

A DISTRIBUTIONAL ANALYSIS OF THE UROPELTID SNAKES
OF INDIA AND SRI LANKA

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INTRODUCTION

The uropeltids are all primitive burrowers having an interesting mode of life history. These snakes, easily distinguished by the presence of modified scales at the tip of the short tail, are small inoffensive creatures living under logs and stones in the damp localities of the mountainous forests of South India and Sri Lanka, often at high altitudes, thus evading easy observation and collection. Smith (1943) has given a consolidated account of these snakes which have been studied in recent years by Chari (1952-1955), Constable (1949), Deraniyagala (1941, 1954), Gans (1966, 1913), Murthy (1982) and Rajendran (1977, 1985).

In this paper, the pattern of distribution of the uropeltids found only in South India (see maps 1-7a) and Sri Lanka is discussed. It is interesting to note that these snakes are found to inhabit the forested mountainous regions of southwestern India Sri Lanka and are totally absent in the rest of the globe.

The present day uropeltids are known by 44 species and 2 races contained in eight genera of a single family. An analysis of their geographical distribution in India and Sri Lanka is indicated in Table 1.

Due to the current interest in the biota of the Western Ghats of which snakes form an important component and also in view of the fact that the status of several species of uropeltids as well as other kinds has been seriously threatened because of the depletion of forests, it is hoped that this paper will stimulate an interest in the ophiology of Western Ghats thereby encouraging the biologists/conservationists to collect these unique reptiles from the areas that have not yet been thoroughly investigated.

Table I—Distribution of the uropeltids of India Sri Lanka
(Serpentes : Uropeltidae)

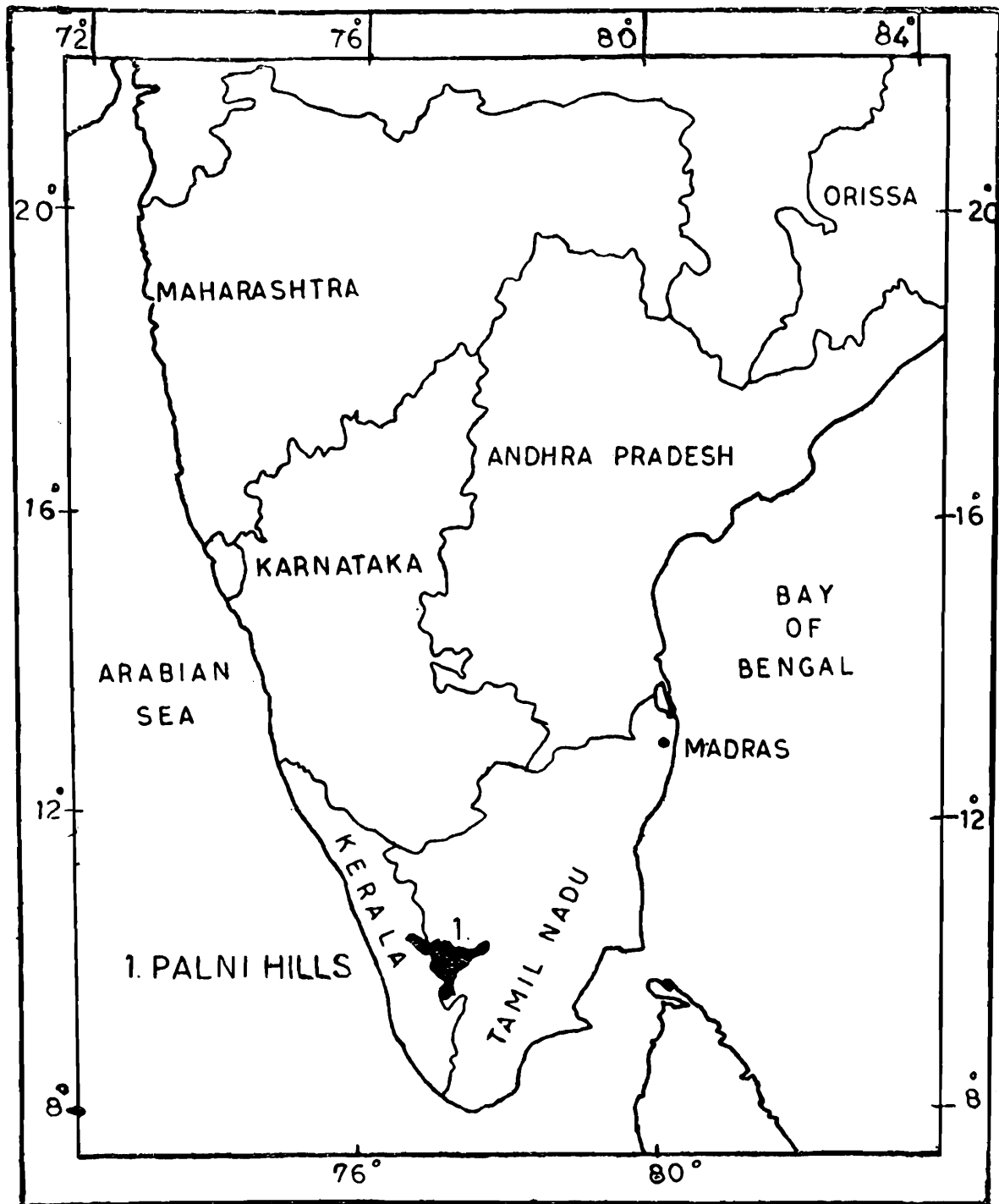
Note : Species marked with an asterisk are rare/known by a few specimens only.

