

FAUNA OF RAJASTHAN, INDIA, PART . REPTILIA

By

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INTRODUCTION

(1) *General*

The present work on Rajasthan reptiles is based largely on the extensive collections in the Zoological Survey of India made during faunistic surveys between the years 1941 to 1965.

Though the reptile fauna of India as whole is fairly well studied and Smith's works (1931, 1935, 1943) are valuable, there is no consolidated faunistic work on Rajasthan reptiles. In this connection the work of Blanford (1879) on a collection from the Ajmer area and Murray's (1884) work mainly on the reptiles of Sind are worth mentioning. The papers of Krishna and Dave (1959, 1960), and Dave (1960) on the collections from the Jodhpur area and Sunder Singh's work (1960) from Pilani area are ecological, not taxonomic.

For general account of the topography, climate, vegetation etc. of Rajasthan, and also for details of the collecting stations cited here see part I (General introduction) this series of papers (Roonwal, 1963).

Collections made subsequent to those mentioned in Roonwal's paper have been cited in Table 1 below. The eastern zone is comparatively less surveyed for reptiles and some districts (Alwar, Dungarpur, Banswara, Bundi, Swai Madhopur, Jalore) have not been surveyed at all. Some earlier collections included in the present study are those collection O.B.St. John from Ajmer (worked out by Blanford, 1879) and of G. S. Sutherland's (Mt. Abu) and N. Belletty from Rajputana (no date).

Altogether 333 specimens comprising 28 species, and 7 subspecies belonging to 28 genera and 12 families were examined. Of these 14 species and 2 subspecies are new records from Rajasthan. One species, *Crocodilus palustris* Lesson, is observed in the field only by the author (S. B.).

(2) List of collections examined

The collections were made in the following surveys (Table I).

Table 1. List of surveys from which the material for Rajasthan Reptilia was studied.

Name of the survey	Year	Leader of survey party or collector	Districts surveyed
Rajasthan Survey	1941	Drs. B. N. Chopra and M. L. Roonwal	Udaipur
Rajasthan Survey	1948	Shri K. S. Pradhan	Sirohi
Purchased	1957	Dr. S. D. Gupta	Bikaner
Rajasthan Desert Survey	1956 1957 1958	Dr. B. Biswas	Jaipur, Nagaur, Bikaner, Sikar and Ganganagar.
Western Rajasthan Survey	1957—58	Dr. K. K. Tiwari & Shri S. Biswas	Jodhpur, Barmer and Jaisalmer
Sambhar Lake Survey	Nov.' 57 -Jan.' 59	Shri T. G. Vazirani Shri A. K. Mukherjee Shri S. Biswas	Nagaur and Jaipur.
Jodhpur Survey	1960	Shri R. K. Bhatnagar	Jodhpur
Rajasthan Desert Survey	1960-61	Dr. B. Biswas	Bikaner
Rajasthan Survey	1962	Dr. P. D. Gupta	Barmer and Jodhpur
S. E. Rajasthan Survey	1963	Dr. N. Majumdar	Jhalawar
Rajasthan Survey	1963 & 1964	Shri K. K. Mahajan	Ajmer, Udaipur, and Jaisalmer.
Southern Rajasthan Survey	1964	Dr. P. D. Gupta	Udaipur, Kotah, and Chittorgarh
Southern Rajasthan Survey	1965	Shri S. Biswas	Ajmer, Udaipur, Sirohi, Chittorgarh, Bhilwara & Kotah.

(3) Acknowledgements

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COLLECTING LOCALITIES

The reptiles examined were collected from a total of 80 collecting stations distributed over 17 districts of Rajasthan.

For the Map of Rajasthan showing most of the collecting localities please consult the Map, Plate 9, Fauna of Rajasthan Part I (Roonwal, 1963).

Abbreviations

AKM, Dr. A. K. Mukherjee; BB, Dr. B. Biswas; BNC, Dr. B. N. Chopra; GSS, G. S. Sutherland; IP, Iswar Prakash; JC, Jaswant College; KKM, K. K. Mahajan; KKT, Dr. K. K. Tiwari; KSP, K. S. Pradhan; MLR., Dr. M. L. Roonwal; NM., Dr. N. Majumdar; NB, N. Belletty; PDG., Dr. P. D. Gupta; RKB, R. K. Bhatnagar; SB, S. Biswas; SDG., Dr. S. D. Gupta; TGV, Dr. T. G. Vazirani.

SYSTEMATIC ACCOUNT

Order I LORICATA

Family (1) CROCODILIDAE

1. *Crocodilus palustris* Lesson

The mugger or marsh crocodile.

1834. *Crocodilus palustris* Lesson, in Belang. *Voy. Ind. orient. Zool.* : 305.

Remarks.—Though absent in the present or earlier collections, it was observed by the author in the Pichola Lake, Udaipur, and Budha Pushkar, Ajmer. Blanford (1879) also mentioned about its occurrence in the Pushkar Lake (near Ajmer) and in a small tank in Chittor hill. The species is now reported to breed in Jaipur (Prakash, 1971 b), it is becoming rarer day by day in Rajasthan.

Order II TESTUDINES

Suborder *THECOPHORA*

Family (2) TRIONYCHIDAE

2. *Lissemys punctata granosa* (Schoepff)

1972. *Testudo granosa* Schoepff, *Hist. Test.* : 127, pls. XXX A & B.

Material.—Ajmer Dist: 1 ex., Anasagar, 17, viii.1965 (coll. SB). Jodhpur Dist.: 1 ex, Sta. 10, Bisalpur, 14.x.1962 (coll. PDG), 4 ex., Jodhpur, viii.1960 (coll. RKB). Jaipur Dist.: 1 ex., Sta. 6, Devdyani, Sambhar town, 7.x.1963 (coll. KKM).

Measurements :

<i>Reg. No.</i>	<i>Length</i> (in mm)	<i>Breadth</i> (in mm)	<i>Remarks</i>
21129	73	68	Entoplastron Callosity absent
21151	95	78	„ „
21007	210	165	„ „
21007	184	152	„ present
21007	232	172	„ „
21007	295	192	„ „

Distribution.—Rajasthan : Localities mentioned above (First record from Rajasthan). *Elsewhere*: India: Barakar, Kasai, Mahanadi and Godavari rivers; Indian Peninsula south of the Ganga : Tamil Nadu, Maharashtra, Gujarat (Kutch).

Remarks.—Measurements given above show that the young are nearly round, but with growth they become more elongate. Excepting in the young the callosities on the plastron are not prominent, and the entoplastron callosity is absent. This subspecies differs from the typical one in having entoplastral callosity moderate in the adult, and in the presence of longitudinal streaks in the head of young, and in the carapace being uniformly brown.

