

NOTES ON LIZARDS IN THE INDIAN MUSEUM.

III. ON THE UNNAMED COLLECTION OF LIZARDS OF THE FAMILY SCINCIDAE.

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Plate I.

This is the concluding note on the unnamed material of Indian lizards in the collection of the Indian Museum. These notes have been based on an examination of the specimens of three chief families *viz.*, Geckonidae, Agamidae and Scincidae, but the collection also contains representatives of Eublepharidae, Varanidae and Lacertidae. None of the individuals belonging to the latter three families call for any special notice.

The collection includes 112 skins, of which 81 belong to the genus *Lygosoma*, 29 to *Mabuia* and 2 to *Ristella*. A new species of *Mabuia* has been found in this material, while short notes have been included on several other known species. *Mabuia bibronii* (Gray), hitherto believed to be a purely maritime form, has been recorded from the base of the Nilgiris and specimens of *Lygosoma travancoricum* (Bedd.) and *L. calamus* Blgr. have been added to the Museum collection for the first time.

In these notes, where no reference is given, I have followed Boulenger's volume in the Fauna of British India series.

Genus *Mabuia* Fitzinger.

I have examined 29 specimens of this genus and have been able to recognise 5 species in this material. Of these three *viz.*, *Mabuia dissimilis* (Hallow), *M. carinata* (Schn.) and *M. macularia* (Blyth) are fairly widely distributed, while *M. bibronii* (Gray), represented by two specimens, is only found in certain districts of South India. A new species allied to *M. septemtaeniata* (Reuss) is described from six specimens collected by Mr. R. Hodgart at Rawalpindi.

Mabuia bibronii (Gray).

Plate I, fig. 4.

Annandale¹ makes an interesting observation regarding the distribution of this species. He says, "This very distinct little skink is stated, vaguely, in the 'Fauna' to occur in the 'Carnatic,' but the real interest in its distribution lies in the fact that it appears to be entirely a maritime species. It is common on sand-dunes by the sea on the Indian shore of the Gulf of Manaar and occurs on the coast of Ceylon. It is common on the shore at Madras and I recently took a specimen in a little banyan-grove on a sand-hill close to the sea on the Orissa coast a few miles north of Puri. I have never seen the species more than a few hundred yards

¹ Annandale, *Reb. Ind. Mus.* VII, p. 90 (1912).

above high-tide mark. A diligent search on the shore at Trivandrum and at other places on the Travancore coast failed to reveal a specimen and I can find no record of the occurrence of the species anywhere in the Malabar Zone."

Of the two specimens that I have examined one was collected by Dr. H. S. Rao at Tuticorin, while the other was obtained by Annandale at Mettupalaiyam, at the base of the Nilgiri Hills. The occurrence of this species in the latter locality clearly shows that it is not exclusively a maritime species but is also found inland for a fairly long distance. The fact that *M. bibronii* has not been found so far along the Travancore coast can be explained by an assumption that the range of this species is chiefly restricted to the eastern coast of India and inland and that the species has not yet been able to cross the mountainous barriers in order to extend its range to the western coast.

Mabuia bibronii is represented in our collection from the following localities :—

15355, 15357-9	Pamban, Rameswaram I.	N. Annandale.
15360-5	Ramnád, Madura Dist.	N. Annandale.
16711	Balaghi, nr. Puri	N. Annandale & F. H. Gravely.
19731	Tuticorin	H. S. Rao.
19730	Mettupalaiyam, Coimbatore Dist., Madras.	N. Annandale.

