

## Short Communication

Rec. zool. Surv. India, 96 (1-4) : 245-248, 1997

### NOTE ON THE MILLIPEDE, *PHYLLOGONOSTREPTUS NIGROLABIATUS* NEWPORT A BIODEGRADATOR IN SOUTH ARCOT DISTRICT, TAMILNADU

Information on the faunal diversity of Indian Diplopoda is so far rather inadequate. Data on the role played by them in nature is still more meager. (Kubra Bano and Krishnamoorthy 1979 and Hopkin and Read 1992). Studies carried out by Crawford et al., (1987), Bailey and de Mendonca (1990), Eisenbeis and Wichard (1987) and Hoffman and Payne (1969) in Millipedes revealed that Millipedes consume a variety of food materials. But so far there is no report of their feeding on human faces. During a recent faunistic survey of South Arcot District of Tamil Nadu, apart from collection of different species of millipedes, attempts were made to study their habitats and food preference. The study led to observations on food preference of common species, found in the district, *Phyllogonostreptus nigrolabiatus* as a biodegradator.

In Tamil Nadu, in every village a particular portion of field, a little far away from the village is set apart for use as open public toilet by the villager. During a survey in 1994, when the villagers were asked where does the millipede occur? Immediately they responded asking back. Are you asking about the big millipede? and then took us to these open fields. Here we observed the millipede *Phyllogonostreptus nigrolabiatus* in large numbers, feeding on human faces. The villages from where these millipedes were collected is given in Fig. I and II.

Because of this habit, this species of millipede can be called a partial Biodegradator. This process of biodegradation by these millipedes may help to clean the environment and make the soil more fertile. Experimental studies on the propagation of this millipede to other villages, to be used as biodegradator may be undertaken in future. The soil of these fields can be used as natural fertilizer in agriculture.

#### REFERENCES

- BAILEY, P. T. AND DE MENDONCA, T. R. 1990. The distribution of the millipede *Commatoiulus moreleti* (Diplopoda; Julida; Julidae) in relation to other *Commatoiulus* species on the South Western Iberian Peninsula. *Journal of Zoology*, **221**, 99-111.
- CRAWFORD, C. S., BERCOVITZ, K., AND WARBURG, M. R. 1987. Regional environments life history patterns and habitat use of Spirostreptid millipedes in arid regions. *Zoological Journal of the Linnean Society of London*, **89**, 63-88.
- EISENBEIS, G. AND WICHARD, W. 1987. *Atlas on the Biology of Soil Arthropods*, Springer-Verlag, Berlin.
- HOFFMAN, R. L. AND PAYNE, J. A. 1969. Diplopods as Carnivores Ecology, **50**, 1096-98.

- HOPKIN, S. P. AND READ, H. J. 1992. *The Biology of millipedes*. Oxford University Press. 1-227.
- KUBRA BANO AND KRISHNAMOORTHY, R. V. 1976. The role of the millipede *Jonespeltis splendidus* (Verhoeff) in soil humification. *Proceedings First All India Symposium on soil Biology and Ecology in India*. pp. 106-110.

