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The Amphibians and Reptiles Collected by the Hokkaido University Expedition to Nepal Himalaya¹⁾

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Abstract

A small number of amphibians and reptiles collected by the Hokkaido University Expedition to Nepal Himalaya are examined. The collection includes seven species: *Bufo melanostictus*, *B. himalayanus*, *Agama tuberculata*, *Calotes versicolor*, *Japalura tricarinata*, *Boiga cyanea* and *Trimeresurus albolabris*. Of these, the record of *Bufo himalayanus* is the first for Kathmandu valley and that of *Boiga cyanea* is the second for Nepal.

A small collection of amphibians and reptiles made in Nepal by the Hokkaido University Expedition 1968 was submitted to the authors for identification. The collection is composed of 16 specimens, represented by two species of toads, three species of lizards and two species of snakes. They are as given in the following lines.

Bufo melanostictus Schneider Fig. 1A

1 male, Tatopani, N.W. of Pokhara, 1240 m, 2 May; 1 male, Balaju, Kathmandu, 1300 m, 4 April; 2 females, Godavari, S. of Kathmandu, 1600 m, 16 June; 1 female, Ramche, N. of Trisuli Bazar, 1670 m, 28 May.

The specimens were obtained from both near human habitations and evergreen broad leaved forest. The top of dorsal warts is less spiny in the males than in the females. Black layers on nuptial pads are apparent in the males. Of the two adult females, one has ovaries with black ova, 1.1 mm in diameter, and the other has white ovaries with a few immature dark ova. Although limited in number, the present samples seem to indicate that the body size (SVL, 57.0-67.8 mm in adult males and 81.2-100.0 mm in adult females), is not markedly different from that of samples from lower elevations: Yunnan, female 96 mm (Liu and Hu, 1961); Fukien, male 78 mm (Pope, 1931); Thailand, male 71 mm, female 103 mm (Taylor, 1962); Borneo, male 69 mm, female 75 mm (Inger, 1966).

Bufo himalayanus Günther Fig. 1B

1 subadult female, Godavari, S. of Kathmandu, 1600 m, 16 June.

The specimen, with SVL 54.2 mm, has white ovaries with small unpigmented ova. The present specimen from Godavari is probably the first record of the species from the Kathmandu valley (see: Dubois, 1974).

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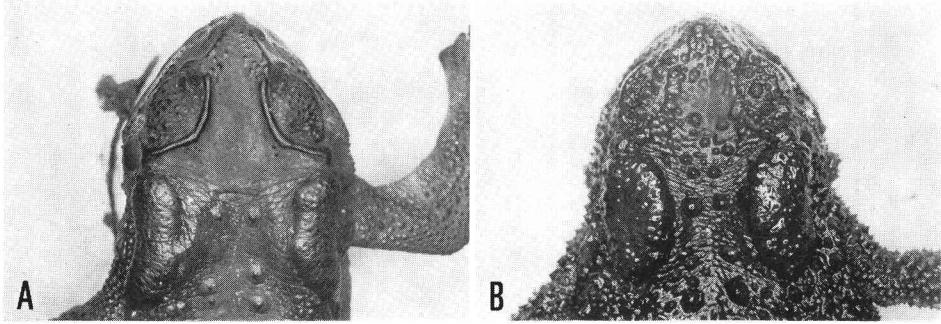


Fig. 1. Dorsal views of head of *Bufo melanostictus* (A, male, SVL 62.4 mm) and *B. himalayanus* (B, subadult female, SVL 54.2 mm).

Agama tuberculata Hardwicke and Gray Fig. 2A

2 males and 1 female, Dana, N.W. of Pokhara, 1024 m, 26 May.

The specimens were captured in the plateau near the Kali Gandak river. This species is endemic to Himalayan region and has distinct tympanums, depressed head and body. Tail is verticillated having the caudal segments composed of four whorls of scales. Dorsal scales are keeled and upper head scales are feebly keeled. The

