



ABSTRACTS OF RECENT CHINESE PUBLICATIONS ON LEISHMANIASES¹ (IV)

11. Yang, J. Q. et al. Studies on sandfly ecology and elimination methods. Chinese Journal of Epidemiology, 1984, 5(2): 100-103 (In Chinese, with English abstract)

There were four sandfly species in the suburbs of Beijing, namely Sergentomyia squamirostris, Phlebotomus chinensis, S. khawi and P. mongolensis. The first two of these species accounted for 46.7% and 44.3% of the sandfly population, respectively. Sandfly density inside a room within a 24-hour period was observed to reach its peak at 23h00. The habitat of P. chinensis had changed from domestic to semi-domestic or wild places. P. chinensis activity lasted, in all, about 4-1/2 months reaching a peak in mid-June. Sandflies had entirely disappeared from the plains around Beijing; but they were still present in mountainous and hilly areas in the suburbs of the town, and, in some places, the density reached 230 flies per man-hour.

In the present studies, malathion and fenitrothion were found to be effective for the elimination of sandflies and their residual effects were satisfactory. Observations over a three-year period in six communes in the suburbs of Beijing showed that sandfly density had been greatly reduced due to the widespread use of these two insecticides.

12. Wang, S. A. et al. Investigation of sporadic kala-azar and of sandfly vectors in Aksu Prefecture, Xinjiang Uygur Autonomous Region. Chinese Journal of Epidemiology, 1985, 6(1): 58-59 (In Chinese)

One case of kala-azar, previously reported in Wensu County, was a 24-year old woman who had never left her native place and whose clinical symptoms appeared in 1978. Her infection was most probably acquired in the locality. In June 1981, 281 inhabitants were examined but no suspected case was found.

Two soldiers with kala-azar aged 19 and 20 years old, respectively, were seen in Kuga County. Their clinical manifestations commenced in August 1980 and January 1981, respectively. Their infections were most probably acquired in Kuga County during a sandfly season. When 263 inhabitants of a southern village in that county were examined, no new case of kala-azar was detected.

A sandfly vector survey was conducted in both of the two above areas during 1981-1982. Four sandfly species, namely Phlebotomus chinensis longiductus, P. major wui, P. alexandri, and Sergentomyia minutus xinjiangensis.

13. Hu, X. S. et al. Studies on monoclonal antibodies against Leishmania donovani, Xinjiang strain. Journal of Parasitology and Parasitic Diseases, 1985, 3(3): 169 (In Chinese, with English abstract)

Nine monoclonal antibodies against the Xinjiang strain of Leishmania donovani were obtained by fusing Sp2/0 myeloma cells and spleen cells from immune mice at a fusion rate of 91.7%. The enzyme-linked immunosorbent assay (ELISA) showed that the antibody titres produced from seven recloned monoclonal antibodies ranged from 1:12 800 to 1:819 200. Among

¹ The WHO/LEISH series has been chosen as a vehicle for issuing abstracts or translations in English of papers on leishmaniasis published in the Chinese medical and scientific press as most of this material is not readily available to interested readers outside China. The numbering of the abstracts in this document is consecutive to that of the abstracts given in the previous WHO/LEISH/84.21.

these, the monoclonal antibodies E₁₂ and A₁₁ showed the following characteristics: (1) the antibody titres of both were 1:51 200; (2) protein content (mg/ml) was 110.7 for E₁₂ and 64.2 for A₁₁; (3) both belonged to the IgG_{2b} subclass; (4) on incubation of living promastigotes of the Xinjiang strain of L. donovani with the monoclonal antibodies, strong agglutination resulted. Under electron microscopy, these promastigotes showed various changes as compared with the controls, such as rarefaction of cytoplasm and an increase in the number and size of the cellular vacuoles. Adhesion between promastigotes was also observed, suggesting that E₁₂ and A₁₁ might have a protective effect against the promastigotes.

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