

论著

洱海周边地带小兽体表蚤类调查

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摘要

目的 了解洱海周边地带小兽体表蚤类寄生状况与分布、物种多样性和群落结构特点,探讨蚤类与小兽宿主间的生态关系。方法 选取洱海周边的不同地理方位作为野外抽样调查地点,用鼠笼加食饵诱捕小兽,每天早晨检查捕获情况并更换诱饵。按“一兽一瓶”的原则采集小兽体表寄生的蚤类。选用丰富度指数(S)、群落均匀度(J')、Shannon-Wiener多样性指数(H')、生态优势度指数(C')、体表寄生蚤类总侵染率(Rft)、蚤类总指数(Ift)和群落内各个种类构成比(Cr)进行群落结构计算。结果 在调查点共捕获小兽3 303只,属4目(啮齿目、食虫目、攀鼯目和食肉目)7科15属21种,除白尾鼯和巢鼠外,其余19种小兽体表都有蚤类寄生。采集到小兽体表寄生蚤类3 243只,属4科11属13种。洱海南边发现21种小兽和12种蚤,在3个方位中其物种多样性最高。洱海东边发现17种小兽和8种蚤,洱海西边发现13种小兽和7种蚤。大部分小兽宿主体表寄生两种以上的蚤类且群落结构复杂。不同方位的蚤类和它们相对应宿主的分布不均匀,洱海南边小兽宿主与体表寄生蚤类的物种数高于洱海周边其他两个方位。结论 洱海周边小兽体表蚤类寄生普遍,小兽体表蚤类的物种多样性、物种构成、群落结构和分布主要由宿主体表微环境和宿主所栖息的生境大环境决定。

关键词 [蚤目](#) [蚤](#) [群落生态](#) [协同进化](#) [小兽](#) [洱海](#)

分类号

Fleas on Small Mammals in the Surrounding Area of Erhai Lake

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Abstract

Objective To investigate the distribution pattern, species diversity and community structure of fleas on small mammals in the surrounding area of Erhai Lake, and the relationship between fleas and their hosts. Methods Different geographical areas surrounding the Erhai Lake in Yunnan were selected as investigated spots. Small mammals were captured with baited cages. The cage-traps were examined and re-baited each morning. All fleas on the hosts were collected and identified. The richness (S), evenness (J'), diversity index (H'), dominance index (C'), total ectoparasite infestation rate (Rpt), total ectoparasite infestation index (Ipt), and constituent ratio (Cr) were used to measure the community structure. Results Althgether, 3 303 small mammals and 3 243 fleas were collected. From the 21 species of small mammal hosts, 13 species of fleas were identified. In southern area of the Lake, the species richness (21 species of small mammals & 12 species of fleas) was highest among the three selected areas. Seventeen species of small mammals and 8 species of fleas were found in eastern area, and only 13 species of small mammals and 7 species of fleas found in the west. This implied the probable influences of ecological environments on the fleas and their corresponding hosts. The community structure of fleas on small mammals was complex. The species diversity, species composition, community structure and distribution pattern of fleas were simultaneously influenced by the hosts' body surface microenvironment and the macroenvironment (habitat). Conclusion The fleas are commonly distributed in small mammals in the areas and their communities are related to host species and the habitats.

Key words [Siphonaptera](#) [Flea](#) [Community ecology](#) [Co-evolution](#) [Small mammal](#) [Erhai Lake](#)

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