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ORIGINAL ARTICLE

SURVEY OF FLEA SPECIES (ORDER, SIPHONAPTERA) ON DOMESTIC MAMMALS IN BASRAH PROVINCE, SOUTHERN IRAQ

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ABSTRACT

The current study aimed to survey the flea species, that parasitize domestic mammals in Basrah Province, southern Iraq from June 2024 to May 2025. It was recorded that 31 animals were infested with fleas, and the total prevalence was 12.45%. Higher prevalence of fleas was recorded in dogs (33.33%), followed by goats (16.67%), camels (19.05%), cats at (16.67%), and sheep (12.73%). Three flea species were collected from infested mammals, the cat flea *Ctenocephalides felis* (Bouché, 1835), the dog flea *Ctenocephalides canis* (Curtis, 1826), and the oriental rat flea *Xenopsylla cheopis* (Rothschild, 1903). These species belong to the family Pulicidae, within the order Siphonaptera. Additionally, the results illustrated that *C. felis* was collected from cats, goats and sheep, whereas *C. canis* was collected from dogs and goats, while *X. cheopis* was recorded only from camels. Camel infestation with the oriental rat flea is recorded for the first time in Iraq, and no global study has recorded this result. The highest infestation was recorded in May with five infestations, followed by October. No infestations were recorded in August, November, December, January, February and March. The study included a brief description of the most important taxonomic characteristics of the recorded of the flea species.

Keywords: Ectoparasites, Domestic mammals, Fleas, Pulicidae, Siphonaptera.

INTRODUCTION

Fleas are holometabolous ectoparasites of warm-blooded animals that are classified in the order of Siphonaptera. This order is a monophyletic group that has evolutionary relationships with true flies (Diptera) (Mullen and Durden, 2019). There are around 2,545 species that have been described and are categorized into 15 families and 246 genera (Whiting *et al.*, 2008). Fleas are distributed worldwide, especially in temperate regions. Wildlife areas have higher flea diversity than human settlements. About 94 % of fleas infest mammals, and 6% infest birds, and there are approximately 20 species feed on humans (Keskin *et al.*, 2020). Adults are wingless, yellowish-brown insects, 1-8mm. in length, and a heavy chitinated body, their