

PREY OF THE INDIAN PIPISTRELLE BAT *PIPISTRELLUS COROMANDRA* (GRAY) AT AUROVILLE, SOUTHERN INDIA

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The prey and feeding habits of *Pipistrellus coromandra* has been recorded in general (Bates & Harrison, 1997), as well as in specific areas - for example, in Bihar (Sinha, 1986) and in central and western India (Brosset, 1962). This report concerns the prey spectrum of this species in Auroville, in the close vicinity of Pondicherry.

Methods: The diurnal roosts of *Pipistrellus coromandra* includes, among others, the gaps between palm leaf fronds used to thatch roofs of houses. One such accessible roost occurs in a residence at the community of Aspiration (11°59'N & 79°50'E) in Auroville which is ca. 8km north of Pondicherry city. Seventy copropieces were collected between January and December 2003. A binocular microscope and established literature on insects (Borror, 1992; Mani, 1990) allowed an analysis of all arthropod remains.

The frequency of particular components of food consumed was assessed according to a pre-established system in place for calculating the trophic connections of fauna in this region (Verzhutskii & Ramanujam, 2002). This methodology recognizes four classes: basic food (>20%), constant food (5-20%), supplementary food (1-5%), and chance food (<1%).

Results: Two-hundred-and-sixty-seven prey items were identified in the faeces. Basic food consisted of Lepidoptera (31.08%) and Coleoptera (22.09%). Among the 83 Lepidoptera, the following were identified: 48 *Herse convolvuli* (Family Sphingidae), three *Achaea janata*, four *Othreis fullonia*, three *Spodoptera mauritia*, one *Spiramea rotata* (Family Noctuidae) and two *Melanitis leda* (Family Satyridae). Among the 59 Coleoptera, 42 were *Holotrichia spp.* (Scarabaeidae: Melolonthinae) and three *Copris sp.* (Scarabaeidae: Scarabaeinae = Coprinae).

Constant food comprised of Mantodea (10.86%), Blattaria (10.48%), Hemiptera (7.11%), Orthoptera (5.99%) and Isoptera (5.61%). Supplementary food was Araneae (2.24%), Neuroptera (1.87%) and Hymenoptera (1.12%). Chance food consisted of Odonata and Diptera (0.74% each). Spiders (Araneae) were the only non-insect arthropods recorded. For details refer to Table 1.

Table 1. The prey of *Pipistrellus coromandra* in Auroville, Tamil Nadu, southern India

Prey	#	%	Category
Araneae (Spiders)	6	2.24	SF
Odonata (Dragonflies & Damselflies)	2	0.74	OF
Orthoptera (Grasshoppers, Crickets, etc.)	16	5.99	CF
Mantodea (Mantids)	29	10.86	CF
Blattaria (Cockroaches)	28	10.48	CF
Isoptera (Termites)	15	5.61	CF
Hemiptera (Bugs)	19	7.11	CF
Neuroptera (Lacewings & Ant-lions)	5	1.87	SF
Coleoptera (Beetles) - ¹	59	22.09	BF
Diptera (Flies)	2	0.74	OF
Lepidoptera (Butterflies & Moths) - ²	83	31.08	BF
Hymenoptera (Ants, Bees & Wasps) - ³	3	1.12	SF
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- Number consumed; BF- Basic food (>20%); CF - constant food (5-20%); SF - Supplementary food (1-5%); OF - chance Food (<1%).

¹ - 42 *Holotrichia spp.*, 3 *Copris sp.*, 14 Unidentified;

² - 48 *Herse convolvuli*, 3 *Achaea ajanata*, 4 *Othreis fullonia*, 3 *Spodoptera mauritia*, 1 *Spiramea rotata*, 2 *Melanitis leda*, 22 Unidentified;

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Discussion: The principal prey of *P. coromandra* in Bihar was said to be small ants and flies (Sinha, 1986) and small flies in central and western India (Brosset, 1962). Here, along the Coromandel (East) Coast of southern India, the principal prey was recorded to be Butterflies and Moths (31.08%) and Beetles (22.09%), with ants and flies accounting for a paltry 1.12% and 0.74% respectively. This shows a marked divergence from the diet recorded in the aforementioned areas. These results also show that *P. coromandra* can feed on larger insects than was previously supposed.

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