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. a. ostvaldi* (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 following anophelines consisted of 60 *A. traimulatus* 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. asalvaidoi* 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. albizaris, A. nunezovari* and *A. asalvaidoi* 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. asalvaidoi*.

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. asalvaidoi* 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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**References**


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