Genera and Species 1	India 2	Sri Lanka 3	Remarks 4
I. <i>Brachyophidium</i> Wall			
1. <i>B. rhodogaster</i> Wall	+	-	Sacred Heart College, Shembaganur, Palni Hills.

1	2	3	4
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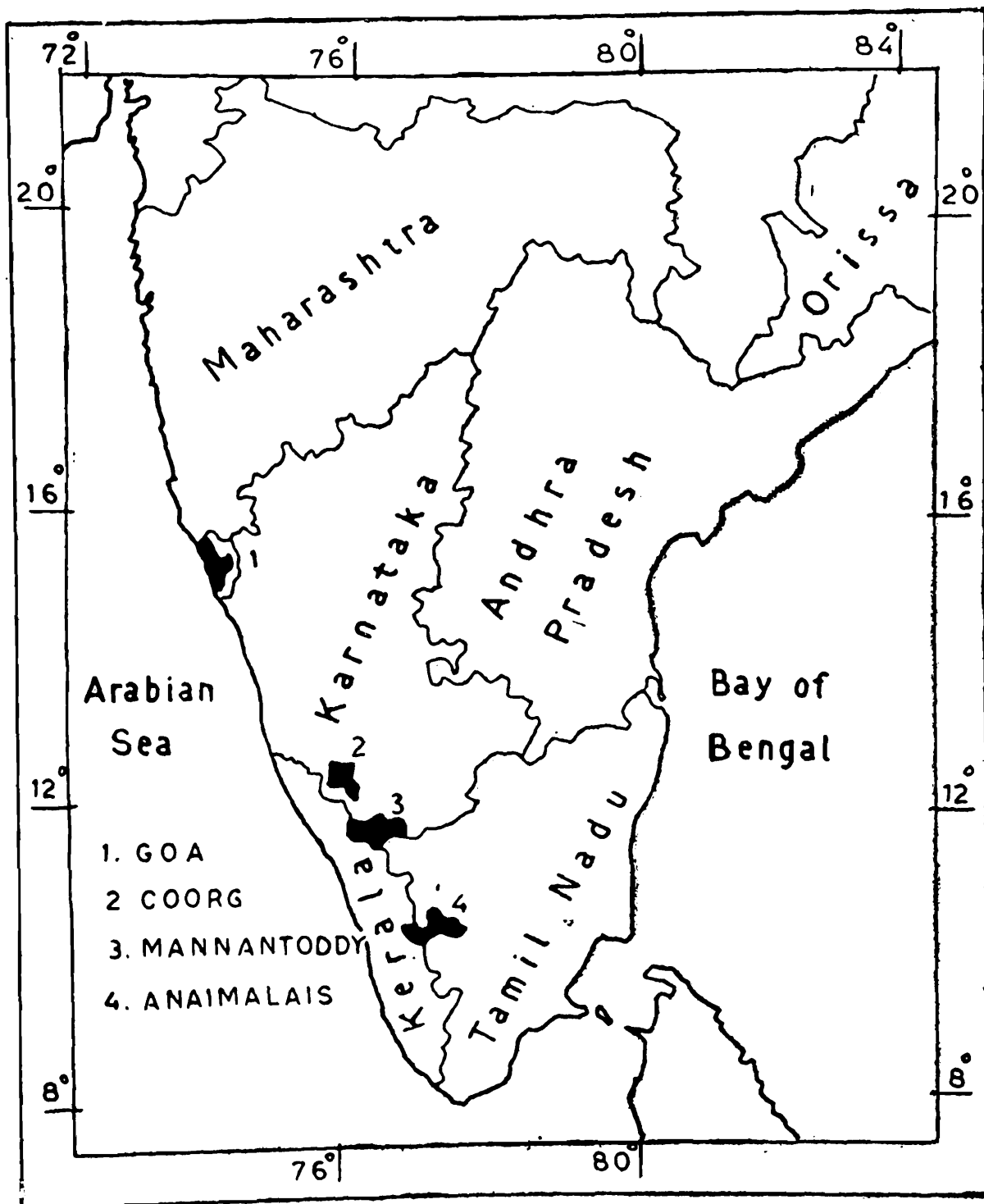
II. *Melanophidium* Guenther

2. **M. bilineatum* Beddome + - Peria and Tirrhiot peaks,
West of Manan toddy Kerala.
Known from three specimens
only.



