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DETERMINATION OF THE SPECIES OF THE SAND FLIES-THE VECTOR OF CUTANEOUS LEISHMANIASIS THAT IS ENDEMIC IN MERSIN

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Objectives: The aim of this study was to determine the sand fly fauna in various areas of the province of Mersin where cutaneous leishmaniasis caused by *Leishmania tropica* are seen and to determine the potential of Phlebotomus and other species for vectoring besides showing the presence of this parasite species directly and with molecular biological methods.

Method and Results: The number of sand flies caught in the field studies performed in Anamur, Silifke and Mut are 197, 573 and 160, respectively. In Mersin totally nine *Phlebotomus- P. sergenti* (%30), *P. alexandri* (%18), *P. neglectus/syriacus* (%12), s*ergentomyia minuta* (%12), *P. tobbi*(%11), *P. papatasi* (%10), *P. simici* (%3), *P. halepensis* (%1), *P. mascitti* (%1), *P. brevis* (%1)- and one *Sergentomyia* species were detected. Of 428 female sand flies, 326 were identified and were grouped according to their blood-sucking / egg-presence properties and 29 pools were prepared by putting 3 to 19 members in each of them. Leishmania DNA was investigated in the DNA samples found in these pools by real time PCR method using ITS1 gene region. DNA isolation was performed by using ZR Insect/Tissue DNA Kit-5TM (Cat. No. D6015).

Conclusion: In this study, the sand fly fauna in Mersin where CL is an endemic disease was determined. *P. sergenti* was identified as the dominant species and it was concluded that *P. sergenti* might be the probable vector of *L. tropica*.