

## REPTILES OF SILENT VALLEY

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### INTRODUCTION

Included herein are 9 species of Lizards and 11 species of snakes collected from the Silent Valley by the scientists of the Southern Regional Station during 1979-1981. Besides the diagnostic characters and colour pattern, the total range of each species is provided. This paper supplements the report published earlier (Murthy, 1981).

The classification adopted here is broadly that of Smith (1935, 1943) but with certain modifications by Mittleman (1952) and Underwood (1967).

The entire collection excepting the single uropeltid studied is deposited in the reptile collections of the Southern Regional Station.

### A SYSTEMATIC INDEX TO THE REPTILES OF THE SILENT VALLEY

#### Suborder SAURIA

#### Family GEKKONIDAE

#### Genus *Cnemaspis* Strauch

1. *C. sisparjnsis* (Theobald)
2. *C. wynadensis* (Beddome)

#### Family AGAMIDAE

#### Genus *Calotes* Rafinesque

3. *C. calotes* (Linn.)
4. *C. elliotti* (Gunther)
5. *C. versicolor* (Daudin)

#### Genus *Draco* Linnaeus

6. *D. dussumieri* (Dumeril & Bibron)

#### Genus *Pasmophilus* Fitzinger

7. *P. blanfordanus* (Stoliczka)

## Family SCINCIDAE

Genus **Mabuya** Fitzinger

- 8.
- M. beddomii*
- (Jerdon)

Genus **Sphenomorphus** Fitzinger

- 9.
- S. dussumieti*
- (Dum. & Bibr.)

## Suborder SERPENTES

## Family UROPELTHIDAE

Genus **Melanophidium** Gunther

- 10.
- M. punctatum*
- Beddome

## Family COLUBRIDAE

Genus **Ahaetulla** Link

- 11.
- A. nasuta*
- (Lacepede)

Genus **Amphiesma** Dumeril & Bibron

- 12.
- A. beddomei*
- (Gunther)

Genus **Denbrelaphis** Blgr.

- 13.
- D. grandoculis*
- (Blgr.)

Genus **Lycodon** Boie

- 14.
- L. aulicus*
- (Linn.)

- 15.
- L. travanconicus*
- (Beddome)

Genus **Macropisthodon** Boulenger

- 16.
- M. plumbicolor*
- (Cantor)

Genus **Ptyas** Fitzinger

- 17.
- P. mucosus*
- (Linn.)

Genus **Xenochrophis** Gunther

- 18.
- X. piscator*
- (Schneider)

## Family ELAPIDAE

Genus **Bungarus** Daudin

- 19.
- B. caeruleus*
- (Schneider)

Family VIPERIDAE

Subfamily CROTALINAE

Genus *Trimeresurus* Lacepede

- 20. *T. malabaricus* Jerdon
- 21. *T. strigatus* Gray

ACCOUNTS OF SPECIES

LIZARDS

1 *Cnemaspis sisparensis* (Theobald)

*Material* : 1 ex., 32mm. (tail damaged), Silent Valley, 27. i. 1979, Coll. R. S. Pillai.

*Description* : Back with larger, rounded or pointed and keeled tubercles ; ventrals as large as the dorsals. Digits longer. Males with 7 to 8 femoral pores.

*Colour pattern* : Brown above. Back with a series of dark brown oblong spots arranged in three longitudinal lines, a dark streak through eye. Tail with alternating lighter and darker bars above.

*Distribution* : Known hitherto only from the three types picked up from the Sispara Ghat, Nilgiris and Kavalai of Cochin, Kerala.

*Remarks* : The example under study is an interesting addition to the reptile fauna of Silent Valley.

2. *Cnemaspis wynadensis* (Beddome)

*Material* : 1 ex., Snout to vent, 40 mm. ; tail 42 mm. ; Silent Valley, 22. i. 1979, Coll. R. S. Pillai.

*Description* : Back as in *sisparensis*. Digits elongate. Tail cylindrical. Male with 4 to 9 femoral pores on each side.

*Colour pattern* : Brown above and pale brownish below. Throat darker and white spotted. Tail with lighter darker markings.

*Distribution* : Wynaad and hill ranges farther south (Kerala)

## Family AGAMIDAE

3. *Calotes calotes* (Linn.)

## Green Lizard

*Material* : 1 ex., (juv.), Snout to vent 93mm. ; Tail 319 mm., Silent Valley, 17. x. 1974, *Coll.* G. U. Kurup.