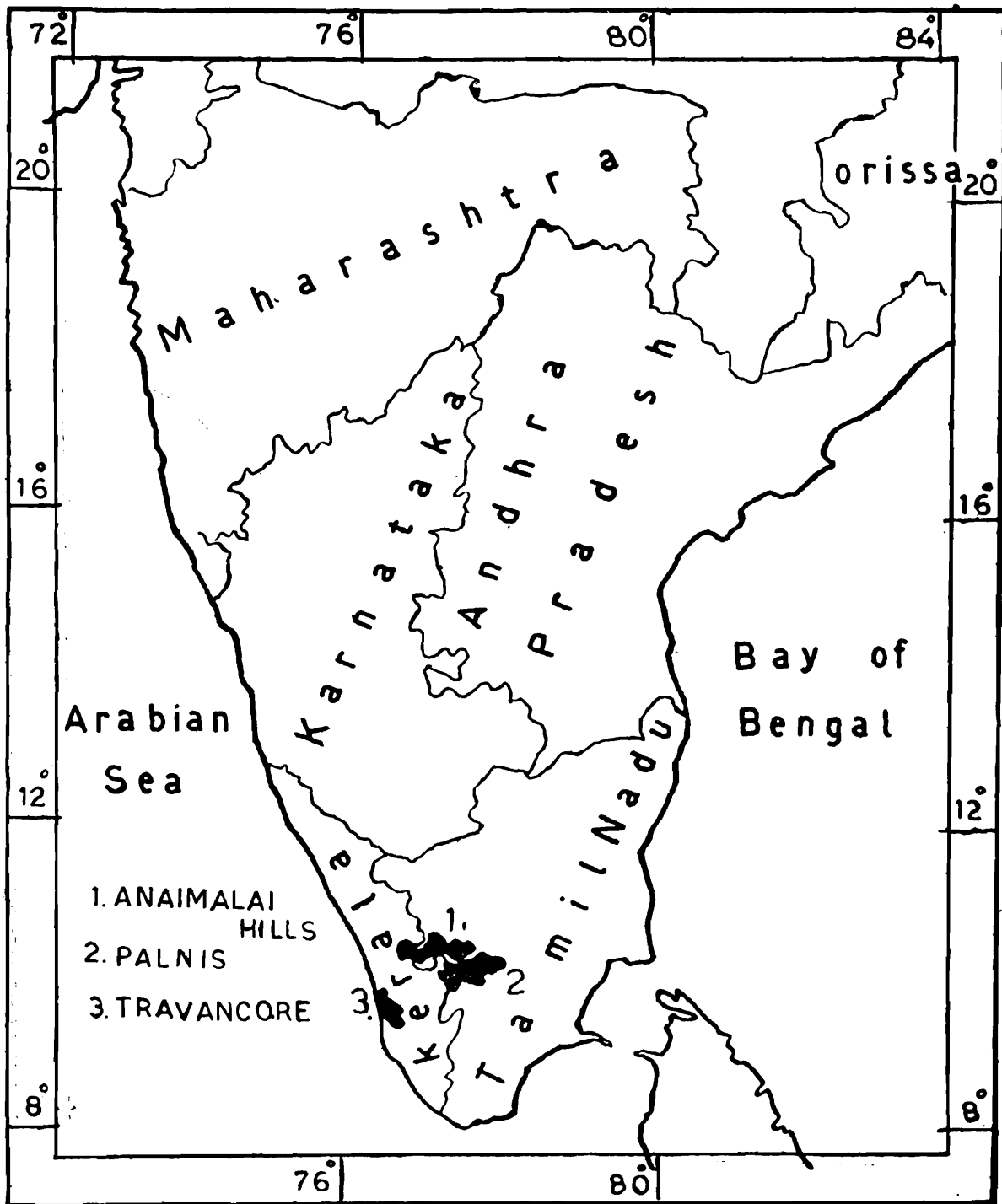
Map no.1 Distribution of BRACHYOPHIDIUM

1	2	3	4
3. <i>M. punctatum</i> Beddome	+	-	Peermade, Kerala, Srikundra, Anaimalais and Goa frontier.
4. * <i>M. wynaudense</i> Beddome	+	-	Manantoddy, Kerala and Coorg, Karnataka.



