

Original Paper

Ecological characteristics of sand flies in Golestan province, Iran (2011)

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Abstract

Background and Objective: Leishmaniasis is one of the main Zoonotic Vector-Born disease which is transmitted by sand flies to human and animals. This study was carried out to determine the ecological characteristics of sand flies in Golestan province, North of Iran.

Materials and Methods: In this descriptive study, 3 villages in Aliabad Katul district in north of Iran were selected according to rural geography distribution and positive detected samples of human infection during 2010-02. Sand flies were collected by sticky traps. Three places were sampled in each village and in indoor and outdoor places 10 traps were installed. Sand flies were collected and their species was determined.

Results: Totally 299 sand flies (160 from indoors and 139 from outdoors) were collected and consequently, 7 species of sandflies were identified including 4 species of phlebotomus genus and 3 species of Sergentomyia genus *Ph.papatasi* (55%) and *S.sintoni* (51%) were predominant species in indoor resting places and outdoor places, respectively. Sand flies seasonal activity extended from mid May through early October. Sand flies had one peak of activity in early August. Among the detected species, *S.hodgsoni* reported for first time from Golestan province.

Conclusion: *Ph.papatasi* was recognized as predominant species in Aliabad Katul district, Golestan province in northern Iran.

Keywords: Sand fly, Leishmaniasis, Golestan

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