Family (3) TESTUDINIDAE

3. *Testudo elegans* Schoepff

1972. *Testudo elegans* Schoepff, *Hist. Test.* : 111 pl. XXV.

Material.—Bhilwara Dist.: 1 ex. near Pandal village, Bhilwara town, 13.ix.1965. (coll. SB).

Measurements.—Length 170 mm, breadth 105 mm.

Distribution.—Rajasthan; Pandal village, Bhilwara town. *Elsewhere*: India: Central and Southern India, extending West as far as Sind. Also in Sri Lanka.

Remarks.—One typically coloured male was collected near a maize field in a grassland.

Prakash (1971 *a*) also recorded this species at Bisalpur, about 5 km. north of Jawai Bandh Rly. Stn. on the Western side of the Aravallis; he also studied its food habits.

Order SQUAMATA

Suborder SAURIA

Family (4) GEKKONIDAE

4. *Stenodactylus orientalis* Blanford

1876. *Stenodactylus orientalis* Blanford, *J. Asiat. Soc. Bengal* 45 : 21, pl. 1, fig. 2.

Material.—Bikaner Dist.: 1 ex. Kolayat, 12.ix.1960, 1 ex. Pugal, 19.ix.1960, (Coll. *BB*).

Measurements.—Length Largest, snout to vent 51 and 55 mm., tail 42 and 46 mm. In one example 12 upper and 11 lower labials; in the other both 11.

Distribution.—Rajasthan: As above (first record from Rajasthan) *Elsewhere*: Khairpur, from hills of Larkana, Rohri and Hala in Sind (Pakistan) and Iran.

Remarks.—Three or four indistinct brown transverse bars over the body of our specimens are distinguishable but those on the tail are prominent and 12 in number.

Of the three species from the Indian Region only the present one occurs in the Indian desert, the other two are from Baluchistan and Afghanistan. The present species differs from its nearest ally *S. lumsdeni* Boulenger, by having a shorter snout, longer limbs, smooth ventral scales.

5. *Gymnodactylus scaber* (Heyden)

1827. *Stenodactylus scaber* Heyden, *In Rüppell, Atlas N. Afr. Rept.* : 15, pl. 4 fig. 2.

Material.—Bikaner Dist.: 1 ex., Pugal, 21.ix.1960 (coll. *BB*). Jaisalmer Dist.: 2 exs., Jaisalmer town, 9.i.1958, 1 ex., on way to Josirasar, 21.1.1958; 2 ex., Pokran, 22.xii.1957 (coll. *KKT & SB*).

Measurements.—Length 2 ♂♂ : Snout to vent, 42, 43 mm., tail 55, 63 mm. 3 ♀♀ 28, 42 and 46.5 mm.; tail 37, 59, 63 mm.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*: Pakistan (Salt Range, Punjab; Sahasan, Sind; Malakand and Waziristan, N.W.F. Province) Afghanistan, Iran, Iraq, Arabia and Egypt.

Remarks.—Common throughout its range, of particularly in the Western Rajasthan usually found in pair on trees and walls.

Except in the young, the lateral fold is rather distinct. The longitudinal series of large subtriangular tubercles on the back are also arranged more or less in transverse rows (22-23 rows from neck to groin). At least three rows of longitudinally arranged brown spots and 12-13 dark bands on the tail could be seen,

This species is very near to *G. montium-salsorum* Annandale (based on only four specimens from the Salt Range, Punjab) but can be differentiated by the presence of preanal pore only (in the other species, the preanal and femoral pores are continuous).

6. *Hemidactylus brooki* Gray

1845. *Hemidactylus brooki* Gray, *Cat. Liz. Brit. Mus.* : 153.

Material.—Ajmer Dist.: 5 ex., Sta. 8, Anasagar, 2. x.1964 (coll. *KKM*). Bhilwara Dist.: 3 ex., Harnai Vill., 4 km. SW of Bhilwara, 16.ix.1965 (coll. *SB*). Chittorgarh Dist.: 1 ex., Chittorgarh fort, 6.ix.1965; 2 ex., near Berach river, 3 km. SW. of Chittorgarh Dakbunglow, 7.ix.1965 (coll. *SB*). Jaipur Dist., 1 ex., Bisalpur, 6.vii.1960 (coll. *RKB*), Nagaur Dist.: 2 ex., between Indana and Didia, 4.ix.1960 (coll. *BB*), Sirohi Dist.: 1 ex., Sta. 12, Nakki lake, 7.ix.1964 (coll. *KKM*).

Measurements.—Length Snout to vent: 21-51 mm.; tail 24 mm.

Distribution.—Rajasthan: As above (first record from Rajasthan). *Elsewhere*: India: Whole of India. Also Sri Lanka, Burma, China, SE. Asia, North Africa and West Indies.

Remarks.—This is a common gecko of Rajasthan. Out of the 15 examples examined, four were males.

This species is easily separated from all other species belonging to the group in which there are regularly arranged larger tubercles on the back and in having 8 to 10 lamellae under the fourth toe. Another species of this group which occurs in Rajasthan is *H. triedrus* Daudin.

7. *Hemidactylus leschenaulti* Dumeril & Bibron

1836. *Hemidactylus leschenaulti* Dumeril & Bibron, *Erp. Gen.* 3 : 364.

Material.—Barmer Dist.: 1 ex., Balotra, 9.ii.1958 (coll. *KKT & SB*). Nagaur Dist. 1 ex., Gudha, 2.viii.1958 (coll. *AKM*).

Measurements.—Length snout to vent 42 mm., tail 46 mm.

Distribution.—Rajasthan: Western Rajasthan (South of Jaisalmer, and as above). *Elsewhere*: India: Annamalai, Nilgiri and Palkonda Hills, Madras, Ramnad, Malabar, Godavari valley, Belgaum Dist., Bombay, Surat, Nagpur, Ellora, Khandesh and Calcutta (?) Also Sri Lanka.

8. *Hemidactylus flaviviridis* Rüppell

1835. *Hemidactylus flaviviridis* Rüppell, *Neue Wirb : Fauna. Abyss.* : 18, pl. VI. fig. 2.

