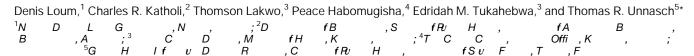
Evaluation of Community-Directed Operation of Black Fly Traps for Entomological Surveillance of O vv Transmission in the Madi-Mid North Focus of Onchocerciasis in Northern Uganda



INTRODUCTION

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Mexico.^{29,30} However, in a test of the ability of community members to operate the EWTs conducted in Mexico, the number of flies collected by the traps was found to be significantly less than when the traps were operated by trained entomologists. Despite this, the traps, when operated by the community members, were effective enough to collect a sufficient number of flies to certify the elimination of transmission in two communities.³¹ However, the effectiveness of the EWT, when operated by community members, has not been evaluated in Africa. Here, we report the results of a trial to evaluate the effectiveness of the EWT when operated by members of an endemic community in an onchocerciasis focus in northern Uganda.

MATERIALS AND METHODS

 \mathbf{S}_1 **d i e.** These studies were conducted in the Madi-Mid North focus of onchocerciasis in northwestern Uganda (Figure 1). Two communities, Laminatoo and Gonycogo, located along the Ayago River were included in the study. Both communities are endemic for onchocerciasis and both are located within 3 km of a breeding site for S v v

1) sweat-impregnated socks worn by one of the volunteers for 3 days before use; 2) the BG Sweetscents human bait lure (Biogents AG, Regensburg, Germany); and 3) aroma beads saturated with a mixture of human sweat components shown to be attractive to S. v s.l., as previously described.³⁴

Selec ion and aining of comm ni ol nee. Four days before the trials began, team members visited each of the two communities and consulted with the village leadership regarding the work to be undertaken. Once the consent of the leaders was obtained, the population of the village was asked to convene at a central location. The purpose of the study was then explained to the population and volunteers enlisted to help with the study. Two days later, the volunteers from both communities convened at a central school, where the investigators conducted training sessions on the activities to be undertaken (e.g., setup and maintenance of the traps, collection and storage of flies from the trap surfaces, and how to conduct human landing collections). In the following week, the volunteers were





27,119 vectors in Gonycogo in 44 collection days. These numbers far exceed the minimum of 6,000 flies per community required to meet the current WHO guidelines for verifying suppression and interruption of transmission.