- X.—REPORTS ON A COLLECTION OF BATRACHIA, REPTILES AND FISH FROM NEPAL AND THE WESTERN HIMALAYAS.
- By G. A. BOULENGER, F.R.S.; N. ANNANDALE, D.SC.; F. WALL, Major, I.M.S., C.M.Z.S.; and C. TATE REGAN, B.A.

## INTRODUCTORY NOTE.

The specimens from Nepal recorded in these Reports were collected by Mr. R. Hodgart on behalf of the Indian Museum, which is much indebted to Major J Manners-Smith, V.C., C.I.E., Resident in Nepal, for the assistance given. The specimens from Kumaon were collected at the same season as those from Nepal (in September and October, 1906) by myself, while those from the Simla district were obtained by a native collector and myself in April and May, 1907. The Nepalese localities mentioned are, for the most part, not to be found on any map. They are situated either in the neighbourhood of Katmandu, the capital of the state; in the Little Nepal Valley, which lies between that in which the capital is situated and the outermost range of hills; or in the Terai or sub-Himalayan plain. Only one or two specimens come from the last district, the majority being from the first. The specimens from Kumaon represent only two localities, Bhim Tal and Naini Tal, situated respectively at 4,500 and 6,400 feet; while the Reptiles and Batrachia from the Simla district were caught, within fifty miles of the town, between 5,000 and 9,000 feet, mostly at 5,000 and at 8,000 feet.-N. ANNANDALE.

### BATRACHIA.

## By G. A. Boulenger, F.R.S.

### I. Leptobrachium monticola, Gthr.

### Locality-Soondrijal, Nepal.

# 2. Bufo melanostictus, Schn.

Localities—Chitlong and Soondrijal, Nepal; Bhim Tal and Naini Tal, Kumaon; Kathgodam, foot of the Kumaon hills.

[This is the common Toad in the Nepal Valley, from which there are other specimens in the Museum, and in Kumaon up to 7,000 feet. I took a solitary tadpole of unusual size in a small pool above Naini Tal in October. As regards shape and dental formula it agreed closely with Flower's figure of a Malayan specimen (*Proc. Zool. Soc.*, 1896, p. 911, pl. xliv, fig. 3). Although this species has been recorded from 10,000 feet in Sikhim, the closely allied *B. himalayanus* is much more abundant in the Darjiling district between 5,000 and 7,000 feet.—N. A.]

# 3. Rana cyanophlyctis, Schn.

Localities—Soondrijal and Pharping, Nepal ; Bhim Tal and the valley of the Balaya, Kumaon.

This species is very abundant at the edge of the Bhim Tal (tal= lake) and in ditches by the roadside in the lower Balaya valley. In the Naini Tal its place appears to be taken by R. vicina. R. cyanophlyctis was seen in large numbers at Dharampur (altitude circa 5,000 feet) in the Simla hills at the beginning of May and several specimens were captured by my native collector. It has the habit of skipping over the surface of the water when alarmed (cf. Boulenger, Faun. Brit. Ind., Rept., p. 450), and although it is usually stated to be an aquatic species, it is only so by daylight; at night it makes considerable journeys by land. When excavations are made during building operations in Calcutta and are filled by rain water, this frog makes its appearance in them almost at once, even when they are at a considerable distance from any permanent pool.—N. A.]

## 4. Rana vicina, Stol.

Localities—Naini Tal and the upper valley of the Balaya.

The series of specimens collected by Dr. Annandale removes all my doubts as to the identity of R. blanfordi, Blgr., and this species (cf. Boulenger, Ann. Mag. Nat. Hist. (7), xvi, p. 640, 1905). The web between the toes may extend, as a fringe, to the disc of the fourth toe; the tympanum may be more or less distinct; the tongue is but feebly notched behind, as noticed by Stoliczka; internal vocal sacks are present in the male.

[Common at the edge of the Naini Tal and in pools by the roadside in the Balaya Valley above 5,000 feet. It is largely aquatic in its habits, at any rate during the daytime. Specimens taken at the beginning of October appeared to be breeding; the females contained large ova, while the throats and thighs of the males were suffused with a bright claret-colour, which soon disappeared in spirit. In no example seen were nuptial excress-cences developed. Specimens were also taken at the end of April in a small pool of a stream, the greater part of which had dried up, at Matiana (altitude 8,000 feet) in the Simla district. With them were tadpoles, probably of the same species. The tadpoles had large suctorial lips similar to those of the tadpole of R. *liebigii*, from which, however, they differed in dental formula.—N. A.]

#### 5. Rana tigrina, Daud.

Localities-Soondrijal and Katmandu, Nepal (4,000 to 5,000 feet).

6. Rana limnocharis, Boie.

Localities-Soondrijal, Nepal; Bhim Tal, Kumaon.

[A specimen was also taken at Dharampur in the Simla hills in May.—N. A.]

7. Rana formosa, Gthr.

Locality-Soondrijal, Nepal.

### LACERTILIA.

### By N. Annandale, D.Sc.

The collection includes examples of nine species of this group, of which species two are new. The others are common Himalayan forms, the distribution of which is rendered considerably clearer by these specimens. The occurrence of the two allied skinks Lygosoma himalayanum and L. sikkimense in the same locality is of interest; while the eastern limits of the range of Agama tuberculata can now be fixed with tolerable certainty.

## 1. Hemidactylus nepalensis, sp. nov.

One male specimen from Katmandu, Nepal : altitude 4,500 feet. Reg. No. Ind. Mus. Reptiles, 15779.

#### Diagnosis—

Allied to *Hemidactylus platyurus* (Schneid.) and to some extent intermediate between this species and *H. garnotii*, D. and B.

Head and body depressed; tail slender, flat, tapering, denticulated at the edges. A distinct fold of skin along the sides, measuring about I mm. in breadth, and another along the hind limbs posteriorly. Head long, slender, the length of the snout slightly exceeding the distance between the eye and the external ear; the extremity of the snout rounded. Toes webbed at the base; all the digits well developed. Dorsal surface of head and body covered with minute rounded tubercles which are almost homogeneous, but are smaller on the snout than elsewhere; dorsal surface of tail covered with minute imbricating scales; subcaudals large; ventral surface of belly covered with small imbricating leaf-shaped scales (about thirty in a transverse line across the middle of the body) changing gradually into minute tubercles on the throat. Nostril between the rostral and three small scales; eight upper and eight lower labials; one pair of chin shields meeting behind the mental and followed by several small scales on either side. An almost straight series of thirty femoral and præanal pores interrupted in the middle line. Three lamellæ under the inner, and seven under the middle posterior digit; four under the inner, and six under the