Zoological Survey of India  
*Southern Regional Station*  
Chennai

M. MARY BAI

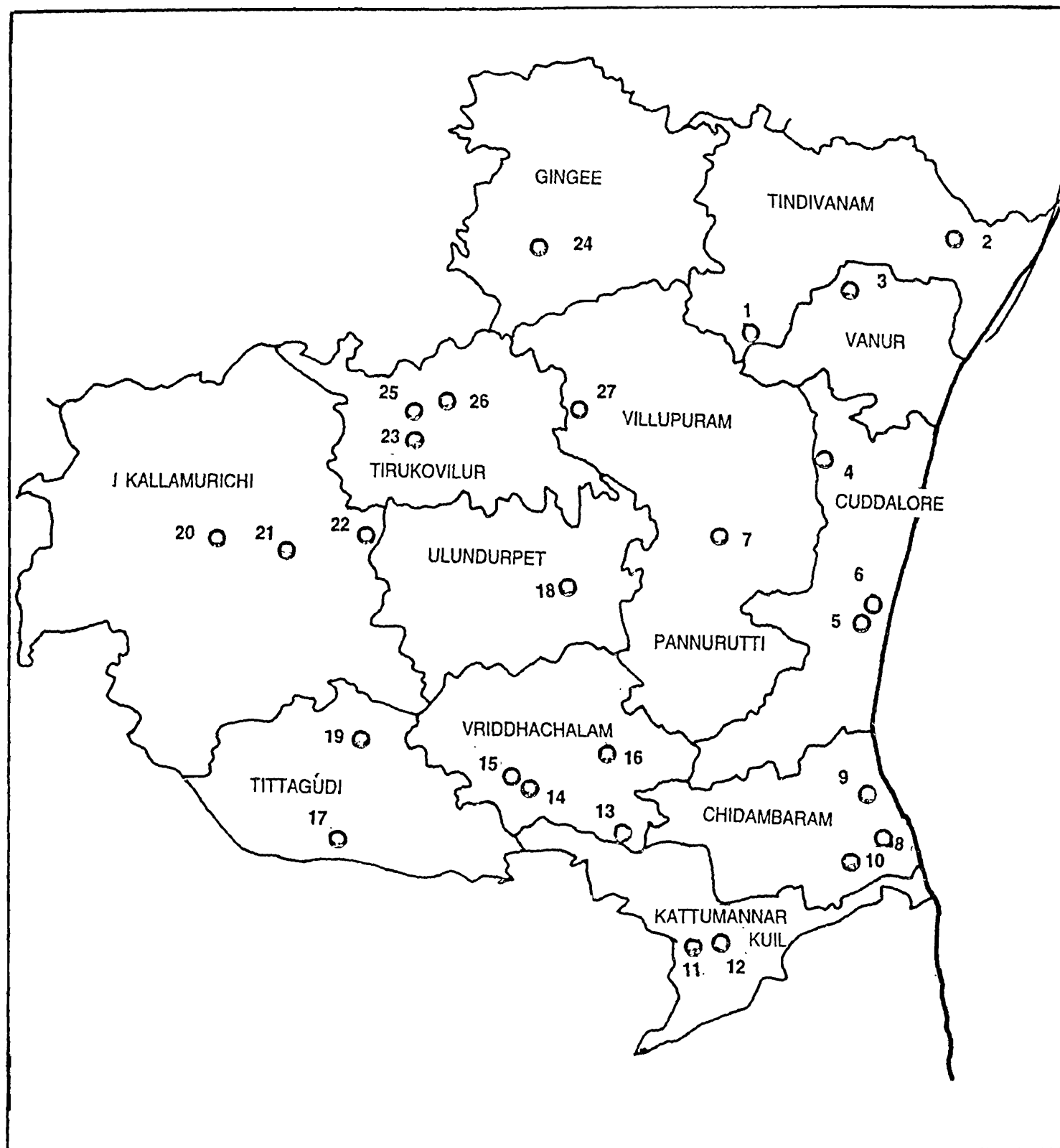


Fig. I

List of collection sites of *Phyllogonostreptus nigrolabiatus* Newport in South Arcot District

1. Vedur, 2. Kumaranpuram, 3. Thenkodipakkam, 4. Ennarpalayam, 5. Murukespettai, 6. Pannurutti,
7. Pulavanur, 8. Killai, 9. Portonova, 10. Chidambaram, 11. Veeranam, 12. Thiruchinnapuram, 13. Anjanak-
- upam, 14. Sukiranur, 15. Virthachalam, 16. Old Neyveli, 17. Wellington Reservoir, 18. Sendamangalam, 19.
- Periyanesalur, 20. Gomuki Dam, 21. Madur village, 22. Rishivandium, 23. Periya Yeri, 24. Kannanakuppam,
25. Velandai Yeri, 26. Thapovanam, 27. Mambalapattu.



**Fig. II**

Dorsal and Ventral view of Millipede *Phyllogonostreptus nigrolabiatus* Newport