.6	8.1	12.3	6.0	3.7	7.5
ZISP 22471, <i>B. drapiezii</i>	1190	14.5	7.3	25.0	16.2	8.2	13.9	7.0	3.6	8.0
ZISP 22472, <i>B. drapiezii</i>	1360	14.1	7.2	25.0	16.3	7.9	15.0	7.2	3.9	8.1
ZISP 22469(1), <i>B. cynodon</i>	1620	34	19.5	41.5	29.2	19.2	29	15.8	7.5	15.1
ZISP 22469(2), <i>B. cynodon</i>	1655	25	17	43.1	30.3	18.5	25.5	12.8	9.75	13.8
ZISP 22469(5), <i>B. cynodon</i>	1820	33.8	18.5	47.1	33	18.8	29.1	17.6	9.85	14.2
ZISP 22086, <i>B. cynodon</i>	2040	27	14	43	30	18.5	23.9	12.7	8	13.6

TABLE 3. Indexes of Morphometric Characters of *B. bengkulensis*, *B. drapiezii*, and *B. cynodon*

Species/NN	SVL/HW	SVL/SL	SVL/BH	SVL/BW	SVL/EN	SVL/HL1
ZMMU 10416, <i>B. bengkulensis</i>	67.2	125.9	61.2	89.8	251.9	47.6
ZISP 22470, <i>B. drapiezii</i>	85.4	175	105	187.5	283.8	47.7
ZISP 22471, <i>B. drapiezii</i>	85.6	170	82.1	163.0	330.6	47.6
ZISP 22472, <i>B. drapiezii</i>	90.6	188.9	97.1	188.9	348.7	54.4
ZISP 22469(1), <i>B. cynodon</i>	55.8	102.5	47.6	83.1	216	39.0
ZISP 22469(2), <i>B. cynodon</i>	64.9	129.2	42.2	97.4	169.7	38.4
ZISP 22469(5), <i>B. cynodon</i>	62.5	103.4	53.8	98.4	184.8	38.6
ZISP 22086, <i>B. cynodon</i>	85.3	160.6	75.6	145.7	255	47.4

Etymology. The species received the name *B. bengkuluensis* derived from the name of the Bengkulu Province (Sumatra, Indonesia).

Comparisons. *B. bengkuluensis* is well distinguished from the majority of the species of the genus *Boiga* of Sunda Archipelago and Indochina by a coloration of belly, along it pass three noticeable dark stripes (Figs. 4 and 6). *Boiga bengkuluensis* is most similar with the representatives of two complexes of south-eastern Asian forms: *B. cynodon*-complex and *B. drapiezii*-complex, being an intermediate form by the constitution of body and coloration (Figs. 12 – 15). The data on some characters of *B. bengkuluensis* and species of these complexes are given in Tables 1 – 3. Besides coloration, *B. cynodon* (Boie, 1827) is distinguished from the new species by the greater number of Sq (23 – 25) (Boulenger, 1896:79, 1912:172; Smith, 1943:357; Taylor, 1965:882; Leviton, 1968:300 – 301; Cox, 1991:131; Manthey and Grossmann, 1997:320; Stuebing and Inger, 1999:118; Orlov and Ryabov, 2002:37). Two other species of *B. cynodon*-complex: *B. guangxiensis* Wen, 1998; and *B. ocellata* Kroon, 1973, also well distinguish by coloration, greater number of Sq (21 – 23); a little larger Gp, than Ga (Kroon, 1973:582 – 583; Das, 1998:65 – 66; Yetang, 1998:51; Orlov and Ryabov, 2002:36).

B. drapiezii has a considerably more slender and thin body, less number of T a/p (2+2, 2+3, or 3+3); distinguishes also with great number of Infralab (5 – 6) in contact with the Ga shields and very small L, or with its absolute absence (Boulenger, 1896:74, 1912:171; De Rooij, 1915:196; Taylor, 1965:867 – 868; Cox, 1991:135 – 136; Manthey and Grossmann, 1997:322; Stuebing and Inger, 1999:122 – 123). There are known some cases when under the name *B. drapiezii*, there was hiding the species we described as *B. bengkuluensis* (Nutphand, 2001:176 – 177).