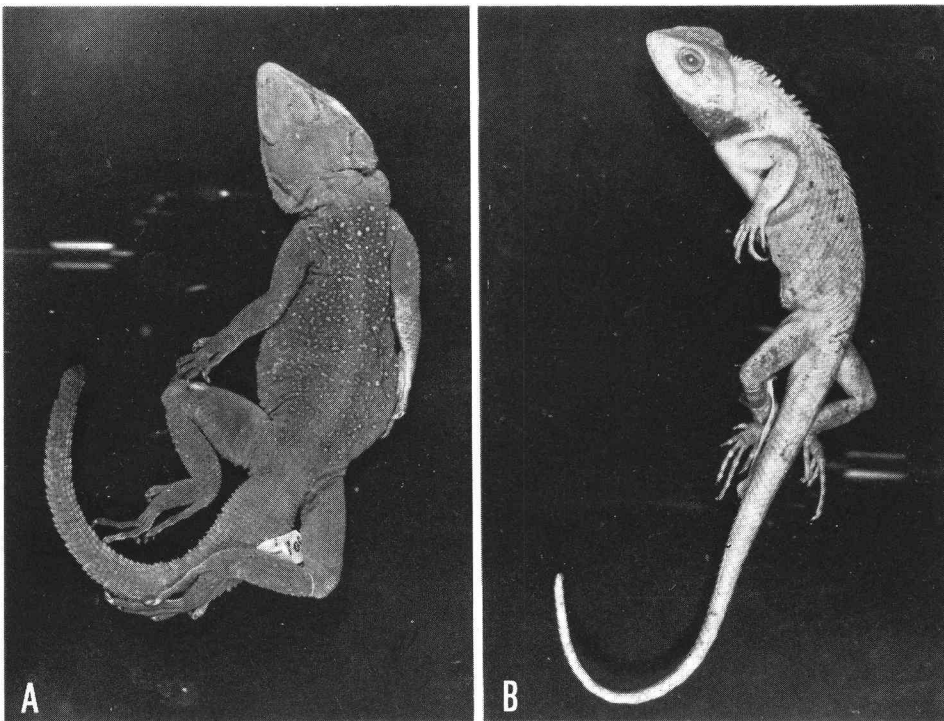


Fig. 2. Dorsal view of *Agama tuberculata* (A, male, SVL 132.6 mm) and lateral view of *Calotes versicolor* (B, female, SVL 112.0).

Table 1. Measurements in mm of *Agama tuberculata*.

Specimen No.	1	2	3
Sex	Male	Male	Female
Snout to vent	132.6	107.0	106.0
Tail	125.0*	182.0*	176.0*
Axilla to groin	60.0	49.0	52.1
Snout to base of arm	54.8	43.2	41.2
Snout to ear-opening	31.2	26.2	24.0
Head width	24.5	21.9	19.9
Forelimb	62.0	50.2	48.0
Hindlimb	96.4	79.6	76.2

* Regenerated.

males are adults having atrophied epididymides and their testes were small. The female had four shelled eggs in each oviduct. Mean egg size was 18.0 mm × 10.0 mm. All the specimens had regenerated tail.

***Calotes versicolor* (Daudin)** Fig. 2B

3 males and 1 female, Pokhara, 800 m, 17 May.

The specimens were captured around the cultivated land. This is a very common species, ranging from Afghanistan, India and Ceylon east to Hongkong, Indo-China, Malaya and Sumatra. Dorsal scales are equal-sized, rather large, distinctly keeled and pointing backwards and upwards. The mid-body scale rows were variable in the four specimens (44, 46, 47, 48).

Table 2. Measurements in mm of *Calotes versicolor*.

Specimen No.	1	2	3	4
Sex	Male	Male	Male	Female
Snout to vent	75.6	75.8	85.6	112.0
Tail	107.0*	184.0	203.0	155.0*
Axilla to groin	35.0	35.2	44.0	54.0
Snout to base of arm	28.6	28.7	30.8	42.0
Snout to ear-opening	17.7	17.2	20.5	26.0
Head width	14.0	13.6	15.8	19.8
Forelimb	37.2	34.2	44.1	46.5
Hindlimb	51.3	52.3	61.8	73.0

* Broken.

***Japalura tricarinata* (Blyth)** Fig. 3A

1 female, Dunche, E. of Gosainkund, 3000 m, Date unknown.

The specimen was captured in an open grass field. This is a small terrestrial lizard, endemic to the Himalayan high regions. It has distinct tympanums and indis-

tinct oblique fold in front of shoulder, and body is not compressed. Dorsal scales are unequal. Nuchal and dorsal crests are continuous and reduced to a series of slightly enlarged keeled scales. A serrated ridge running on each side of the neck is paralleling with nuchal ridge. The female had two shelled eggs in each oviduct. Measurements in mm: snout to vent, 50.7; tail, 107.0; axilla to groin, 25.7; snout to base of arm, 20.0; head width, 10.9; snout to ear-opening, 13.0; forelimb, 22.3; hindlimb, 40.3.