Material.—Barmer Dist.: 1 ex., Jorbir, 11.i.1957 (coll. *BB*). 2 ex., Barmer town, 6.xi.1958 (coll. *KKT & SB*). Bikaner Dist.: 1 ex., Pugal,

24.ix.1960. Churu Dist.: 1 ex., Taranagar, 26.x.1960 (coll. *BB*). Chittorgarh Dist.: 1 ex., Chittorgarh fort, 10.ix.1965 (coll. *SB*). Jaipur Dist.: 2 ex., Sta. 4a, PWD, Rest House, Sambhar lake, 5.x.1963. 1 ex., Bazaznagar, 26.ix.1963 (coll. *KKM*); 1 ex., Dudu, 8.i. 1959 (coll. *SB*); 3 ex., P.W.D. Rest House, Sambar lake (coll. *AKM*). Jaisalmer Dist.: 2 ex. Nokh, 22 & 28.viii.1960 (coll. *BB*). Jodhpur Dist.: 1 ex., Phalodi, 16.xii.1967 (coll. *KKT* & *SB*), Nagaur Dist.: 2 ex., Gudha, 3.iii.1958 & 17.vi.1957. 2 ex., Nawa, 12.iv. 1958 (coll. *TGV*); 4 ex. Gudha, 29.iv.1957 & 14.vii.1958 (coll. *AKM*); 2 ex., Gudha, 1.xii.1958 (coll. *SB*); 2 ex., Nagaur, 2.ix.1960 (coll. *BB*). Udaipur Dist.: 1 ex., Udaipur, 2.ix.1965, (coll. *SB*).

Measurements.—Length: Snout to vent 60-84 mm.; tail 86 mm.

Distribution.—Rajasthan: Ajmer (*O. B. St. John's* coll.) and as above. *Elsewhere*: India: North India from West Bengal to the Punjab upto south of lat. 20° Also Bangladesh, in the west Iran and Arabia to the shores of Red Seas; Pakistan, Sind, Salt Range, Rawalpindi.

Remarks.—According to Smith (1935) it is the northern representative of *H. leschenaulti* Dum. & Bibr. from which it differs in the following characters: 12 to 15 upper and 10 to 12 lower labials, 7 to 10 lamellae under the first toe, 11 to 14 under the fourth; back with fewer enlarged tubercles; males with 5 to 7 femoral pores on each side.

Family (5) AGAMIDAE

9. *Sitana ponticeriana* Cuvier

1844. *Sitana ponticeriana* Cuvier, *Guerin, Icon. Reg. Anim. Rept.* Pl. X. fig. 2.

Material.—Jaipur Dist.: 1 ex., Sta. 11, 3 km. south of Kotputli Bus Station, 10.vi.1963 (coll. *NM*).

Measurements.—Length: Snout to vent 39 mm., tail (Broken), 62 mm. hindlimb 37 mm.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan.) *Elsewhere*: India: whole of India up to Himalayan foothills except Bengal east of Ganges, but there is a specimen from Haldibari, (North Bengal). Also Sri Lanka.

Remarks.—The above specimen was collected under a log. It belongs to the smaller form out of two forms mentioned by Smith (*loc. cit.*) due to the following characters: tail more than twice the length of head and body, hindlimb reaching the tip of snout, labial and occipital scales intermixed with larger.

There are five dark brown black-edged rhomboidal spots along the middle of the back and an elliptical one on the tail.

10. *Calotes versicolor* (Daudin)

1802. *Agama versicolor* Daudin, *Hist. Nat., Rept.* 3 : 395.

Material.—Ajmer Dist.: 1 ex., Sta. 7, by the side of the Jaipur road, 20.ix.1964 (coll. *KKM*). Barmer Dist.: 2 ex., Barmer, 6.xi.1958 (coll. *KKT & SB*). Bikaner Dist.: 1 ex., Bikaner, Oct. 1956; 1 ex., Kolayat, 13.ix.1960 (coll. *BB*). 24 ex., Bikaner, (coll. *SDG*). Jaipur Dist.: 1 ex., Bazaznagar, 24.ix.1963 (coll. *KKM*); 1 ex., Sambhar Lake, 28.iv.1957; 1 ex., Devdyani, Sambhar lake, 13.v.1958, (coll. *AKM*); 1 ex., Koni, 24.vi.1958; 2 ex., Phulera, 17.v.1958; 1 ex., Naraina, 23.iii.1958 (coll. *TGV*). Jaisalmer Dist.: 1 ex., Sta. 13, Jaisalmer, 28.x. 1962; 1 ex., Sta. 5, Badesbagh, Jaisalmer, 14.viii.1964 (coll. *PDG*). Jhalawar Dist.: 1 ex., Sta. 30, Ahu river, 26.iii.1963 (coll. *NM*). Jodhpur Dist.: 1 ex., Sta. 10, Jodhpur, Oct. 1963 (coll. *PDG*); 1 ex., Umed Sagar, Jodhpur, 22.xii.1956; 1 ex., Kaylana Desert afforestation area, 13.xii.1956 (coll. *BB*); 1 ex., Bishalpur, 6.vii.1960 (coll. *RKB*). Nagaur Dist.: 1 ex., Merta, 29.xii.1956; 1 ex., Kharnal, 6.ix.1960; 1 ex., Barni, 5.ix.1960; 1 ex., Balaia, 6.ix.1960 (coll. *BB*); 1 ex., Gudha 20.ii.1958 (coll. *KKT & SB*); 2 ex., Nandana Nadi, 28.vii.1958; 2 ex., Gudha, 8.vii.1958 (coll. *AKM*). 2 ex., Lihorana, April 1958; 1 ex., Lihorana, 6.v.1958; 2 ex.; Gudha, 9.iii.1958; 1 ex., Gudha, 18.v.1958; 1 ex., Gudha, 3.vii.1958 (coll. *TG*). Pali Dist.: 1 ex., Pali, 1 ex., Pali, 4.xii.1956 (coll. *BB*), Udaipur Dist.: 1 ex., Barapal, 14.x.1941; 2 ex., Udaisagar Lake, 11.x.1941; 1 ex. Palsad, 18.x.1941 (coll. *MLR*).

Measurements.—Length: Snout to vent 74-180 mm., tail 179-270 mm.

Distribution.—Rajasthan: Ajmer (*O. B. St. John*); Jaipur and Udaipur (*Blanford*) and as above. *Elsewhere*: India: Common throughout India and the Andaman Islands. Also Pakistan (Sind and Baluchistan), Afghanistan, Sri Lanka, Nepal, Burma Borneo, northern part of Malay Peninsula, Indo-China, Hainan, Hongkong and South China.

Remarks.—This is the most common lizard of Rajasthan. It is very common in the summer and rainy seasons but is conspicuously absent in winter.

In a full grown male the dorsal scales are bordered white and brown within, gular pouch white and well developed, throat black.

This species comes very near to *C. bhutanensis* Biswas, which differs from *versicolor* in its short snout, two rows of erect scale by the two sides of the neck and the characteristic colour pattern.

11. *Agama agilis* Olivier

1807. *Agama agilis* Olivier, *Voy. Emp. Ortho.* iv. : 394; *Atlas* (12) pl. XXIX, fig. 2.