*Description* : Body compressed and covered with equal sized scales which are not larger than the ventrals. A distinguishing feature of this lizard is the presence of a row of 9 compressed spines above the tympanum. The gular sac and the dorsal crest are well developed. Tympanum naked. Tail very long and slender.

*Colour Pattern* : The colouration (in life) is bright green dorsally and pale green ventrally. The dorsum is characterised by 6 whitish stripes transversely arranged and extending on to the tail. The specimen under study is an immature example with a dorso-lateral stripe running along each of the flanks.

*Distribution* Eastern Ghats — Sheavaroy Hills, Tamil Nadu ; Western Ghats — Anaimalais and Hills of South Kerala ; Nicobar Islands ; Sri Lanka.

4. *Calotes ellioti* Gunther

## White-spotted Tree Lizard

*Material* : 1 ex., Snout to vent 83 mm., Tail 187 mm. ; Mukkali, Silent Valley, 16. i. 1980, *Coll.* K. R. Rao.

*Description* : A dwarfed arboreal species, characterised by a complete fold extending across the throat, two spines on the back of the head and a white spot below the eye.

*Colour pattern* : The ground colouration is olive above and whitish below. The back is characterised by the presence of angular dark-brown cross bars. A white spot below the eye on each side is another unfailing character of this tree lizard.

*Distribution* : Western Ghats.

5. **Calotes versicolor** (Daudin)

Indian Garden Lizard

*Material* 1 ex., Snout to vent 90 mm., Tail 222 mm. ; Nella-para, Silent Valley, 19. i. 1979, *Coll.* R. S. Pillai.

*Description* : Head large and markedly swollen. No fold or pit in front of the shoulder. The spines above the tympanum, two in number, are separated from each other. Males with gular sac.

*Colour pattern* : The dorsal colour is brown but is variable depending on weather and climate. The juveniles are characterised by light dorsolateral stripes. The head and shoulders of males are suffused with red. The undersides are whitish with dark streaks.

*Distribution* : The whole of India ; Pakistan ; Sri Lanka ; Indo-China.

6. **Draco dussumieri** Dumeril & Bibron

Flying Lizard

*Material* 1 ex., Snout to vent 95 mm. ; tail 135 mm., Dam site, Silent Valley, 5. xii. 1980, *Coll.* C. S. Rao.

*Description* : Body with a large, lateral, wing-like membrane supported by the last five ribs, which are much produced. A gular appendage and a lateral flap on either side of the throat. Tympanum distinct. Tail long. No femoral or preanal pores.

*Colour pattern* : The colour (in life) of the dorsum is greyish brown with darker markings and a series of dark circles. The wing membranes are purplish black with light, rounded, yellowish spots and grey below. The throat is suffused with black.

*Distribution* : Tamil Nadu ; Kerala ; Coorg, Karnataka ; Karwar, Maharashtra ; Goa.

7. **Psammophilus blanfordanus** (Stoliczka)

Rock-Lizard

*Material* : 1 ex., Snout to vent 56 mm., Tail 119 mm., Mukkali, Silent Valley , 18. i. 1979, *Coll.* R. S. Pillai.

*Description* : Body depressed and covered with uniform carinate scales. Tympanum distinct. No gular sac, preanal or femoral pores. Tail long and slender.

*Colour pattern* : The specimen under study is a juvenile and is marbled brownish in colour with a series of lozenge-shaped spots on the back and the tail. The underside is pale yellowish.

*Distribution* : Eastern & Western Ghats ; Bihar ; Orissa ; Madhya Pradesh.

#### Family SCINCIDAE

#### 8. *Maluya beddomii* (Jerdon)

*Material* : 1 ex., Snout to vent 45 mm. , Tail 95 mm., Dam site, Silent Valley, 21. vi. 1980, *Coll.* R. S. Pillai.

*Description* : Lower eyelid scaly. Dorsal scales with 3 or 4 feeble keels. The subdigital lamelle are strongly keeled. The back is characterised by four conspicuous dark stripes arranged longitudinally.

*Colour pattern* : Brown above and whitish below. The young invariably are characterised by 4 dark brown stripes extending on to the tail. The top of the head is marked by longitudinal markings.

*Distribution* Berar, Karnataka ; Salem, Tirunelvely, Tamil Nadu ; Anaimalais and Sivagiris, Western Ghats ; North Kerala.