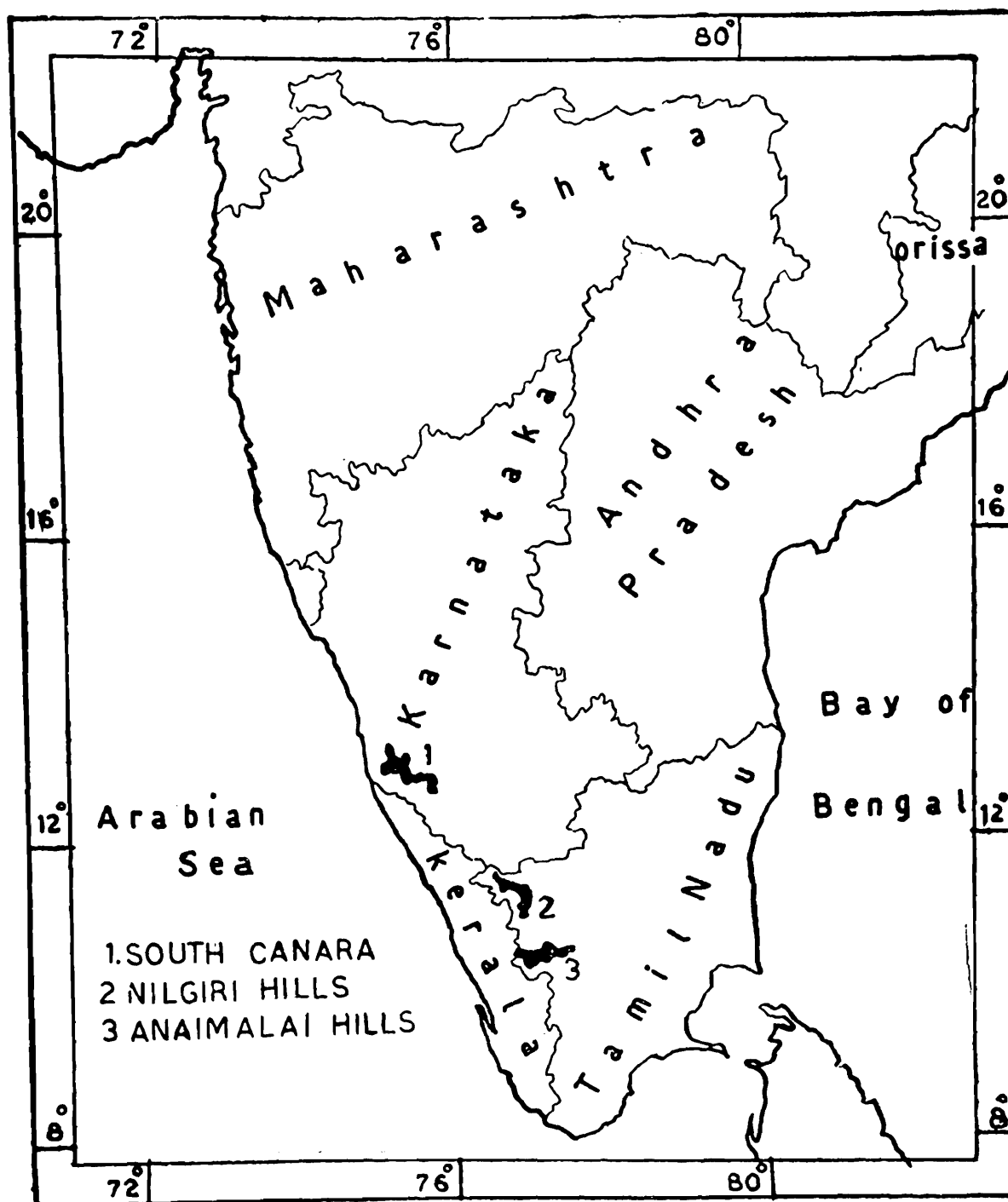
Map no. 2 Distribution of MELANOPHIDIUM

1	2	3	4
III. <i>Platyplectrumus</i> Guenther			
5. <i>P. madurensis</i> Beddome	+	+	South India and Sri Lanka.
5a. <i>P. madurensis madurensis</i> Beddome	+	-	Shembaganur and Kodaikanal, Palnis and Munnar, Kerala.
5b. <i>P. m. ruhanae</i> Deraniyagala	-	+	Southern Province, Sri Lanka.



Map no. 3 Distribution of PLATYPLECTRURUS

1	2	3	4
6. <i>P. trilineatus</i> (Beddome)	+	-	Shembaganur, Palnis and Anaimalais.