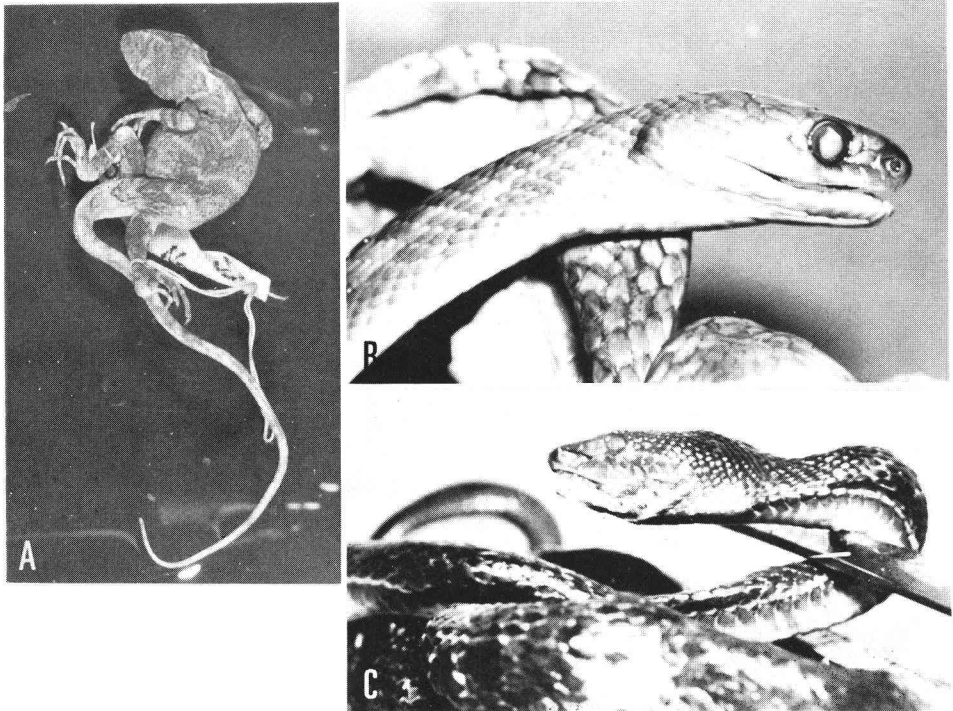


Fig. 3. Dorsal view of *Japalura tricarinata* (A, female, SVL 50.7 mm) and profiles of *Boiga cyanea* (B, female, SVL 805 mm) and *Trimeresurus albolabris* (C, male, SVL 370 mm).

***Boiga cyanea* (Duméril and Bibron)** Fig. 3B

1 female, Sundarijar, N. of Kathmandu, 1450 m, 7 August.

This species has been known from Darjeeling District, Assam, Burma, Thailand, Cambodia and Cochin-China (Smith, 1943; Taylor, 1965; Swan and Leviton, 1962), and its occurrence in Nepal was rather recently made clear (Fleming and Fleming, 1973). The present specimen is the second record for Nepal.

Description.—Rostal wider than high, only a very small portion visible above; internasals distinctly wider than long; prefrontals wider than long, their common suture longer than that between internasals; frontal shorter than its distance from tip of snout, shorter than parietals; nostril between two nasals; loreal longer than deep; preoculars large, reaching top of head but separated from frontal; two postoculars.

Supralabials 9, 3rd, 4th and 5th bordering orbit; infralabials 10–11, five touching anterior genials separated from one another by small scales. Scale formula 21-21-15; body scales smooth, somewhat pointed behind; vertebrals longer than wide at mid-body. Ventrals 233; anal entire. Subcaudals 66. Climbing keel indistinct. Pupil vertical. Color in preservative: above uniform brown, below dull yellow orange, edges of ventrals obscurely flecked at anterior part of the body. Measurements in mm: snout to vent, 805; tail, 160.

Although the numbers of ventrals and subcaudals in the present specimen are fewer than those of *B. cyanea* (ventrals 237–257 and subcaudals 124–138; Smith, 1943), other scale characters agree with those of the latter species. The coloration, however, is different: while *B. cyanea* is reported to be uniform green above and yellowish cream below in life, and its green changes to ultramarine in preservative (Taylor, 1965), the present specimen is brown above in preservative and is hardly considered to have been green in life. However, young *B. cyanea*, unlike adults, is brown above (Smith, 1943), and the first specimen of the species for Nepal is also reported to have ferruginous dorsum (Fleming and Fleming, 1973). Therefore, the coloration found in the present specimen might be within the range of variation or young coloration might have been retained.

***Trimeresurus albolabris* Gray** Fig. 3C

1 male, Sundarijar, N. of Kathmandu, 1450 m, 7 August.

The specimen was captured around the cultivated land. A mouse (species unidentified) was found in the stomach. The tail tip was missing. Ventral, 166; subcaudal, 59+, partly entire. Scale formula: 25-21-17. Measurements in mm: snout to vent, 370; tail, 82+.

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