#### 9. *Sphenomorphus dussumieri* (Dum. & Bibr.)

*Material* : 1 ex., Snout to vent 42 mm., Tail 54 mm., Dam site, Silent Valley, 21. iv. 1980 , *Coll.* R. S. Pillai.

*Description* : Body not elongate ; 40 scales round the body. Limbs well developed. Rostral concave.

*Colour pattern* : Bronzy green above and white below. The back is characterised by two stripes—a dorso-lateral and a dark brown lateral. The tail (in life) of the male is scarlet red while that of the female is brownish.

*Distribution* : Hills of south-western India and plains of South Kerala. A single specimen from Sri Lanka.

SNAKES

Family UROPELTIDAE

10. *Melanophidium punctatum* Beddome

Pied-Belly Uropelt

*Material* : 1 ex., 487 mm., Silent Valley, 27. iii 1. 1978, *Coll.* Romulus Whitaker.

*Description* : A mental groove present. Body scales in 15 rows, ventrals 189, caudals, 14. Tail feebly compressed ; terminal scute with two ridges forming two to four points at the top.

*Colour pattern* : The ground colouration is iridescent black while the belly and the outer 2-3 scale rows are marked by black centres.

*Distribution* : From Goa to the hills of South Kerala.

*Remarks* : This example is the only uropeltid snake recorded from the Silent Valley so far.

Family COLUBRIDAE

11. *Ahaetulla nasuta* (Lacepede)

Common Green Whip Snake

*Material* : 1 ex., 1075 mm., Dam site, Silent Valley, 4. xii. 1980, *Coll.* R. S. Pillai.

*Description* : Snout extending in a pointed dermal appendage usually formed only of the rostral shield which extends far beyond the lower jaw. Pupil horizontal. Body scales in 15 oblique rows ; ventrals 187, caudals 173, Anals 2.

*Colour pattern* : Parrot-green above and pale greenish beneath. The back is criss-crossed by black and white lines more prominent in the anterior half.

*Distribution* : Throughout India barring the Ganges Valley west of Patna, Bihar, Sri Lanka, Burma, Thailand and Kampuchea.

12. *Amphiesma beddomei* (Gunther)

Beddome's Keelback

*Material* : 1 ex., 593 mm., Dam site, Silent Valley, 5. xii. 1980, *Coll.* C. S. Rao.

*Description* : Nuchal groove absent. Body scales in 19 rows, ventrals 147, caudals 59, Anals 2. One anterior temporal.

*Colour pattern* Olive-brown above and whitish below. The back is dotted with a series of yellow spots arranged between two black spots along the flanks. An oblique streak, yellow in colour, runs from the eye to the gape.

*Distribution* : Throughout the Western Ghats.

### 13. *Dendrelaphis grandoculis* (Boulenger)

#### Large-eyed Bronzeback

*Material* : 1 ex., 695 mm., Valiparathodu, Silent Valley, 22.i.1980, Coll. K. R. Rao.

*Description* : Body scales in 15 rows, oblique and the vertebrales enlarged; ventrals 174, caudals 119, Anals 2 ; ventrals and caudals with a suture-like keel.

*Colour pattern* : Olive-brown above and darker below. The back is traversed by a series of small black spots and the tail is bordered by three black lines, one on each side and one below.

*Distribution* : Nilgiris and hills of Thirunelveli and South Kerala.

### 14. *Lycodon aulicus* (Linn.)

#### Common Wolf Snake

*Material* : 1 ex., 715 mm., Dam site, Silent Valley, 5. xii. 1980 Coll. K. R. Rao.

*Description* : Head elongate and depressed. Habitus slender. Body scales smooth and shiny in 17 rows ; ventrals 205 angulate laterally, caudals 59, Anals 2. Eyes protruding.

*Colour pattern* : The general ground colour is black or brownish. The under sides are whitish. The back is characterised by 10 to 12 white or yellow bands which commence at the nape.

*Distribution* : Throughout India.

15. *Lycodon travancoricus* (Beddome)

Travancore Wolf Snake

*Material* : 1 ex., 282 mm., Silent Valley, 24. i. 1979, *Coll.* R. S. Pillai.

*Description* : Body scales in 17 rows, ventrals 182, angulate laterally ; caudals 52, Anal single. Back with lightish bars.