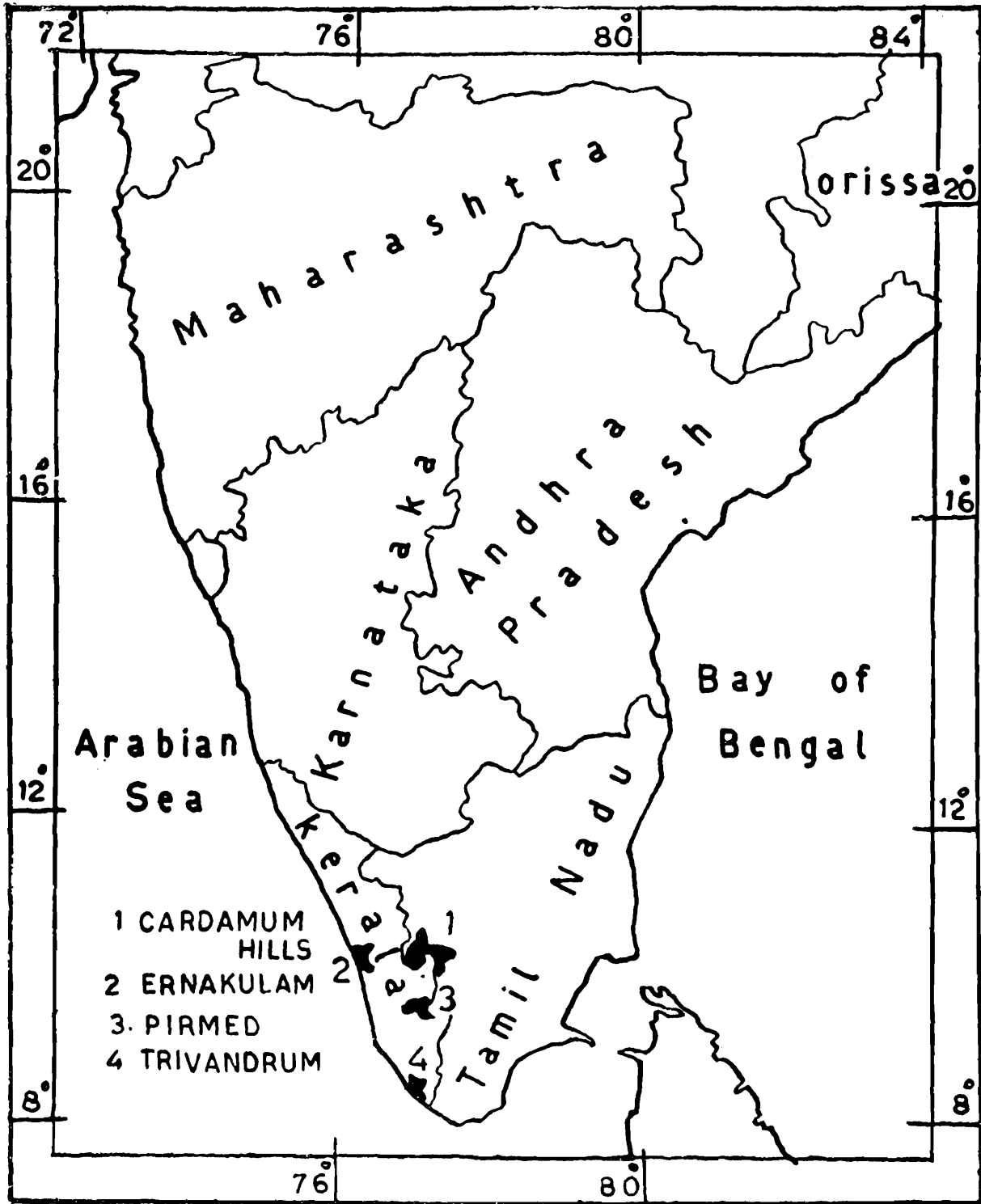


Map no.4 Distribution of PLECTRURUS

IV. *Plectrurus* Dumeril

7. <i>*P. aureus</i> Beddome	+	-	Chambra Hill, Kerala.
8. <i>*P. canarius</i> (Beddome)	+	-	Kudremukh, Karnataka.

1	2	3	4
9. <i>P. guentheri</i> Beddome	+	-	Kundapur, Karnataka ; Ooty and Coonoor, Nilgiris.
10. <i>P. perroteti</i> Dum. & Bibr.	+	-	Nilgiris and Anaimalais. Common in the Nilgiris.