Material.—Barmer Dist.: 1 ex., Pachpadra, 11.ii.1958 (coll. *KKT & SB*). Bikaner Dist.: 5 ex., Kolayat; 1 ex., Kolayat, 12.ix.1960; 1 ex., Pugal, 20.ix.1960; each day 1 ex., Pugal, on 18.ix.1960; 29.ix.1960; 22.ix.1960; 23.ix.1960; and 3 ex. on 25.ix.1960; 1 ex., Lunkaranasar viii., 30.ix.1960; 1 ex., Kotri, 15.ix.1960 (coll. *BB*). Ganganagar Dist.: 2 ex., Suratgarh 9.x.1960 (coll. *BB*). Jaipur Dist.: 1 ex., Sambhar Lake town, 17.vi.1958 (coll. *TGV*). Jaisalmer Dist.: 3 ex., Nokh, 24.viii.1960 (coll. *BB*); 12 ex., Sta. 13, Jaisalmer, 22.x.1962 (coll. *PDG*). Jodhpur Dist.: 1 ex., Sta. 6, Phalodi, 25.viii.1964 (coll. *KKM*); 1 ex., Jodhpur, (Donor, *J.C.*). Nagaur Dist.: 1 ex., Lihorana 6.v.1958 (coll. *TGV*).

Measurements.—Length: Snout to vent 34-106 mm.; tail 60-176 mm.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan and from India). *Elsewhere*: Pakistan (Sind, Punjab, Baluchistan), Afghanistan and Iran.

Remarks.—9 juveniles in the collection differ from adults in the following characters:—Pointed projections of scales within tympanum not prominent (absent in some), occipital spines and spine posterior to tympanum not well developed; parietal region convex; fourth toe longer than third; crossbars more prominent (in adults, colouration is nearly uniform).

12. *Uromastix hardwickii* Gray.

1827. *Uromastix hardwickii* Gray, *Zool. J.* 3 : 219.

Material.—Bikaner Dist.: 5 ex., Lunkaransar, 3.x.1960 (coll. *BB*), 2 ex., Sta. 6, Bikaner, 5.x.1962 (coll. *PDG*). Ganganagar Dist.: 2 ex., Nohar, 14.x.1960; 1 ex., Charano-ki-Dhani, 18.x.1960; 1 ex., Diplana, 13.x.1960; 1 ex., Sothi, 14.x.1960 (coll. *BB*). Jaisalmer Dist. : 2 ex., Mohangarh, Jan. 1958 (coll. *KKT & SB*).

Measurements.—Length : Snout to vent 135-183 mm.: tail 100-123 mm.

Distribution.—Rajasthan: Bikaner (*S. D. Gupta*) and as mentioned above. *Elsewhere*: India: North-Western India as far east as Uttar Pradesh. Pakistan (Sind, Baluchistan and Punjab).

Remarks.—Differs from *U. asussi* (Strauch), the species which meets it at the fringe of its distribution, (Baluchistan and Afghanistan) in having 20 to 24 comparatively small spines in a cross series at the base of tail.

The observations made by Smith (1935) hold true in case of specimens from Sind, Pakistan and Kathiawar, Saurashtra. The specimens of this area are usually larger in size and the enlarged dorsal scales are

arranged in cross series. Further, spines on the dorsal base of the tail are less sharp, blunt and flat at the base.

Family (6) SCINCIDAE

13. *Mabuya macularia* (Blyth)

1853. *Euprepes macularius* Blyth, *J. Asiat. Soc. Beng.* 22 : 652.

Material.—Ajmer Dist.: 1 ex., Sta. 71, by the side of Jaipur road, Ajmer, 1.x.1964 (coll. *KKM*).

Measurements.—Length: Snout to vent 40 mm., tail broken.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*: India: Throughout. Also Pakistan (Sind and Rawalpindi), Indo-China, Malay-Peninsula, Burma and Sri Lanka.

Remarks.—Smith (1935) distinguished five geographical "forms"; the present example conforms to the second "form" due to the presence of 28 scales round the body, dorsal and lateral scales with 5 feeble keels the legs reaching wrist or elbow, the colouration uniformly brown above and the flank not spotted. *M. macularia* and *M. carinata* (Schneider) in most of their characters come very near to each other and even the differences overlap.

14. *Ablepharus grayanus* (Stoliczka)

1872. *Blepharosteres grayanus* Stoliczka, *Proc. Asiat. Soc. Beng.* : 74.

Material.—Jaisalmer Dist.: 1 ex., Sta. 8, Badebagh, 17.viii.1964 (coll. *KKM*). Sirohi Dist.: 1 ex., Sta. 12, Nakkilake, (Mt. Abu), 7.ix.1964; 1 ex., Sta. 13, Achalgarh Fort (Mt. Abu), 7.ix.1964 (coll. *KKM*).

Measurements.—(Length, in mm).

<i>Reg. No.</i>	<i>Snout to vent</i>	<i>Tail</i>	<i>Snout to axilla</i>	<i>Axilla to groin</i>	<i>No. of scales round body</i>
21471	25	50	11	16	18
21470	32	30	12	18	18
21469	35	63	12	22	18

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). India: Gujarat (Kutch). *Elsewhere*: Pakistan (Sind and Baluchistan).

Remarks.—Two examples are pale olive green above, the third one brown with three dotted lines on tail. *A. pannonicus* Fitzinger, occurs in Pakistan (Punjab and Sind) and differs from the present one in having small but distinct ear openings.

15. *Riopa punctata* (Gmelin)

1799. *Scincus punctatus* Gmelin, *Hist. Amphib* : 197.

Material.—Jaipur Dist.: 4 ex., Sta. 11, Kotputli, 10.vi.1963 (coll. *NM*). Udaipur Dist.: 1 ex., Sta. 3, Fateh Sagar, 14.ix.1964 (coll. *KKM*).

Measurements.—Length: Snout to vent 56 mm.; tail 48 mm.; 24 scales round the body and 13 keeled lamellae under the toe.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*: India: Widely distributed in South and Central India, but absent in Bihar and Orissa. In the Z.S.I. collection there is a specimen from Kalimpong (Darjeeling Dist., West Bengal) (coll. *Gravelly*). Also Sri Lanka.

The present species is nearest to *R. guentheri* (Peters) in having a common scale count (24 to 26) round the body and in respect of their similar colouration but it differs having fewer scales on middle of body. *R. guentheri* is confined to Maharashtra and North Kanara.

In juveniles there are no dark brown spots on scales of tail, appears creamy white; and is subequal to the body.