*Colour pattern* : Dark or blackish above and white below. The cross-bars on the back are faint, and never pure white. Sometimes the cross-bars bifurcate on the sides and enclose triangular patches.

*Distribution* Western Ghats as far as Matheran, Maharashtra ; South Arcot, Tamil Nadu ; Visakhapatnam, Andhara ; Ganjam, Orissa and Jubbalpore, Madhya Pradesh.

16. *Macropisthodon plumbicolor* (Cantor)

Green Keelback

*Material* : 1 ex., juvenile 265 mm., Valiparathodu, Silent Valley, *Coll.* K. R. Rao.

*Description* : Head distinct from neck. Pupil of the eye round. Habitus rather stout. Scales strongly keeled in 25 rows, ventrals rounded 154, caudals 38.

*Colour pattern* : Grass-green (in life) and whitish beneath. The specimen under study is a juvenile with a conspicuous inverted V-shaped mark on the head. The back and tail are marked by light black spots or cross-bars.

*Distribution* : Throughout India (generally in the forested areas upto 1500 M.).

17. *Ptyas mucosus* (Linn.)

Rat Snake

*Material* : 1 ex., 1150 mm., Dam site, Silent Valley, 4. xii. 1980, *Coll.* R. S. Pillai.

*Description* : Size large with a streamlined contour. Scales shiny and in 17 rows, ventrals 195, caudals 179, anals 2. Neckn arrow and eyes large.

*Colour pattern* : Black or olive-green above and yellowish-white below. Strongly marked black cross bars are prominently seen on the posterior half of the back. The lower lip is generally dotted with black horizontal streaks.

*Distribution* : From South China and Vietnam through all of India and westward into Iran and Southern Afghanistan to Transcaspia.

### 18. *Xenochrophis piscator* (Schneider)

#### Checkered Keelbark

*Material* 1 ex., 685 mm., Valiparathodu, Silent Valley, 22. i. 1980, Coll. K. R. Rao.

*Description* : Body stout. Scales keeled and in 19 rows, ventrals 145, caudals 75, Anals 2. Eye large. Head pointed and separated from the neck.

*Colour pattern* : The ground colouration is black with the characteristic and conspicuous black with checkered pattern on the back. Head with one or two black streaks.

*Distribution* : The whole of India ; Upper Burma ; China.

#### Family ELAPIDAE

### 19. *Bungarus caeruleus* (Schnieder)

*Material* : 1 ex., 1088 mm., Kummanthodu, Silent Valley, 7. xii. 1910, Coll. R. S. Pillai.

*Description* : Scales on the body smooth and in 17 rows ; the vertebrales strongly enlarged ; ventrals, 197, caudals, 47 and undivided.

*Colour pattern* Jet black above and white beneath. The back is characterised by distinct white cross-bars arranged in pairs. There are no vertebral spots in the specimen under study.

*Distribution* : The whole of India ; Sri Lanka.

## Family VIPERIDAE

## Sub Family CROTALINAE

20 *Trimeresurus malabaricus* Jerdon

## Malabar Rock Pit Viper

*Material* : 4 exs.—2 juveniles (285—315 mm.) and 2 subadults (415—485mm.) from several localities in the Silent Valley, 1980-81, Coll. R. S. Pillai.

*Description* : Top of head covered with minute scales. Head very distinct from neck. A deep pit between the nose and the eye. Tail prehensile. Scales in 24 rows, ventrals 149, caudals 59, paired.

*Colour pattern* : The juveniles are brownish while the subadults are greenish in colour. A distinct pattern of blackish spots confluent in a zig-zag fashion is invariably seen both in the young and subadults under study.

*Distribution* : Hills of South—Western India.

21 *Trimeresurus strigatus* Gray

## Horse-shoe Pit Viper

*Material* : 1 ex., 250 mm., Silent Valley, 20. i .1979, Coll. R. S. Pillai.

*Description* : General characters as for *T. malabaricus*. Scales in 21 rows, ventrals, 150, caudals 52, Anal single. It is distinguished from its ally, *malabaricus* in having internasals undistinguishable from the adjacent scales on the head.

*Colour pattern* : Brown above and whitish below. The back is characterised by a series of large brown spots which merge into a zig-zag stripe dorsally. The ventrals are dotted heavily with brown. A distinct inverted V-shaped mark on the nape present.

*Disiribution* : Southwestern Ghats.

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