

**Research Article**

## **Distribution, diversity and roost preference of microchiropteran bats in southern districts of Tamil Nadu, India**

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### **ABSTRACT**

Availability habitat and microhabitats for roosting are crucial for any species for its survival. Bats prefer and use cave, crevices, tree cavities, foliage and many anthropogenic structures as their roosting sites. In the present study, an investigation was made on the distribution, diversity, and roost preference of microchiropteran bats in Tirunelveli and Tenkasi districts of Tamilnadu, Southern India. A total of ten species of microchiropterans bats namely *Hipposideros speoris*, *Hipposideros ater*, *Hipposideros fulvus*, *Taphozous melanopogon*, *Taphozous nudiventris*, *Pipistrellus tenuis*, *Pipistrellus coromandra*, *Megaderma lyra*, *Rhinopoma hardwickii*, and *Tadarida brasiliensis* were observed between January to December 2021. These bat species mainly preferred temples (59.15%), buildings (38.02%), and hillocks (2.83%) as their roosting sites. It is also found that 79.70% of the roosts were found in the vicinity of agriculture fields and water bodies. The species abundance was calculated by Margalef's Index for *H. speoris* (2.5), *P. tenuis* (2.3), *M. lyra* (1.7), *H. ater* (1.2), *T. melanopogon* (0.7), *R. hardwickii* (0.5), *T. nudiventris* (0.3), and *T. brasiliensis* (0.2). The present study reveals that the bats mostly prefer temples and anthropogenic structures which provide suitable microhabitats, which are located in the vicinity of agricultural landscape.

**Key words:** Microchiropteran bats, Distribution, Roost preference, Margalef's Index, Agricultural landscape.