***Mabuia macularia* (Blyth).**

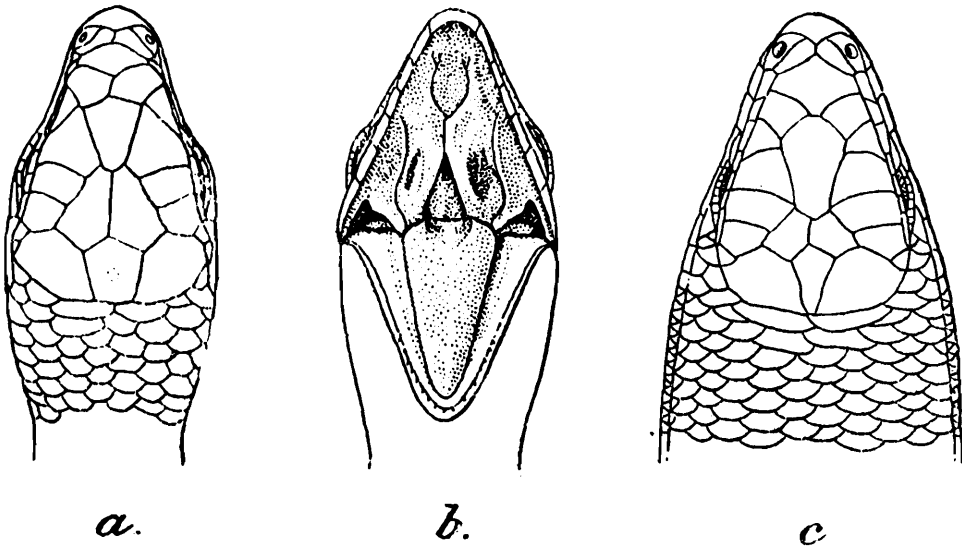
From an examination of the collection in the Indian Museum, this appears to be the commonest and most widely distributed species in India. The colour pattern is very variable and in certain specimens from the base of the Western Himalayas the body is of a uniform greyish colour with a number of black spots on the sides of the head and the anterior part of the body.

***Mabuia hodgarti*, sp. nov.**

Plate I, figs. 2 & 3.

The snout is of moderate length and is obtuse. The lower eyelid is provided with an undivided transparent disc. The nostril is situated entirely behind the vertical between the rostral. The frontonasal is considerably broader than long and is separated from the frontal by the prefrontals, which form a suture in the middle line. The frontal is a dagger-shaped shield somewhat longer than broad, it is considerably shorter than the frontoparietal and the interparietal taken together; it is in contact with the second supraocular only. There are four supraoculars, the second is by far the largest and just touches the prefrontal. There are 5 or 6 superciliaries. The two frontoparietals are somewhat larger than the interparietal, which entirely separates the parietals. There is a pair of small nuchal shields. Four labials are situated anterior to the subocular, which is about twice as large as the neighbouring labials and is not narrowed inferiorly. The ear opening is oval and is provided with three or four projecting lobules anteriorly, it is about as large as a lateral scale. The dorsal scales are more or less distinctly

tricarinate, the carinae being situated invariably in the posterior half of the scale, the scales in the region of the neck and flanks are very feebly



TEXT-FIG. 1.—Head shields and palate of *Mabuia hodgarti*, sp. nov. and *M. septemtaeniata* (Gray).

a. Head shields of *Mabuia hodgarti* $\times 4$; b. Palate, tongue and jaws of *M. hodgarti* $\times 4$; c. Head shields of *M. septemtaeniata* $\times 2\frac{1}{2}$.

keeled. There are 36 or 37 scales round the middle of the body, the dorsals are almost as large as the ventrals. The adpressed limbs overlap and the subdigital lamellae are smooth. The tail is about 1.3 times as long as head and body taken together.

There are two broad bands of brownish colour on the sides, each commences from behind the eye and is continued on the tail region : posterior to the hind limb it is broken up into dots. In the course of each band there are a number of whitish spots and several short, oblique, vertical bars of deeper colour imparting to the band a characteristic appearance. There are two dotted lines along the dorsal surface, commencing slightly behind the head and continued on to the tail region. The upper surface is olivaceous and the under surface dull white.

The new species is closely related to *Mabuia septemtaeniata* (Gray), but differs from it in the following points :—

1. The prefrontals form a suture in the middle line and thus separate the frontonasal from the frontal.
2. The frontal is considerably shorter than the frontoparieta and the interparietal taken together.
3. The frontal touches the second supraocular only.
4. The frontoparietal is larger than the interparietal.
5. The colouration is rather characteristic.

There are 6 superciliaries, but in three specimens I have counted 5 on the right side and 6 on the left.

