

## COMUNICAÇÃO

### TEN YEARS OF OCCURRENCE OF HUMAN *LEISHMANIA VIANNIA BRAZILIENSIS* (Lvb) INFECTIONS IN FARMS AROUND TRÊS BRAÇOS, BAHIA-BRAZIL

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Some years ago we published observations on the epidemiology of cutaneous leishmaniasis due to *Leishmania viannia brasiliensis* (Lvb) from our field area in Três Braços, Bahia, Brazil regarding the occurrence of human infections using techniques already described<sup>4</sup>. We now data of a further five years observations. The total data for 15 farms under study is set out in the Table 1. We also crudely quantify three factors that may influence this epidemiology namely the degree of forestation of the region, the quantify of cacao grown (the chief economy of the region) and the use of insecticide (Benzene Hexachloride) to protect this crop against insect pests. Scrutinising the total number of cases for the decade there appears to be an association between prevalence of human Lvb

infection and forestation as illustrated by farms 1, 14 and 15. Seven farms have not indexed a case for three years. There appears to be no association with cacao growing or insecticide although the probable vector *Lutzomyia whitmani* is abundant in such plantations and the peridomicile<sup>3, 6</sup>. It is possible that the surviving forest contains the original hitherto unidentified wild animal reservoir of Lvb as has been previously suggested<sup>2</sup>. Although more than 1,000 wild animals have been trapped in the area we have only recorded on Lvb in one rodent<sup>5</sup>. We intend to augment our field research in an attempt to identify this unknown reservoir. Although we have identified two domestic animal reservoirs in the area<sup>1,7</sup>, only a wild animal reservoir could be related to such an association of forest with human disease.

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Table 1 - Yearly occurrence of leishmaniasis in the fifteen farms.

N° of farm	Popula- tion in 1980	Number of cases of leishmaniasis each year										Total cases in decade	Popula- tion in 1989	Quantity of forest	Quantity of cacao	BHC use
		80	81	82	83	84	85	86	87	88	89					
1	224	3	1	1	0	2	0	1	6	1	0	15	215	+++	+++	+++
2	122	1	1	0	2	0	2	0	0	0	0	6	116	++	+++	+++
3	262	3	4	0	0	1	1	1	1	0	0	11	191	-	+	-
4	100	0	0	0	0	0	2	2	1	0	1	6	87	+	+++	++
5	107	3	2	1	0	1	0	1	1	1	0	10	129	++	++	++
6	51	0	1	0	1	0	0	1	0	0	0	3	60	+	++	++
7	100	2	1	0	0	0	0	0	0	0	0	3	115	+	+	+
8	49	0	0	0	0	0	0	0	0	0	0	0	66	-	+	-
9	43	0	1	1	0	0	0	0	0	0	0	2	48	+	++	-
10	52	0	0	0	0	0	0	0	0	0	0	0	50	++	+++	+
11	81	0	0	1	1	0	3	0	0	1	0	6	74	+	+++	+
12	16	1	0	0	0	0	0	0	0	0	0	1	10	-	++	-
13	111	0	1	0	0	0	0	0	0	0	2	3	84	+	+++	++
14	131	0	3	0	1	0	1	2	3	3	4	17	146	+++	+++	-
15	147	9	10	3	1	0	0	1	0	2	4	30	142	+++	+++	+++

+ Present  
 ++ Moderate  
 +++ Marked