Philippine species of the complex “*B. drapiezii*” have significant similarity with *B. drapiezii* and some similarity with *B. bengkuluensis*. All these species on the belly surface have two longitudinal dark stripes, while *B. bengkuluensis* has three longitudinal dark stripes (two very clear stripes in the edges of ventral shields and more diffuse along the middle of the belly). Differences in pholidosis and proportions are given in Tables 1 – 3. *B. angulata* (Peters, 1861) differs by less sizes (standard length: males 1055 mm, females 916 mm; tail length: male 367 mm, female 312 mm); lesser number of T a/p (2+2 or 2+3) and

lesser number of Infralab — 10 (Boulenger, 1896:75; Leviton, 1968:298 – 299; Alcalá, 1986:134). *B. schultzei* Taylor, 1923 differs by posterior genial shields equal or longer than anterior pairs genials shields; lesser number of T a/p (2+2, 2+3, or 3+3); and also smaller sizes (SVL 956 mm, Lcd 370 mm) (Leviton, 1968:311). *B. philippina* (Peters, 1867) is distinguished by the presence of two PrO; lesser number of V, 240 and Scd, 133; and also smaller sizes (SVL 435 mm, Lcd 155 mm) (Boulenger, 1896:77; Leviton, 1968:312).

B. jaspidea (Schlegel, 1837) significantly differs with thin constitution of body and shape of head; very different type of pattern of coloration; differs with greater number of scales around mid-body (Sq 21); lesser number of temporals (T a/p 2+2); by posterior genial shields longer than anterior pairs genials shields (Boulenger, 1896:73, 1912:170; De Rooij, 1915:199 – 200; Cox, 1991:137; Manthey and Grossmann, 1997:322 – 323; Stuebing and Inger, 1999:124 – 125).

B. multomaculata (Russell, 1801) differs by coloration (dark blotches on the light-brown ground colour) and as well as by smaller size, usually not more than 1000 mm; lesser number of temporals (T a/p 2+2 or 2+3); lesser number of ventrals (V 199 – 245) (Boulenger, 1896:63 – 64, 1912:168 – 169; De Rooij, 1915:195 – 196; Taylor, 1965:869 – 872; Cox, 1991:138; Manthey and Grossmann, 1997:323). *B. nigriceps* (Günther, 1863) is also distinguished by coloration (straw-colored-brown or reddish body); increased number of scales around the mid-body (Sq 21), (Boulenger, 1896:72, 1912:171 – 172; De Rooij, 1915:199; Taylor, 1965:877 – 878; Cox, 1991:139 – 140; Manthey and Grossmann, 1997:323 – 324; Stuebing and Inger, 1999:126 – 127).

B. kraepelini Stejneger, 1902 differs with smaller number of V (max to 243), greater number of Sq (21 – 23) and T a/p (4/4, 4/5, 5/4, or 5/5) (Pope, 1935:338; Vogel, 1994:16; Zhao et al., 1998:101).

The species of *B. irregularis* (Merrem, 1802) complex are distinguished by a slightly greater number of rows of scales around the mid-body: 19 – 21 (rarely 23); lesser number of Scd, 100 – 125 (Boulenger, 1896:75 – 76; De Rooij, 1915:201; Ehmann, 1992:374 – 375; O’Shea, 1996:118).

The Indo-Chinese species *B. cyanea* (Dumeril, Bibron and Dumeril, 1854) and *B. saengsomi* Nutphand, 1985 differ by coloration (green or yellow-green color, without bands and spots), smaller number of V (237 – 257 and 231 – 245) and Scd (124 –



Fig. 16. *Boiga dendrophila occidentalis*.



Fig. 17. *Boiga nigriceps nigriceps*.



Fig. 18. *Boiga jaspidea*.

158 and 116 – 127) (Boulenger, 1896:72; Smith, 1943:355; Cox, 1991:122, 143 – 144; Manthey and Grossmann, 1997:319, 324 – 325).