Type-specimen :—19801 Zoological Survey of India (Ind. Mus.).

Locality.—There are six specimens in our collection obtained by Mr. R. Hodgart at Rawalpindi, Punjab. They are all small individuals and possess a prehensile tail. It is probable that it is an arboreal species.

Measurements in millimetres.

Total length	82.0	70.5	70.0
Length of head	10.0	9.0	9.1
Width of head	6.1	5.3	5.7
Length of body	24.5	21.5	21.9
Fore limb	10.2	10.2	9.5
Hind limb	13.2	12.2	12.0
Tail	47.5	40.0	39.0

Genus **Lygosoma** Gray.

I have examined 89 specimens of this widely distributed genus and have been able to recognise a dozen species among them. Besides the nine species, on which notes are included here, there are representatives of *Lygosoma dussumieri* (D. & B.), *L. taprobanense* (Kel.) and *L. punctatum* (Linn.). Though all of these are already known species, examples of two viz., *Lygosoma travancoricum* (Bedd.) and *L. calamus* Blgr. have now been added to the Indian Museum collection for the first time.

Lygosoma indicum (Gray).

This species is represented by 10 specimens in the collection. Of these 3 are from the Garo Hills, 2 from the Khasi Hills and the remainder from the Eastern Himalayas below Darjeeling. In a specimen from Shillong there are only 34 scales round the middle of the body. A great difficulty was experienced in identifying the young examples of *Lygosoma indicum* because in them the scales on the lower eyelid are very transparent and give an impression of the presence of an undivided transparent disc.

Lygosoma maculatum (Blyth).

I have here to record the occurrence of *Lygosoma maculatum* in the Chittagong Hill Tracts, where two specimens were obtained and are now present in our collection. The other two specimens in the collection are from Lashio in Burma and from the east side of Trotter Island (Marine Survey Sta. 570).

Lygosoma sikkimense (Blyth).

This species is represented in the collection by 21 specimens, all of which are from the Darjeeling District of the Himalayas (Darjeeling, Kurseong, Ghoom and Sureil).

Lygosoma himalayanum (Günther).

Plate I, fig. 5.

The collection includes 23 examples of this species. Of these 8 are from the Simla Hills, one from Muktesar in the Kumaon Hills and the remainder from Kashmir. Of the 14 specimens from Kashmir there are two collected by Mr. T. B. Fletcher at Killanmarg (alt. 10,000 ft.) which are of a much darker colour. There are two other dark specimens in the collection of the Indian Museum, one is from Srinagar, Kashmir, while the exact locality of the other is not known, but it is stated to have been presented by Col. MacMahon.

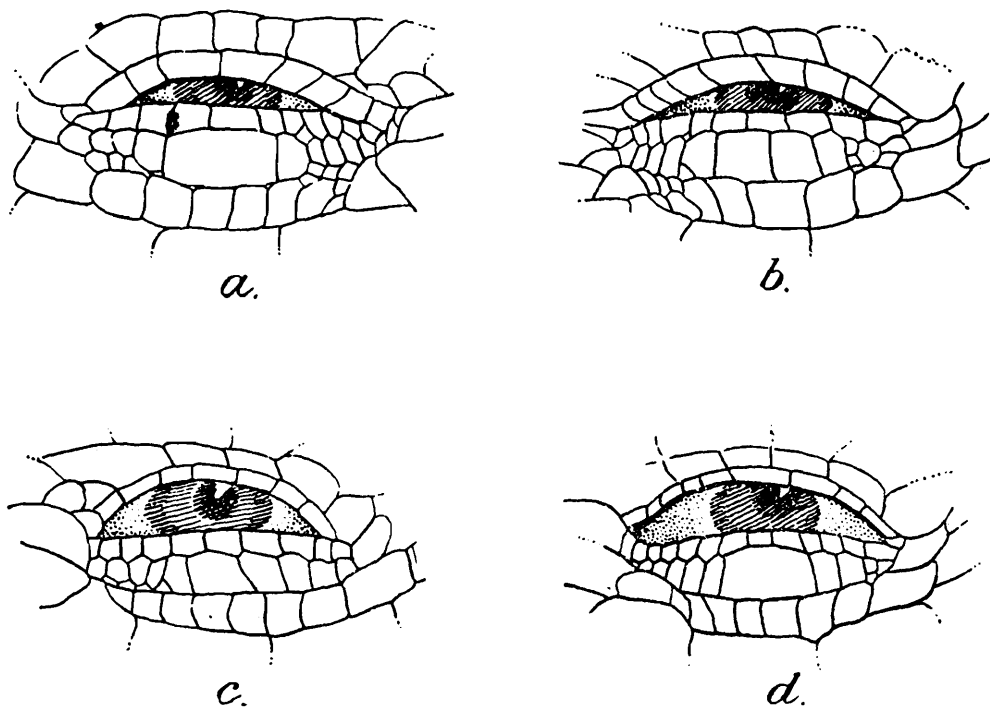
In all these four examples the whole of the animal is much darker in colour and is provided with two broad, dark, lateral bands, which are edged with white streaks. On the dorsal surface there are rows of dull white spots with an anterior black margin. The borders of the ventral scales are of a deep bluish colour, while each scale is of a light blue colour in the centre. The under surface forms a beautiful cheque pattern.