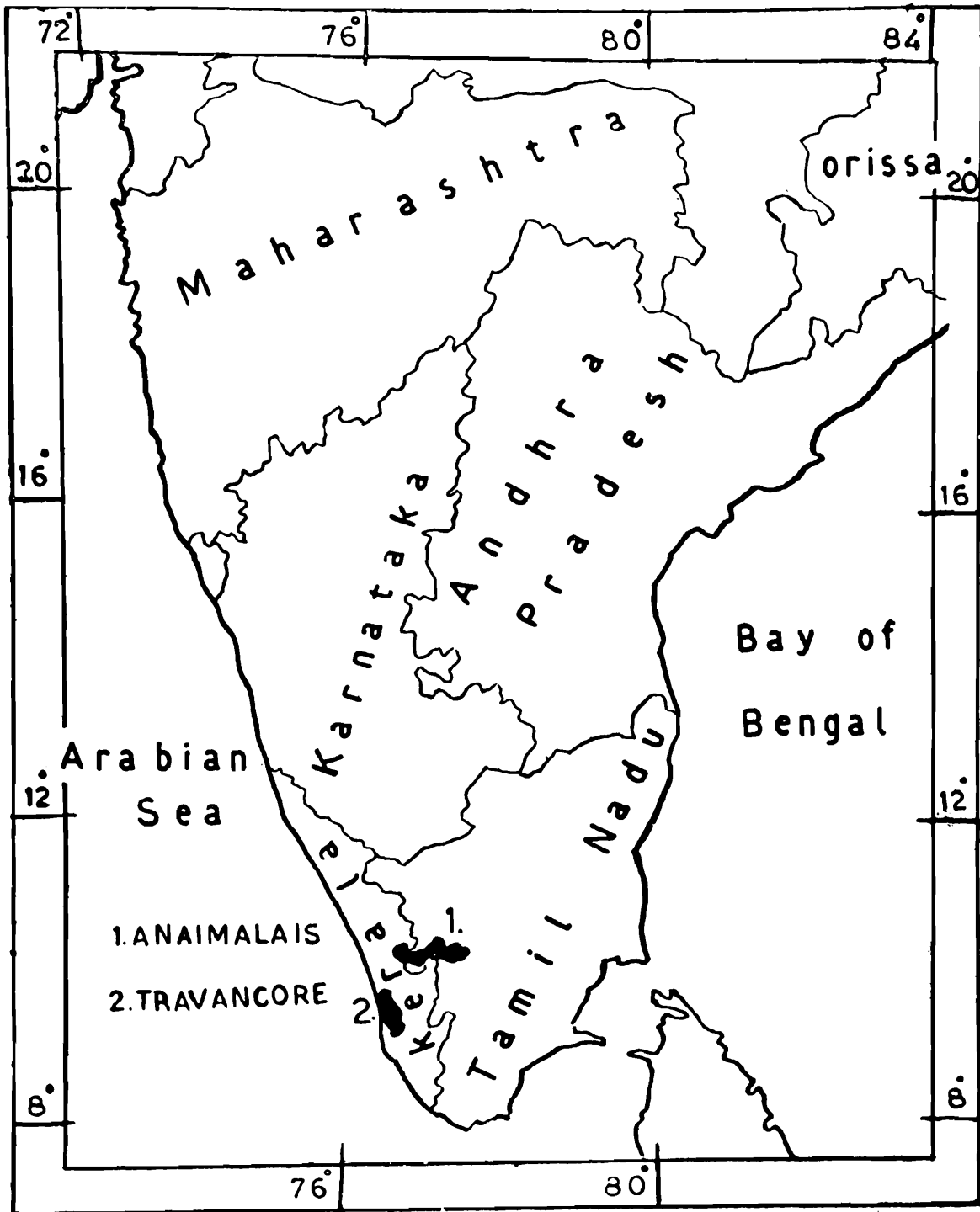


Map no. 5 Distribution of RHINOPHIS

1	2	3	4
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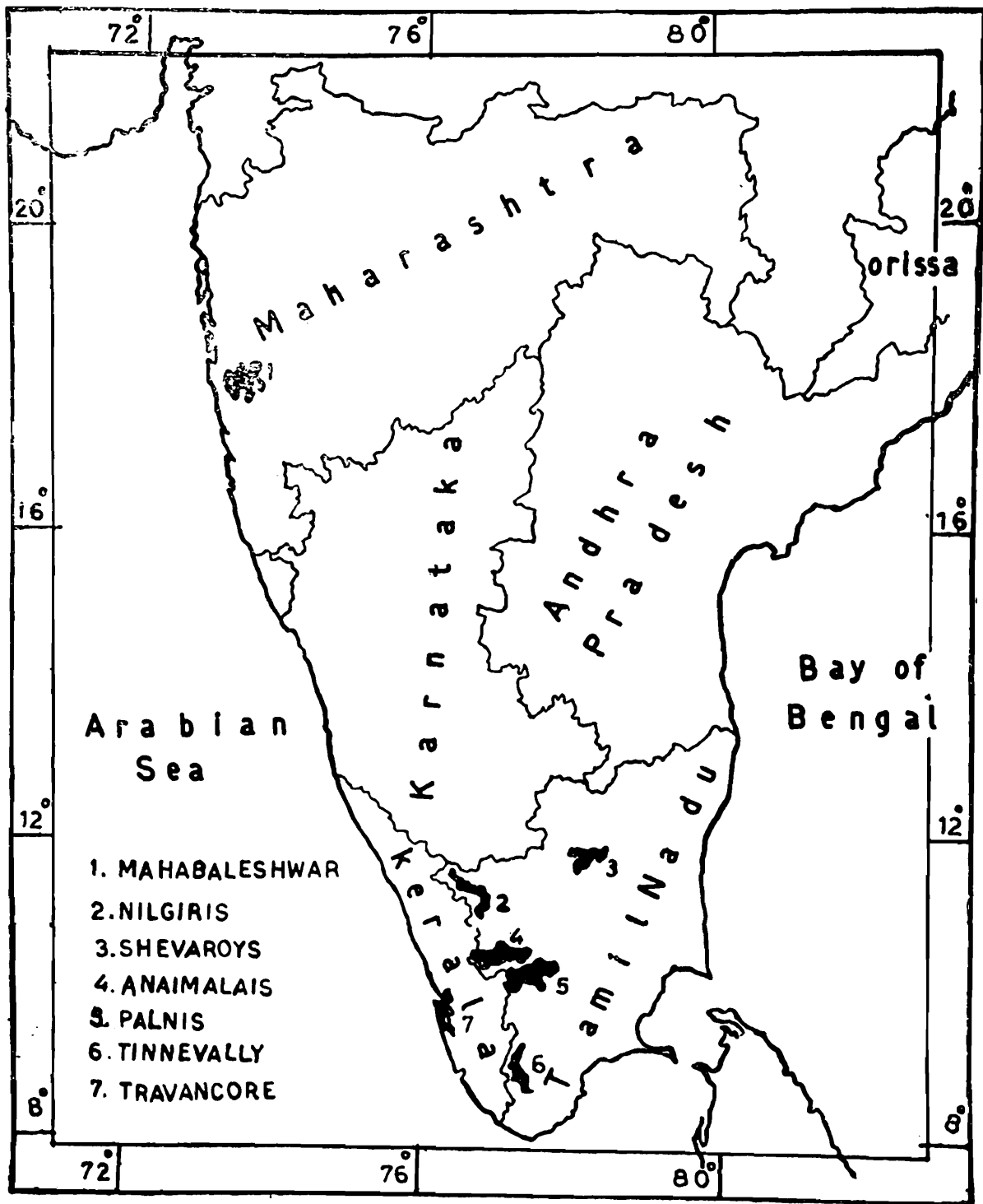
V. *Pseudotyphlops* Schlegel

11. *P. philippinus* Schlegel + - At low elevations in Trincomalee, Matara, Kolonne, Korle, Badullo.