The complex of forms of *B. dendrophila* (Boie, 1827) and *B. tanahjampeana* (Orlov and Ryabov, 2002), inhabiting southern mainland of Indochina and islands of Indonesia and Philippines, distinguished by a bright-black coloration of the body and contrasting yellow transverse bands. Only adult specimens of *B. dendrophila gemmicincta* (Dumeril, Bibron and Dumeril, 1854) and *B. tanahjampeana* from the islands of Sulawesi and Tanahjampea do not have yellow transverse bands, and uniformly colored correspondingly in black and yellow-brown color. Forms of *B. dendrophila*-complex differ with bigger sizes (SVL to 2500 mm), a larger number of scales around the mid-body (Sq 21 – 25), a smaller number of ventral (maximum up to 253, usually not more than 230) and subcaudal shields (to 117) (Boulenger, 1896:70 – 71, 1912:169 – 170; De Rooij, 1915:197; Brongersma, 1934:200 – 222; Taylor, 1965:875; Cox, 1991:133; Manthey and Grossmann, 1997:321; Stuebing and Inger, 1999:120; Vogel, 2000:27 – 43). *B. wallachi* Das, 1998 from Nikobar Islands well differs with uniform coloration of body without bands, smaller sizes (SVL 735 – 1050), low number of V



Fig. 19. *Boiga drapiezii*.



Fig. 20. *Boiga cynodon*. Yellow color morph.

(227 – 233) and Scd (77 – 104) [Das, 1998:60 – 64]. *B. andamanensis* (Wall, 1909) differs with high number Sq (21), low number of Scd (121 – 128), low number of T a/p (2+3) and small sizes (max SVL 73 mm) (Smith, 1943:352; Das, 1998:66).

We do not compare the new species with South-Asian continental and Sri-Lanka species because of their obvious morphological differences.

Affinities. According to its morphological characters *Boiga bengkuluensis* is related to *B. cynodon* and *B. drapiezii* complexes (Figs. 12 – 15) and could be combined in one group with the following species: *B. cynodon*, *B. ocellata*, *B. guangxiensis*, *B. angulata*, *B. drapiezii*, *B. philippina*, and *B. schultzei*.

Boigas of Bengkulu Province (Sumatra, Indonesia)

On the base of examination of specimens and our private observations we noted six species of the genus of *Boiga* for Bengkulu Province: *B. dendrophila occidentalis*, *B. n. nigriceps*, *B. jaspidea*, *B. drapiezii*, *B. cynodon*, and *B. bengkuluensis* sp. nov. (Figs. 1 – 4, 16 – 19). It is possible to expect *B. multomaculata* in this area but we still have no reliable records. Besides, for *B. cynodon* in the province of Bengkulu we noted five color variations that we name as: 1, yel-



Fig. 21. *Boiga cynodon*. Gray color morph.



Fig. 22. *Boiga cynodon*. Dark color morph with light bands.



Fig. 23. *Boiga cynodon*. Powdered color morph with dark bands.

low; 2, gray; 3, dark with light bands; 4, powdered with dark bands; and 5, black (Figs. 20 – 24).

The data on the proportions and pholidosis are given in Tables 1 and 2. In the literature about snakes of Southeast Asia a black and aberrant forms of *Boiga cynodon* is mentioned quite often (Boulenger, 1896:79, 1912:172; Smith, 1930:65; Tweedie, 1957:80; Taylor, 1965:883 – 884; Cox, 1991:132; Cox et al., 1998:76; Orlov and Ryabov, 2002:37 – 41). Boulenger (1896:79) gives the description of several “dark brown or black” specimens from Malacca, Sarawak (Borneo, Malaysia) and Mindanao (Philippines); Smith (1930:65) reports about “aberrant example” from Singapore. Twedie (1954:77) mentioned that “a melanistic variety is not uncommon.” Taylor (1965:883 – 884) described it in detail as “*Boiga cynodon* var.”; he gives the description based on one specimen from Na Prado, Pattani, southern Thailand, and further he writes: “outside of Thailand this form has been reported from Malaya and Singapore.” Cox (1991:132) mentions about “melanistic form” from Thailand, Malaysia and Singapore. The detailed description of *B. cf. cynodon* “black” from Bengkulu Province (Sumatra) was given by Orlov and Ryabov (2002:37 – 41). The morphological anal-



Fig. 24. *Boiga cynodon*. Black color morph.

ysis of the specimens of different coloration of *B. cynodon* from Bengkulu Province confirm that it is phenotypic polymorphism and does not have distinct taxonomic status.

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