16. *Ophiomorus tridactylus* (Blyth)

1855. *Sphenocephalus tridactylus* Blyth, *J. Asiat. Soc. Beng.* 22 : 654.

Material.—Rajasthan. 1 ex., "Rajputana" (Western Rajasthan); no date (coll. *N. Belletty*). Jodhpur Dist.: 1 ex., Jodhpur (Coll. *I. Prakash*, no date).

Measurements.—Length: Snout to vent 65-89 mm.; tail 43-58mm., axilla to groin 72 mm., fore-limb 7 mm.; scales round body 22.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*: India: Gujarat (Kutch). Also Pakistan (Punjab, Sind and Baluchistan), Afghanistan and eastern Iran.

Remarks.—This is the only species known from India. The other two species, occurring in Iran and Baluchistan differs from the present one in having 4 fingers (*vs.* 3). While recording this species from Sind Blanford (1876) wrote: "When in Indian desert between Sind and Rajputan in 1876, I daily saw tracks in the sand which I believe to have been made by this lizard." This lizard is popularly known as "Rig Mahi" i.e. sand fish and its fat is supposed to be of medicinal value for impotency.

Rathore (1970) has studied its fast movement under sand.

Family (7) LACERTIDAE

17. *Acanthodactylus cantoris cantoris* Günther

1864. *Acanthodactylus cantoris* Günther *Rept. Brit. Ind.* : 73.

Material.—Barmer Dist.: 1 ex., Sta. 21, Barmer 2.xi.1962. (coll. *PDG*). Bikaner Dist.: 1 ex., Pugul, 23.xi.1960; 1 ex., Pugul, 22.xi.1960; 11 ex., Kolayat, 10 to 13.ix.1960; 2 ex., Lunkaransar, 1.x.1960; 1 ex., Lunkaransar, 28.ix.1960 (coll. *BB*). Jaipur Dist.: 3 ex., Devdayani, Sambhar Lake, 13.v.1958; 3 ex., Phulera, 17.v.1958; 3 ex., Sambhar Lake, 25.vi.1958; 1 ex., Korsina, 14.v.1958; 4 ex., Sambhar Lake town, 23.vi.1958; 2 ex., Sambhar Lake town, 17.vi.1958; 2 ex., Devdyani, 18.vi.1958 (coll. *TGV*). Jodhpur Dist. : 1 ex., Kaylana, 13.xiii.1956 (coll. *BB*). Jaisalmer Dist.: 1 ex., Mohangarh, 15.i.1958 (coll. *KKT & SB*); 1 ex., Nokh, 22.viii.1960, 1 ex., 3 km. west of Nokh, 24.viii.1960 (coll. *BB*). Nagaur Dist.: 4 ex., Gudha, 18.v.1958; 2 ex., Lihorana, 6.v.1958; 1 ex., Gudha, 21.vi.1958; 1 ex., Kuni, 24.vi.1958; 1 ex., Kuchaman Road, 16.ii.1958; 1 ex., Lihorana 4.iv.1958. 1 ex., Gudha, 3.ii.1958 (coll. *TGV*) 3 ex., Gudha, 12.vii.1958 (coll. *AKM*). Sikar Dist.: 1 ex., Puranchhoti, 9.xi.1960 (coll. *BB*).

Measurements.—Length: Snout to vent: 29-73 mm., tail 50-157 mm.

Distribution.—Rajasthan: "Rajputana" (coll. N. Belletty) and as above: *Elsewhere*: India: Uttar Pradesh (Agra). Also Pakistan (Sind Punjab, North-west Frontier Provinces and Baluchistan), S. Afghanistan, S. E. Iran and Aden.

Remarks.—We have 12 juveniles obtained in June and September; Blanford (1875) had many juveniles in November from Sind, Baluchistan and S.E. Iran. In the young, the six black and white longitudinal streaks on the body are very prominent; in adult, the streaks gradually fade away with age, and some examples are of a uniform chocolate colour.

Very common in Rajasthan. Differs mainly from the *A. cantoris blanfordi* Boulenger in having lesser number of scales in the middle of body (26-36 vs. 40-46).

18. *Ophisops jerdoni* Blyth

1853. *Ophisops jerdonii* Blyth, *J. Asiat. Soc. Beng.* 22 : 653.

Material.—Ajmer Dist.: 2 ex., Sta. 9. Road towards Rammar Dhari, 3.x.1964 (coll. *KKM*). Bhilwara Dist. : 1 ex., near Pandal Village, 13.ix.1965 (coll. *SB*). Chittorgarh Dist.: 1 ex., Southern side of Chittorgarh fort, 10.ix.1965; 2 ex., 3 km. S. W. of Chittorgarh Rest House, near Berach river, 7.ix.1965 (coll. *SB*). Jaisalmer Dist.: 1 ex., Badebagh, 25.xii.1957; 2 ex., Pokran, 22.ix.1957 (coll. *KKT & SB*); 1 ex., Sta. 4 Amarsagar, 13.viii.1964 (coll. *KKM*). Jodhpur Dist.: 1 ex., Kaylana desert afforestation demonstration station, 13.xii.1965 (coll. *BB*).

Measurements.—Length: Snout to vent 16-38 mm., tail 36-79 mm.

Distribution.—Rajasthan: Jaisalmer and above. *Elsewhere*: India: Gujarat (Kutch), Punjab, Kashmir, M. P. (Rewa), Karnataka (Bellary). Also Pakistan (N.W.F.P., Baluchistan, Sind, Karachi).

Remarks.—In the juveniles the keels and striations of the head-shield are not prominent as in adults: the upper and lower lateral streaks on the sides of head and body are very prominent; and the space between the stripes is not interrupted or spotted. In adults the upper surface is lighter in colour than the lower.

O. jerdoni differs from *O. microlepis* Blanford also known from Ajmer in having head shields rugose, keeled and straight (*vs.* smooth) and 25-35 scales (*vs.* 56-66) round middle of body.

Family (8) VARANIDAE

19. *Varanus griseus* (Daudin)

The Desert Monitor.

1803. *Tupinambis griseus* Daudin, *Hist. Nat. Rept.* viii : 352.

Material.—Bikaner Dist.: 1 ex., Pugal, 20.ix.1960 (coll. *BB*); 13 ex., Bikaner, 5.vi.1957 (coll. *SDG*). Jaipur Dist.: 1 ex., Chapparawara, 5.v.1957 (coll. *AKM*).

Measurements.—Length: Snout to vent 210-325 mm., tail 470-580 mm.

Distribution.—Rajasthan: As mentioned above (fairly common in parts of Rajasthan; Smith, 1935). *Elsewhere*: India: Punjab (Ambala) Uttar Pradesh (Agra) and M. P. (Narsingharh). Also Pakistan, West Asia upto the Caspian Sea and North Africa.