Map no. 6 Distribution of TERETRURUS

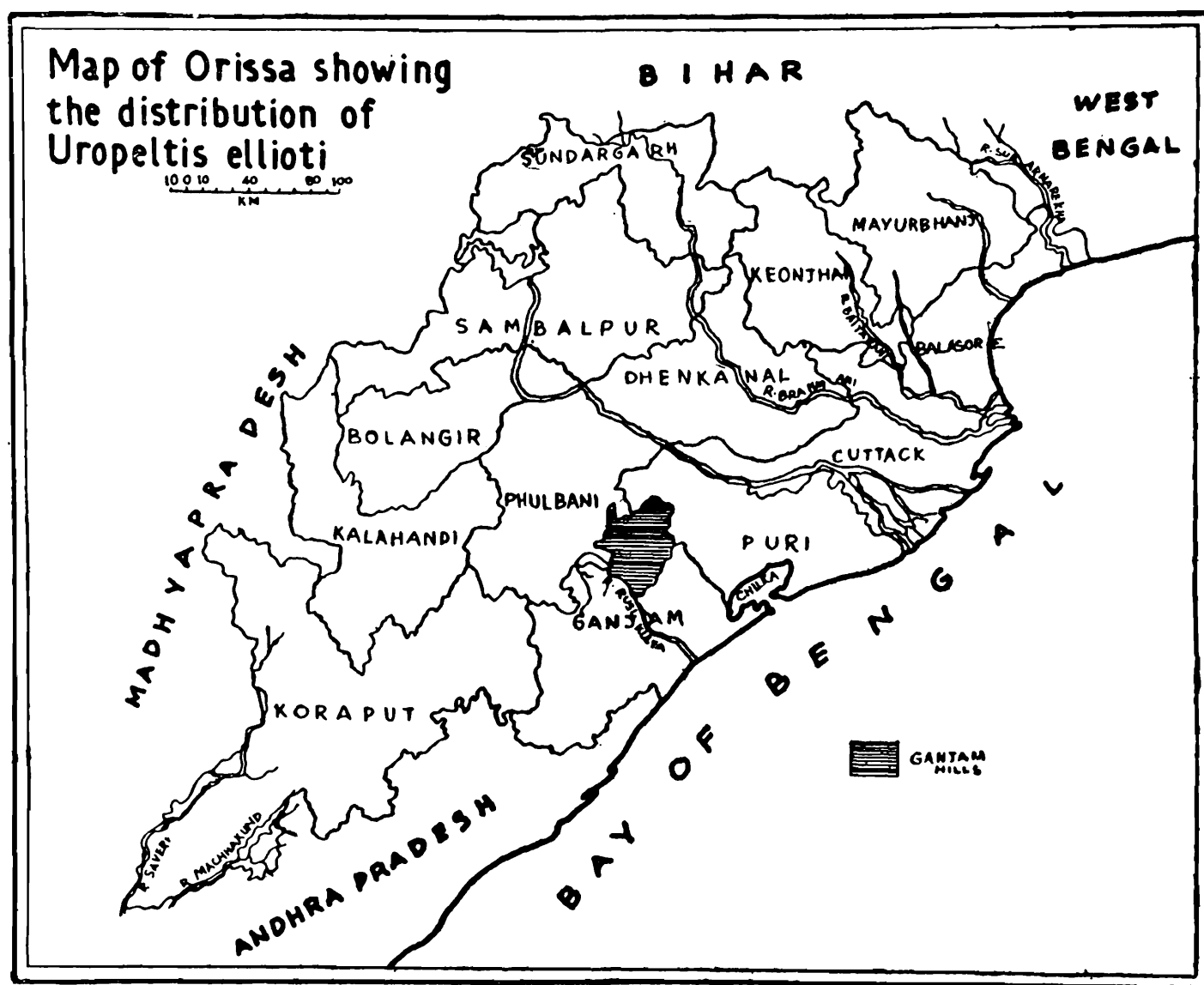
1	2	3	4
VI. <i>Rhinophis</i> Hemprich			
12. <i>R. blythii</i> Kelaart	—	+	Hills of the Central and Southern Provinces.
13. * <i>R. dorsimaculatus</i> Deraniyagala	—	+	Northwestern Province.



Map no. 7 Distribution of UROPELTIS

1	2	3	4
14. <i>R. drummondhayi</i> Wall	—	+	Hills of Central and Uva Provinces.
15. * <i>R. fergusonianus</i> Boulenger	+	—	Cardamon Hills, Kerala.
16. <i>R. oxyrhynchus</i> (Schneider)	—	+	The low country in the Northern and Eastern Provinces, Mullativu ; Vavoniya ; Trincomalee.
17. <i>R. philippinus</i> (Cuvier)	—	+	Hills in the Sabaraganuva and Central Provinces.
18. <i>R. punctatus</i> Mueller	—	+	Hills in the Central and Noathwestern Province.
19. <i>R. sanguineus</i> Beddome	+	—	Koppa and Kalsa, Karnataka ; Wynad, Kerala ; Nilgiris and Tirunelveli Hills.
20. <i>R. travancoricus</i> Boulenger	+	—	Tirunelveli Hills, Tamil Nadu ; Munnar, Kerala.
21. <i>R. trevelyana</i> (Kelaart)	—	+	Hills of Sabaragamuva ; Central and Uva Provinces.
VII. <i>Teretrurus</i> Beddome			
22. <i>T. sanguineus</i> (Beddome)	+	—	Tirunelveli and Munnar Hills.
VIII. <i>Uropeltis</i> Cuvier			
23. <i>U. arcticeps</i> (Guenther)	+	—	Muvathupuzha and Alleppy, South Kerala Hills ; High Wavy Mountains, Madurai District and Tirunelveli Hills, Tamil Nadu.
24. * <i>U. beddomii</i> Guenther	+	—	Anaimalais.
25. <i>U. broughami</i> (Beddome)	+	—	Palnis, Sirumalais and Nilgiris.
26. <i>U. ceylanicus</i> Cocteau	+	—	Sholayar, Murugolai and Valaparai, Anamalais ; Vandamedu and Bonaccord, Kerala ; Koppa and Kot igechar, Karnataka ; Shevroy Hills, Eastern Ghats.

