The 1375 mosquito extracts tested represented 46% of the 3056 samples originally collected in November 1990–February 1991 (BRANQUINHO *et al.*, 1993). The predominant species collected was *A. oswaldoi* (n=2610); 1·3% were infected with *P. vivax* VK247 and 2·3% with *P. vivax* VK210. Among 362 *A. deaneorum*, 0·8% were infected with VK247 and 0·3% with VK210. The remaining anophelines consisted of 60 *A. triannulatus* and 24 *A. darlingi*, none of which was found to be infected. All the mosquitoes were also tested for the presence of *P. falciparum* and *P. malariae*. Only one of the 207 positive mosquitoes gave positive results for 2 different parasites, *P. vivax* VK210 and *P. vivax* VK247 (BRANQUINHO *et al.*, 1993). The 12 *A. oswaldoi* and 2 *A. deaneorum* found to be infected with the *P. vivax*-like parasite in the present study gave negative results with the other 4 mabs.

The detection in the same geographical region of the repetitive CSP sequence of the *P. vivax*-like/*P. simiovale* parasite in both anophelines and humans is a strong indication that sporozoites of that organism are both present in vectors and inoculated into humans.

A. darlingi has been considered to be the main malaria vector in the Amazon region of Brazil (DEANE, 1988), with *A. albitarsis*, *A. nuneztovari* and *A. oswaldoi* acting as occasional vectors (ARRUDA *et al.*, 1986; DEANE, 1988). KLEIN *et al.* (1991a, 1991b), comparing groups of different mosquito species fed on the same patients, found sporozoite infection rates in *A. deaneorum* to be practically identical to those of *A. darlingi*, with a significantly lower infection rate in *A. oswaldoi*.

As far as we are aware, this was the first study to demonstrate infection of anophelines with the *P. vivax*-like parasite with the aid of a specific mab. Also, we have found for the first time an association between mosquito and human infection with the *P. vivax*-like/*P. simiovale* parasite.

As we pointed out previously (BRANQUINHO *et al.*, 1993, 1996), in the State of Acre, Brazil, the predominance of *A. oswaldoi* in a recently settled area, and the extent of its infection with malaria parasites, indicated its importance in local malaria transmission. Our present findings substantiated this.

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