

Paper 17 of 18

The Ecology and Biting Activity of Blackflies (Simuliidae) and the Prevalence of Onchocerciasis in an Agricultural Community in Ghana

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Abstract

Field studies on the ecology and biting activity of blackflies (Simuliidae), as well as an assessment of the prevalence status of Onchocerciasis diseases were conducted in a rural forest area of Ghana. It was observed that the blackfly vector *Simulium damnosum s.l* was the most abundant and widely distributed of the species encountered. The pH and flow rate of the breeding sites were significant factors influencing the distribution of the flies. The pattern of biting exhibited by *S. damnosum s.l* was bi-modal with morning and late afternoon peak activity. The savanna forms of the *S. damnosum s.l* were found to occur in the area representing 0.0–0.26% of the catch. The disease is endemic with the prevalence rate ranging between 0.0001 and 12.9% in the district and the frontline communities having infection rates exceeding 60%.