1	2	3	4
27. <i>U. dindigalensis</i> (Beddome)	+	—	Sirumalais, Tamil Nadu.
28. <i>U. ellioti</i> (Gray)	+	—	Courtallam and Manjolai, Tirunelveli Hills ; Munnar, Kerala ; Shevroy Hills Javadi and Ganjam Hills, Eastern Ghats.
29. <i>U. liura</i> (Guenther)	+	—	Madura and Tirunelveli Hills.
30. <i>U. macrolepis</i> (Peters)	+	—	



Map no. 7a

30a. *U. macrolepis macrolepis* (Peters)

Bombay Hills between latitudes 18°7' and 19°7' N.

30b. *U. macrolepis mahableshwarensis* Chari

Mahableshwar, Powai Lake Salsette Island, Maharashtra.

	1	2	3	4
31. * <i>U. macrorhynchus</i> (Beddome)		+	-	Anaimalais
32. <i>U. maculatus</i> (Beddome)		+	-	Anaimalais and Hills of South Kerala.
33. <i>U. melanogaster</i> (Gary)		-	+	Hills of the Central Province.
34. * <i>U. myhendrae</i> (Beddome)		+	-	Hills of South Kerala and Nilgiris.
35. * <i>U. nitidus</i> (Beddome)		+	-	Anaimalais, Cochin side.
36. <i>U. ocellatus</i> (Beddome)		+	-	Western Ghats south of the Goa gap ; Common in the Anaimalais
37. * <i>U. petersi</i> (Beddome)		+	-	Anaimalais.
38. <i>U. philipsi</i> (Nicholls)		+	-	Maousakanda Estate, Gamma-duva, East Matale.
39. <i>U. pulneyensis</i> (Beddome)		+	-	Palnis ; Alagar Hills ; Munnar Hills.
40. <i>U. rubrolineatus</i> (Guenther)		+	-	Bhimshanker and Pune, Maharashtra ; Anaimalais and Hills of South Kerala.
41. <i>U. rubromaculatus</i>		-	+	Anaimalais and Nilgiris.
42. <i>U. ruhanae</i> Deraniyagala		-	+	Galle District, Southern Province.
43. * <i>U. smithi</i> Gans		+	-	Anaimalais.
44. <i>U. woodmasoni</i> (Theobald)		+	-	Palnis ; Anaimalais ; Hills of Tirunelveli and South Kerala ; one specimen from the Nilgiris.

DISCUSSION

An analysis of the table shows that out of the eight genera known, majority are confined to the Western Ghats, South India ; the entire family is, however, autochthonous to the Indian subregion. The pattern of peculiar distribution of these snakes shows that while some forms are allopatric, others are highly endemic.

Of the eight uropeltid genera, the genus *Uropeltis* is known by 22 species followed by 10 species of the genus *Rhinophis*. Only one species, *Uropeltis ellioti* (Gray) extends from Shevroys to Ganjam Hills in the Eastern Ghats besides being found in the Western Ghats. The Bombay Hill uropeltid, *Uropeltis macrolepis* (Peters) occurs in the Bombay Hills between latitudes 18°7' and 19°7' N. Three uropelts namely, *Uropeltis melanogaster* (Gray), *U. philipsi* (Nicholls) and *U. ruhanae* are endemic to Sri Lanka. Of the remaining 6 genera, *Pseudotyphlops* is the only genus that is endemic to Sri Lanka,

represented by a single species ; all the others viz., *Brachyophidium*, *Melanophidium*, *Platyplectrurus*, *Plecturus* and *Teretrurus* are confined to the Western Ghats, India. A new subspecies of *Platyplectrurus madurensis* namely, *P. madurensis ruhanae* has been described by Deraniyagala (1955).

To summarise, the fact that these interesting burrowing forms are to be found only in South India, and Sri Lanka amply suggests that South India itself is a distinct faunal centre having close affinities with Sri Lanka. It is also clear that the fauna of Sri Lanka and South India have been derived distinctly and are separated from the rest of the Indian subregion. The fact that very few of the uropeltids have penetrated Sri Lanka suggests their different phases of dispersal in the geological time scale.

SUMMARY

The limited distribution of the uropeltid snakes of India and Sri Lanka is discussed. A table indicating the geographical distribution of the eight genera including 44 species known so far is provided with localities of their occurrence in South India and Sri Lanka. Distributional maps for the genera occurring in India are given.

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