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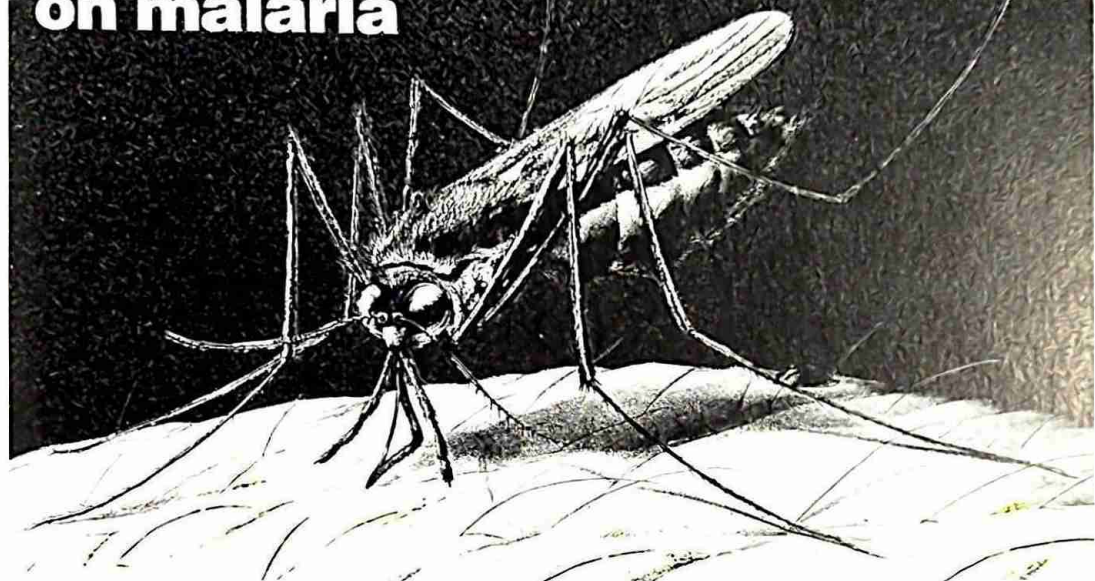
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References: 1. Patton CL, Spielman A, Perrone JB, et al. Diagnosis of malaria using quantitative buffy coat (QBC) tubes. Third Annual Conference on Malaria and Babesiosis, Academy of Tropical Medicine, August 1987. 2. Spielman A, Perrone JB, Tavechaisri A, et al. Malaria diagnosis by direct observation of centrifuged samples of blood. *Am J Trop Med Hyg*. 1988;38(4):117-117. 3. Levine TA, Warshaw SG, Patton CL. Detection of malarial parasites using quantitative buffy coat (QBC) tubes. *Parasitol Today*. 1989;5(4):132-134. 4. Hoffman LS, Long GW, Obenhi H, et al. Rapid diagnosis of malaria by a new technique: staining of centrifuged parasites. *Lancet*. 1989;1(871):9. 5. Levine TA, Warshaw SG. A new technique for examining blood. *Am Soc*. 1988;74(6):185-191.

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