

Study on Phlebotomine sandflies in selected areas of Sri Lanka.

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Six species of sandflies belong to two genera of *Phlebotomus* and *Sergentomyia* were reported from Sri Lanka. Out of these only *P. argentipes* was proven as a vector in the other parts of the world that was also involved with transmission of visceral leishmaniasis. Two areas with known disease transmission were selected for the study and three methods were used to collect the adult sandflies (cattle baited traps, CDC miniature light traps and manual collection with aspirators). Identification of sand flies was done using morphological characters with the help of a standard key. Some of the wild caught blood fed female sandflies was subjected to gut dissection and Geimsa staining was carried out to see the presence of promastigotes within. The dominant species in northwestern area was *p. argentipes* (90 percent) . The southern parts collection consisted of 95 percent of *S. zeylanica* in which the transmission capability is unknown. The peak aggregation of sandflies in cattle baited traps (Northwestern areas) was seen around 21.00 hr - 23. 00 hr but the majority of aggregation consisted of males. The attempts made to confirm the vector species by demonstrating the presence of *L. donovani* within wild caught female sandflies were not successful. None of the soil samples gave positive yield of immature stages. The studies need to be extended to establish exact vectors of cutaneous leishmaniasis in Sri Lanka