Remarks.—Differs from *V. bengalensis* (Daudin) in its round tail (slightly compressed posteriorly); body colour grayish-brown or yellowish-brown, with smaller brown spots.

20. *Varanus bengalensis* (Daudin).

The common Indian Monitor.

1802. *Tupinambis bengalensis* Daudin, *Hist. Nat. Rept.* iii : 67.

1758. *Lacerta monitor* Linnaeus, *Syst. Nat.* ed. x : 201.

Material.—Bikaner Dist.: 1 ex., Pugal 22.ix.1960 (coll. *BB*) 10 ex., Bikaner, 5.iv.1957 (coll. *SDG*). Jaisalmer Dist.: 1 ex., Sta. 8, Badebagh. 17.viii.1964 (coll. *KKM*); 1 ex., Jaisalmer, 23.x.1962 (coll. *PDG*). Jodhpur Dist.: 1 ex., Sta. 9, Jodhpur, 10.x.1962 (coll. *PDG*). Nagaur Dist.: 1 ex., Bhakrod, 6.ix.1960 (coll. *BB*).

Measurements.—Length: Snout to vent 210-450 mm., tail 054-695 mm.

Distribution.—Rajasthan: As above: and Ajmer (*O.B. St. Jhon*). *Elsewhere*: India: Throughout India (Assam, West Bengal, Orissa, Uttar Pradesh, Kerala, Andamans). Also Burma, Sri Lanka, Pakistan and Iran.

Remarks.—The body in adults is brownish or olive above, usually with blackish dots; lower parts are yellowish sometimes spotted black. According to Murray (1884) *V. flavescens* (Gray) also occurs Rajasthan. In both *V. bengalensis* and *V. flavescens*, the tail is compressed and has a low double-toothed crest above; in *bengalensis* the nostril is nearer the orbit, in *flavescens* it is nearer the end of the snout.

Suborder SERPENTES

Family (9) TYPHLOPIDAE

21. *Typhlops braminus* (Daudin)

1803. *Eryx braminus* Daudin *Hist. Nat. Rept.* vii : 279.

Material.—Ajmer Dist.: 2 ex., Sta. 6, Dakbunglow compound, Ajmer, 29.ix.1964 (coll. *KKM*). Bikaner Dist.: 2 ex., Bikaner, Oct. 1956 (coll. *BB*).

Measurements.—Total length of one ex.: 75 mm. 20 scales round the body; 295 transverse rows of scales.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*: India: Throughout, including the Andaman and the Nicobar Islands. In the east it extends to Indo-china and Malaysia and in the west upto Africa. Also Mexico.

Family (10) BOIDAE

22. *Eryx conicus* (Schneider)

1801. *Boa conica* Schneider, *Hist. Amphib.* ii : 268.

Material.—Jodhpur Dist.: 1 ex., Khokhra village, 6.viii.1960 (coll. *RKB*).

Measurements.—Length: Snout to vent 179 mm.; tail 20 mm. Scales: ventral 182, subcaudal 9, costal 20.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*: India: North India, as far east as Bihar and Orissa and Naini Tal districts in Uttar Pradesh. Also Pakistan (Sind and Baluchistan) and Sri Lanka.

Remarks.—The example has 14 small scales surrounding eye, and

nine between labials and the eye. Differs from *E. jonhi jonhi* (Russell), in the absence of mental groove and in having a pointed tail.

23. *Eryx johni johni* (Russell)

1801. *Boa johni* Russell, *Ind. Serp.*, ii : 18 & 20, pls. XVI & XVII.

Material.—Bikaner Dist.: 1 ex., Kolayat, 12. ix.1960 (coll. *BB*)
Chittorgarh Dist.: 1 ex., by the side of Sanod tank, Chottorgarh, 10.x.
1964 (coll. *PDG*). Jodhpur Dist.: 2 ex., Khokhra Village, 6.viii.1960
(coll. *RKB*). Kotah Dist.: 1 ex., Sta. 26, Kishoresagar, 25.x.1964 (coll.
PDG). Nagaur Dist.: 1 ex., Gudha, 12.x.1964 (coll. *TGV*).

Measurements and Counts:

<i>Reg. No.</i>	<i>Ventral</i>	<i>Subcaudal</i>	<i>Costal</i>	<i>Snout to vent Length in mm.</i>	<i>Tail</i>
21799	205	31	53	260	38
20997	203	30	53	250	39
20998	211	26	55	497	72
20999	204	34	54	630	78
21800	210	21	58	670	68
21782	210	33	60	653	95

Distribution.—Rajasthan: Ajmer (*O. B. St. John*), Jaipur (*R. Patton*), and as above. *Elsewhere:* India: North-western India (Uttar Pradesh, Punjab) and South India (Andhra Pradesh, Tamil Nadu and Maharashtra). Also Pakistan (Sind, Baluchistan and North-West Frontier Province).

Remarks.—Two young examples have 19 colour bars on the body and tail; the posterior bars are prominent. In adults the body colour is uniform brown, with distinct bars only on tail.

The present species meets the western *Erix johni persicus* in Baluchistan and N.W.F.P.

Family (11) COLUBRIDAE

24. *Elaphe helena* (Daudin)

1803. *Coluber helena* Daudin, *Hist. Nat. Rept.* vi, p. 277.

Material.—Sirohi Dist.: 1 ex., Mount Abu 8.iii.1948 (coll. *KSP*), 1 ex., Mount Abu (*G. S. Sutherland*).

Measurements.—Length: Snout to vent 696 mm., tail 200 mm, Scale counts: Dorsal 23:25:23, Ventral 232, subcaudal 90.

Distribution.—Rajasthan: Ajmer (*O. B. St. John*); Mt. Abu, Udaipur, Jaipur (*Wall*) and as mentioned above. *Elsewhere*: India: Peninsular India, Himalaya, northern Bengal, Assam, Madhya Pradesh and Bihar.

Remarks.—Smith (1943) mentioned two distinct colour forms; the present specimen belong to his first form (with two longitudinal black stripes, parallel, or converging posteriorly). The second form (with a white black edged collar interrupted in the middle) is restricted to the Western India, south of Bombay. The distinct festooned marking on each ventral side considered by Wall (1913) as confined to specimens from Western India only is also present in our specimens.

25. *Coluber ventromaculatus* Gray & Hardwicke

1834. *Coluber ventromaculatus* Gray & Hardwicke, *Ill. Ind. Zool.*, ii, pl. 80, fig. 1.

