An epidemiological study to determine the distribution of anopheline species and their potentiality as vectors of malaria was carried out in 4 villages of the Serra do Navio region, Amapá State in the north of Brazil. Fifteen anopheline species were identified among 3053 mosquitoes collected as human biting catches in the 4 study areas from February 1990 to October 1991. 77.2% of the mosquitoes were collected during the dry season. ELISA, based on the use of species-specific anti-sporozoite monoclonal antibodies, was used to analyze mosquitoes collected for human Plasmodium species. The positivity rate of the mosquitoes of all 15 species tested was 0.79% [23/2876; 15 Anopheles albimanus, 4 An. nuneztovari, and one each of An. brasilienis, An. triannulatus, An. oswaldi and An. rangeli. Plasmodium falciparum sporozoite antigen was detected in An. albittaris and An. oswaldii; P. falciparum and P. vivax variant VK217 were detected in An. albittaris and An. nuneztovari; and P. malariae in An. albittaris, An. nuneztovari, An. brasilienis, An. triannulatus and An. rangeli. All mosquitoes positive for P. malariae were collected in the forest adjacent to the study areas (i.e., they may have been infected with P. brasiliani non-human primates).

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A Schistosoma mansoni esterase implicated in the immune response of patients infected with human Plasmodium in the Serra do Navio region of Amapá State, Brazil

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To determine the malaria endemicity in 4 adjacent villages of the Serra do Navio region (Serra do Navio, Colônia Aguã Branca, Porto Terezinha, and Amapá State, Brazil, we carried a blood film survey and measured the spleen of individuals aged 2-9 years. Based on these observations, Serra do Navio village (prevalence and spleen rate = 0) was classified as non-endemic for malaria, Porto Terezinha (prevalence = 1% and spleen rate = 1%) as hyperendemic, and the other 2 villages, Colônia Aguã Branca (prevalence = 2% and spleen rate = 1%) and Amapá State, Brazil (prevalence = 1% and spleen rate = 1%) as meso-endemic areas for malaria. Reasons for the difference in endemicity in these villages in the same area were discussed.

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Anophelines infected with human Plasmodium in the Serra do Navio region of Amapá State, Brazil

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To determine the malaria endemicity in 4 adjacent villages of the Serra do Navio region (Serra do Navio, Colônia Aguã Branca, Porto Terezinha and Arrependido), Amapá State, Brazil, we carried out a blood film survey and measured the spleen of individuals aged 2-9 years. Based on these observations, Serra do Navio village (prevalence and spleen rate = 0) was classified as non-endemic for malaria, Porto Terezinha (prevalence = 1% and spleen rate = 1%) as hyperendemic, and the other 2 villages, Colônia Aguã Branca (prevalence = 2% and spleen rate = 1%) and Arrependido (prevalence = 1% and spleen rate = 1%) as meso-endemic areas for malaria. Reasons for the difference in endemicity in these villages in the same area were discussed.

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