

Écologie des Leishmanioses. Colloques Internationaux du Centre National de la Recherche Scientifique No. 239. 334 pages, illustrated. Éditions du Centre National de la Recherche Scientifique, 15, quai Anatole-France, 75700 Paris, France. 1978. Fr. 248.

This volume represents the transactions of an international colloquium on the ecology of the leishmaniasis, held in Montpellier, 18-24 August 1974. Approximately 80 investigators from most of the major geographic areas of the world where the disease occurs met in this "global and interdisciplinary" colloquium to consider the whole complex of *Leishmania* and the leishmaniasis in terms of an ecological approach. The publication includes a list of participants, a preamble by the organizer, Prof. J. A. Rioux, introductory remarks of the chairman, Prof. P. C. C. Garnham, the text of 41 presentations, and a series of recommendations by the group. After each presentation is a section entitled "Discussion." However, the impression is imparted that the actual discussions must have been incompletely reported or drastically summarized, due to the great brevity of the comments, and instances of questions posed but not answered. The volume is bilingual, with both the text of the presentations and the questions and discussion given in either French or English, as used by the participants.

The majority of the papers reflect an effort by the authors to adhere to the chosen theme. "Ecology" in the context of this symposium appears to be concerned with population biology of the parasites and the invertebrate and vertebrate hosts, and with the interaction of those geographic, climatic, and biological factors which characterize active transmission foci. However, the subject matter is extremely diverse, and many papers could have been more easily classified into the traditional categories of epidemiology, immunology, biochemistry, etc., usually employed in such symposia. The overall quality of the presentations was excellent, and the program was for the most part unencumbered by the repetitive presentation of old data which so often mars such specialized meetings. An indication of the overall quality of the papers is afforded by the fact that they are generally still of significant interest and value in spite of the almost 4 year delay in publication.

Individual mention of the 41 separate papers is obviously impossible. However, they were organized into five categories; the first section, entitled "Leishmaniasis" contains 10 papers dealing with a diversity of aspects of the parasite, ranging from culture media to terminology. The Liverpool group presented an excellent review of biochemical taxonomy, which was, and continues to be, a subject of intense interest. The second section "Vertébres-réservoirs" consists of only three papers; two of which were outstanding epidemiological studies of canine reservoirs in France, and the other reported the novel, but not very successful, use of sandflies for xenodiagnosis in Panama. The section on "Phlébotomes-vecteurs" with 10 titles, includes papers on sampling methods, natural infections, distribution, population dynamics, interaction of mixed experimental *Leishmania* infections, and epidemiological, and host-preferences studies. The largest section, "Foyers leishmaniens" encompasses 15 presentations. The promise of wider geographic coverage suggested by the long list of papers under this heading was not realized, however, since only Mediterranean, Middle-Asian Region, and African foci received attention. The Russian participants rather dominated this section, contributing 7 of the 15 titles. This is no doubt appropriate, considering the exceptional interest and experience the Soviets have had in characterizing foci, and their unique success in controlling transmission in some areas. The last section entitled "Prévention," includes only three papers—an assessment of the problem from the WHO point of view, an essay on the prospects of a vaccine based on preliminary animal studies, and a review of the pragmatic methodology in use in the Soviet Union.

The recommendations adopted by the group extend to 4 printed pages, and in general, deal with the perceived need for standardization of technics, ter-

minology, criteria and even reagents. It is of interest that no specific plan or proposal for implementation of the recommendations was made, beyond the suggestion that standardized criteria and reagents might be promulgated by WHO. Further recommendations deal principally with the desired direction of future research.

The only notable shortcoming of the colloquium was the unavoidable emphasis on the Mediterranean-Middle East-African regions. Only three papers were presented from the two institutions representing the New World, and there was no one present to report on the tremendously important resurgence of kala-azar on the Indian sub-continent. However, this valuable collection of papers is a must for anyone interested in the study of *Leishmania* and the leishmaniasis.

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