Material.—Bikaner Dist.: 1 ex. Pugal, 26.ix.1960 (coll. *BB*). Jaipur Dist.: 1 ex. Naraina, 2.xi.1958, Devdyani, 26.iv.1957 (coll. *BB*); 1 ex. Phulera road, 4.x.1963 (coll. *KKM*). Jaisalmer Dist.: 2 ex., Nokh, 21.viii.1960 (coll. *BB*). Jadhpur Dist.: 1 ex., Jodhpur 6.viii.1960 (coll. *BB*); 2 exs., Khokhara Village, 6&7.viii.1960 (coll. *RKB*); 1.ex., "Rajputana", no date, (coll. *N. Belletty*).

Measurements & Counts:

<i>Reg. No.</i>	<i>Ventral</i>	<i>Sub-caudal</i>	<i>Length in mm.</i>	<i>Tail Snout to vent.</i>
21002	207	101	842	285
21001	205	109	540	230
21003	201	80+?	310	86+
21156	204	95	240	78

Distribution.—Rajasthan: As above. *Elsewhere*: India: North-Western India, Uttar Pradesh (East to Almora Dist.), and south to Kandesh (Maharashtra). Also Pakistan (Chitral) Afghanistan, Iran South USSR (Uzbekistan) and Isreal.

26. *Coluber arenarius* (Boulenger)

1890. *Zamenis arenarius* Boulenger, *Fauna Brit. India* : 329.

Material.—Bikaner Dist.: 1 ex., Pugal, 20.ix.1960 (coll. *BB*); 1 ex., "Rajputana", no date (coll. *N. Belletty*).

Measurements & Counts: Length: Snout to vent 805 mm., tail 180 mm. Dorsals in middle, 25; ventrals 226; subcaudals 75.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*: India: N.W. India. Also Pakistan (Sind)

Remarks.—The first specimen has two longitudinal lines on the parietal. The colour is mostly confined to the edge of the scales though some scales are entirely or partly coloured. There are two longitudinal streaks on the sides on the nape and one in between. These appear to be interrupted into bigger spots behind the middle of the body and are arranged obliquely or diagonally. Besides three more spots on each side of the body are present.

C. arenarius is distinguished from *C. diadema* by its much higher and broader rostral.

27. *Coluber diadema diadema* Schlegel

1837. *Coluber diadema* Schlegel, *Phys. Serp.* ii : 148.

Material.—Nagaur Dist.: 1 ex., Gudha, 9.iii.1958 (coll. TGV).

Measurements & Counts.—Length: Snout to vent 555 mm., tail 155 mm., Dorsal 27:27:19, ventral 247. subcaudal 104.

Distribution.—Rajasthan: Jodhpur, Bhartpur, Ajmer (Wall); and as above. *Elsewhere*: India:Orissa, Uttar Pradesh, Punjab, Kashmir. Also Bangladesh (Chittagong), Pakistan (Lahore and Baluchistan), Southern Turkistan, Iran and Northern Africa.

Remarks.—The subspecies has a definite colour pattern, and is more slender than *C. d. atriceps*. The head is distinct from the neck.

28. *Coluber diadema atriceps* (Fischer)

1885. *Zamenis diadema* var. *atricsps* Fischer, *Jahrb. Hamburg wiss. anst.* ii : 102.

Material.—Nagaur Dist.: 1 ex., Gudha 6.x.1958 (coll. BB).

Measurements & Scale Counts: Length: Snout to vent 835 mm., tail 225 mm. Dorsal 27:29:19; Ventral 248 subcaudal 109, anal 1.

Distribution: Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*. India: North-west India (Uttar Pradesh, Punjab and Haryana), and Kashmir (Gilgit).

Remarks.—Our specimen has one extra loreal above the posterior one (usually there are two loreals, one behind the other).

This subspecies is distinguished from the typical one by its irregularly scattered dark brown spots and its head being partly or entirely dark coloured. The body and head are also more robust; the head shields are larger, the suboculars and upper labials are arranged in an angular manner.

29. *Lycodon aulicus aulicus* (Linnaeus)

1754. *Coluber aulicus* Linn. *Mus. Adolph. Frider*, i : 29 pl. xii, fig. 2.

Material.—Chittorgarh Dist.: 1 ex., Sta. 19, Ghosuda village, 5.x.1964 (coll. PDG).

Measurements & Scale Count.—Length: Snout to vent 532 mm., tail 95 mm., Dorsal 17:17:15, Ventral 215, subcaudal 59.

Distribution.—Rajasthan: Ajmer (*O. B. St. John*) and as above. *Elsewhere*: India: Throughout India. Also Nepal and Burma north to Lat. 17° N.

Remarks.—Two colour forms are known: *typica* and *capucinus* Boie; the former is found throughout the Indian mainland and the latter occurs in the Andaman and Nicobar Islands.

In the present specimen instead of 12 to 19 white crossbars there are 29 on the body which also do not expand laterally or bifurcate; the posterior four are reduced to short vertebral spots.

30. *Natrix piscator* (Schneider)

1799. *Hydrus piscator* Schneider, *Hist. Amph.* i : 247.

Material.—Chittorgarh Dist.: 2 ex., Sta. 22, Bir tank, 11.x.1964. (coll. PDG). Sirohi Dist.: 1 ex., Mount Abu (coll. *G. S. Sutherland*).

Measurements & Scale Counts.—Length: Snout to vent 205 mm.; tail 80 mm., Ventrals 142, subcaudal 81.

Distribution.—Rajasthan: Ajmer (*O. B. St. John*), and as mentioned above. *Elsewhere*: India: whole of India. Also Pakistan (Baluchistan and North-West Frontier Province) and of upper Burma (Myitkina).

Remarks.—Smith (1943) distinguished four well defined races, each with its own geographical range. The specimen from Mt. Abu is a juvenile with faded colouration but five faint spots indicate that it belongs to the typical form.

31. *Macropisthodon plumbicolor* (Cantor)

1839. *Tropidonotus plumbicolor* Cantor, *Proc. Zool. Soc.*, : 54.

Material.—Sirohi Dist.: 1 ex., Mount Abu, 15.viii.1965 (coll. *SB*); 2 ex., Mount Abu (*G. S. Sutherland*).

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan). *Elsewhere*: India: Throughout except the Ganga valley and the extreme north-west. also Sri Lanka.

Measurements & Scale Counts:

<i>Reg. No.</i>	<i>Length in mm. Snout-tovent</i>	<i>Tail</i>	<i>Ventral</i>	<i>Subcaudal</i>	<i>Dorsal</i>
7514	540	90	152	42	23
7515	200	35	154	42	23
21684	142	22	152	39	25

32. *Ahaetulla nasutus* (Lacépède)

1789. *Coluber nasutus* Lacépède, *Hist. Nat. Serp.*, 1 : 100 & 2 : 277 pl. 4, fig. 2

Material.—Sirohi Dist.: 2 ex., Mt. Abu, no date (coll. G. S. Sutherland).