***Lygosoma travancoricum* (Beddome).**

Annandale¹ probably overlooked the inclusion of this species in his list of lizards from India, Burma and Ceylon. There have hitherto been no specimens of this species in the Indian Museum collection. Four examples from the Palni Hills have now been referred to *Lygosoma travancoricum*.

***Lygosoma albopunctatum* (Gray).**

The collection includes 10 specimens of this species. In an example from Sorbhog, Assam, I have noticed that the lower eyelid on one side is scaly, while on the other side it is provided with an undivided transparent



TEXT-FIG. 2.—Lower eyelid of *Lygosoma albopunctatum* (Gray).

a. Right lower eyelid of an individual from Sorbhog, Assam ; b. Left eyelid of same ; c. & d. Left lower eyelids of two other individuals showing variation.

disc. The examination of other specimens has shown that this character is unreliable in this species.

***Lygosoma cyanellum* (Stoliczka).**

A single specimen from Prome exists in the collection. *Lygosoma cyanellum* is only known from Burma and is represented in the Indian Museum collection by specimens from Prome, Pegu and the Dawna Hills.

¹ Annandale, *Journ. As. Soc. Bengal* (n. s.) 1, pp. 149, 150 (1905).

Lygosoma calamus Boulenger.

Plate I, fig. 1.

Hitherto there was no example of this species in the collection of the Indian Museum. I have now found three referable to *Lygosoma calamus*. Of these one was collected by Mr. C. Rogers in the Paunglin Forest Reserve, Pegu District, while the other two were obtained by Mr. T. B. Fletcher at Pynmanar in Burma. The colouration of the specimens from the latter locality is somewhat different. The colour pattern of the young individual is very much like that of *Lygosoma lineatum* (Gray). It is provided with a prominent dull white band edged both above and below by black ones; it commences from behind the superciliaries and is continued along the whole length of the animal. Each scale is provided with a dark brown spot, and these form well-marked longitudinal bands on the sides and the dorsal surface. In the anterior region of the body on the sides are a number of white spots. In a somewhat older individual the upper surface of the head and body assume a uniform dull grey colour and the longitudinal bands are no longer visible. The conspicuous lateral band is seen for a short distance only, but the white spots become more prominent.

Lygosoma lineatum (Gray).

There is a single specimen of this species collected by Mr. T. B. Fletcher at Poona from a termitarium. The colouration is much lighter than that of the other typical specimens that I have examined.

Genus Ristella Gray.

Of this interesting genus I have examined two individuals from the Palni Hills collected by Dr. S. W. Kemp at Kodaikanal. They are well preserved and are referable to *Ristella rurkii* Gray. The dorsal and the lateral scales are perfectly smooth. The dorsal surface is of a uniform reddish brown colour and there are no black spots or shafts on the scales. One individual is much darker than the other. The under surface of the head and tail is provided with bluish dots which are sometimes united together to form big patches.