

Bimodal biting rhythm of Black flies (Diptera: Simuliidae) in south-eastern Nigeria

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The study was aimed at elucidating the longitudinal biting rhythm of black flies and entomological indices of onchocerciasis transmission. Human landing catch method was used to catch *Simulium* for 52 weeks. A total of 6,517 females were caught. The annual biting rate (ABR) was 23,204 bites per person per year. The highest monthly biting rate was 5,677 bites per person per month in January 2006. The circadian biting activity showed a primary peak at between 10.00 and 11.00 hours and a secondary peak between 15.00 and 17.00 hours. Two peaks of Infective biting were observed between 8.00 and 11.00 hours, and between 15.00 and 18.00 hours. About 25% of the dissected flies were parous, and 2.9% were infective with an overall L3 load per fly of 1.9. The annual biting rate (ABR) was 23,504 bites per person per year. The annual transmission potential (ATP) was 663 infective bites per person per year. The transmission of onchocerciasis occurred mainly in the dry season (November to March). There was sustained on-going transmission of onchocerciasis in the study area. There is need for a renewed definite action towards its mitigation.

Biography

Emmanuel Uttah has completed his Ph.D. in 1998 from collaboration between DBL-Institute of Health Research and Development, Charlottenlund, Denmark and the University of Port Harcourt, Nigeria. He is the Head of Department of Biological Sciences, Cross River University of Technology, Calabar, Nigeria. He has published more than 48 papers in reputed journals and has been serving as an editorial board member of repute in some local and international journals.

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