Measurements & Scale Counts.—Length: Snout to vent 715, 550 mm., tail 390, 357 mm. Ventrals 192, 195; subcaudals 156, 159.

Distribution.—Rajasthan: As mentioned above (first record from Rajasthan,. *Elsewhere:* India: Peninsular India: also Bihar (east of Patna), West Bengal and Assam. Also Burma (as far south as Rangoon), Thailand, Cambodia, Viet Nam and Sri Lanka.

Remarks.—*A. nasutus* and *A. pulverulentus* (Dum. & Bib.) are the two species grouped together by their dermal appendages usually extending beyond the lower jaw, but in *nasutus* it is formed only by the rostral scales. The head shields and the ventral scales have very minute scattered black dots.

33. *Psammophis schokari* (Forsk.)

1775. *Coluber schokari* Forskal, *Descr. Anim.*, : 14

1896. *Psammophis schokari* Boulenger, *Cat. Sn. Brit. Mus.*, iii : 157.

Material.—Bikaner Dist.: 1 ex., Kolayt, 12.ix.1960; 1 ex., Pugal, 19.ix.1960; 1 ex., Pugal, 25.ix.1960 (Coll. BB).

Measurements & Scale Counts:

<i>Reg. No.</i>	<i>Ventral</i>	<i>Caudal</i>	<i>Snout to vent & Length in mm.</i>	<i>Tail</i>
21789	182	100 blunt	760	345
21787	177	121	620	330
21788	179	128	720	382

Distribution.—Rajasthan, Jodhpur (*Wall*) and as mentioned above *Elsewhere*: India: Kashmir. Also Pakistan (Punjab, Sind, N.W.F. Province), Iran, Arabia and North Africa.

Remarks.—In two of our specimens four dark brown longitudinal stripes are prominent in the anterior half of the body, but posteriorly they are faded, leaving only black spots. In the third specimen these stripes are wanting; the anterior part is dark spotted and the posterior uniformly gray.

Family (12) ELAPIDAE

34. *Bungarus caeruleus* (Schneider)

1801. *Pseudoboa caerulea* Schneider, *Hist. Amphib.* ii : 284.

1890. *Bungarus caeruleus* Boulenger, *Fauna Brit. Ind.*, : 388.

Material.—Bikaner Dist.: 1 ex., Siasar, 32 km. W. of Pugal 24. ix.1964 (coll. *BB*).

Measurements & Scale Counts : Length: Snout to vent 740 mm., tail 115 mm., dorsals 17, ventrals 229, subcaudal 48.

Distribution.—Rajasthan: As mentioned above. *Elsewhere*: India: Throughout India but not east of the eastern part of West Bengal. Also Sri Lanka.

Remarks.—*B. caeruleus* can be subdivided into four colour forms or races and the present specimen is referable to the form *B. sindanus* Boulenger in which the transverse bars are always distinct with a vertebral spot widening on the sides.

35. *Naja naja oxiana* (Eichwald)

1831. *Tommyris oxiana* Eichwald, *Zool. spec.*, iii : 171.

1889. *Naja oxiana* Boulenger, *Tr. Zool. Soc.*, (z) v : 103

Material.—Ajmer Dist.: 2 ex., Sta. 25, Ararka Village, 14.x.1961 (coll. *PDG*). Chittorgarh Dist.: 1 ex., Sta. 21, Sanod tank, 10.x.1964 (coll. *PDG*)., 1 ex., Sta. 21 Matapahar, 16.xi.1957 (coll. *AKM*).

Measurements & Scale Counts.—Length: Snout to vent 890 to 1245 mm.; tail 205-260 mm., ventrals 188-197; subcaudals 58-66, scales on hood 23.

Distribution.—Rajasthan: Pilani, *Elsewhere*: India north-west India. Also Pakistan, Iran to W. to Transcaspia.

Remarks.—Three sub species, *Naja naja naja* (Linn.) *N. n. Kao-uthia* Lesson and *N. u. oxiana* (Eichwald) are recognised. The distinguishing character of *oxiana* to which all the specimens of the collection are referable are: ventral plus subcaudal scales range between 248 to

228; number of scales on the hood 23-27 and without any marking on the hood, but body is often barred. In our examples the body is not barred; it is uniformly brown or deep brown.

Family (13) VIPERIDAE

36. *Echis carinatus* (Schneider)

1801. *Pseudoboa carinata* Schnieder, *Hist. Amphib.* ii : 285.

1874. *Echis carinata* Fayrer, *Thanatoph. Ind.* pl. xii.

Material.—Bikaner Dist.: 2 ex., Pugal, 21 & 25.ix.1960 (coll. *BB*)
Jaisalmer Dist.: 1 ex., Nokh, 24.viii.1960 (coll. *BB*). Nagaur Dist.:
1 ex., Between Indana & Didia, 4.ix.1960 (coll. *BB*). Sirohi Dist.: 1 ex.,
Mount Abu. near Palanpur Point, 8.iii.1948 (coll. *KSP*); 1 ex., Patehia
(coll. *N. Belletty*).

Measurements & Scale Counts:

<i>Regd.No.</i>	<i>Dorsal</i>	<i>Ventral</i>	<i>Subcaudal</i>	<i>Length in mm. Snout to vent</i>	<i>Tail</i>
21792	28:32:21	172	33	308	32
21793	27:32:21	180	33	305	33
21791	27:32:21	165	31	195	23
21006	26:32:21	157	31	335	37

Distribution.—Rajasthan: Ajmer (*O. B. St John*); and as mentioned above. *Elsewhere:* India: Whole of India south of the Ganga; western part of West Bengal and Kashmir. Also Sri Lanka, Pakistan, South-West Asia and Africa north of the equator.

Remarks.—The parietal scales in the three specimens are nearly equal in size to that of its upper row; there are 11 upper labials. The colour pattern is similar in all these specimens. But in the specimen from Mt. Abu the parietals are larger than that of the adjoining row, the number of ventrals are fewer though the subcaudal count is similar to the other specimens; and also the colour pattern is slightly different. Thus, two forms may be in Rajasthan.

SUMMARY

This paper deals with the reptile fauna of Rajasthan. It is based on several recent collections made by parties of the Zoological Survey of India, with altogether 333 specimens. This collection contains 28 species and 7 sub-species belonging to 28 genera and 12 families. Of

these 14 species and 2 sub species are new records from Rajasthan, and one (*Agma agilis* Olivier) a new record from India. *Crocodilus Palustris* Lesson is included based on observing it in the field by the author (S.B.).

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