

*Phlebotomus martini*, a sandfly belonging to the *Synphlebotomus* group, is the main vector of the fatal disease kala-azar in Kenya. The breeding sites of this species have so far remained a mystery, and immature stages have not yet been observed in nature. Collection of adult *P. martini* was done through human-bait. Immature stages, obtained from these catches, were reared to the adult stage in the laboratory for the first time. The size and the rate of development of the various stages were studied at 27°C and 100% r.h. The mean duration from egg to adult was 56.1 days. Observations were made on the biting behaviour of sandflies during human-baiting. Preliminary observations of natural enemies encountered in the rearing cages are described.