

Tsetse R01 Progress Report

Sampling and Databasing

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Sampling

Study sites

The surveys were done in the districts of Kole, Oyam, Nwoya, Amuru, Adjumani, Moyo and Arua in northern/Northwest Uganda. Additional information on tsetse population distribution was obtained from the District Entomology Offices of the relevant districts.

Data collection

Trapping for tsetse flies were carried out using biconicals traps (Challier, A and Laveissiere 1973). The coordinates for each trap site were taken using a hand-held GPS. Vegetation types and human activities at the trapping sites were also recorded. Each village is at least 5km apart; a single village is taken to be a trapping site (with a number of traps deployed in each).

Dissection and examination

Trapped flies were identified, sexed, counted, recorded and transported to a field dissection site. Live flies were dissected and examined microscopically to determine the presence/absence of trypanosomes in the midguts/salivary glands. The midguts, fly carcass, reproductive parts, and heads were then preserved in parafilm-sealed and labeled cryotubes in either 90% ethanol or RNA-preservation solution for further molecular studies.

Results

Kole District (2014-03-22 to 2014-03-30)

Five villages were surveyed (Olepo [OLE], Mwanya [MWA], Akayo-debe [AKA], Aputu-Lwaa [APU], and Ocala [OCA]) with a total of 40 traps. 1227 *Gff* were captured (564 M and 663 F) and yielded five infected individuals (1.2% estimated infection rate).

Oyam District (2014-05-17 to 2014-05-22)

Nine villages were surveyed (Ocala [OCA], Odworo [OD], Alege [ALE], Acankoma [ACA], Oguk [OGU], Agoba B [AG], Abok[ABO], Ocol [OCL] and Opuyu [OPU]) with 32 traps. 715 *Gff* were captured (298 M and 417 F) and yielded 10 infected individuals (3.0% estimated infection rate).

Oyam and Kole Districts (2014-07-14 to 2014-07-21)

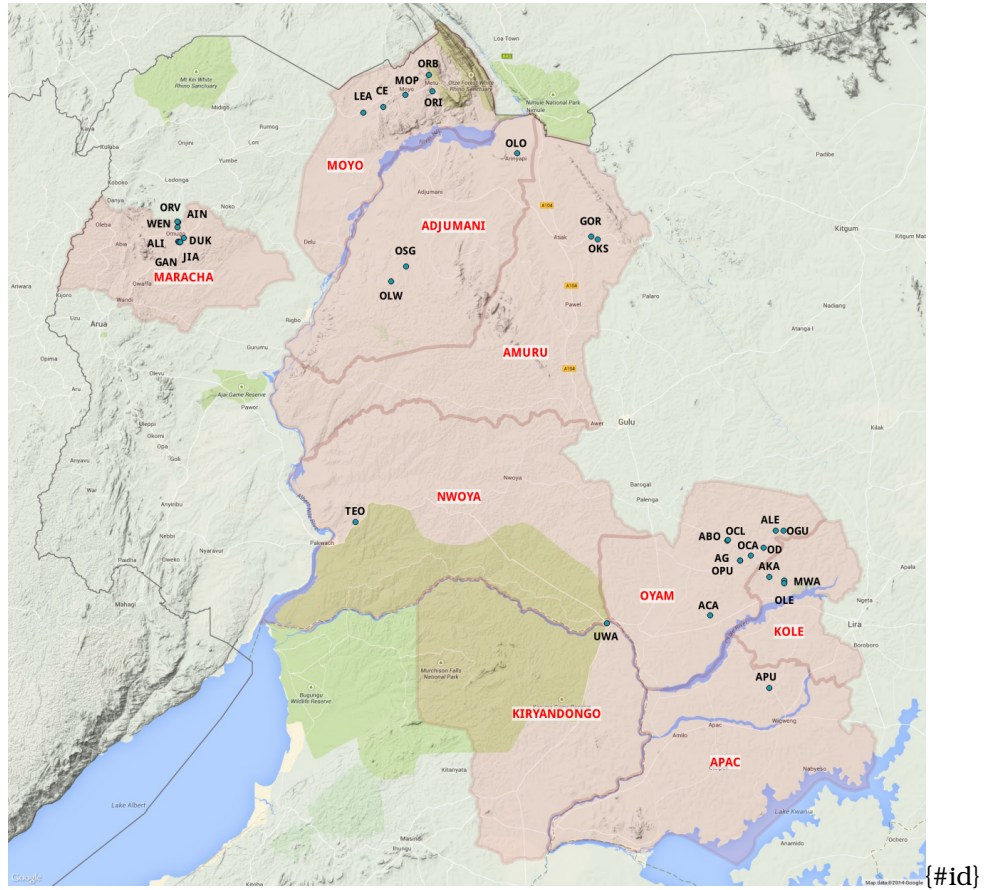
This survey targeted sites that produced infected flies from the previous surveys. The field team deployed 27 traps across four villages that were divided between the two districts:

Oyam:

- Ocala [OCA]
- Odworo [OD]
- Acankoma [ACA]

Kole:

- Akayodebe [AKA]



References

Challier, A and Laveissiere, C. 1973. "Un nouveau piège pour la capture des glossines (Glossina: Diptera, Muscidae): description et essais sur le terrain." *Cah ORSTOM Ser Ent Med Parasitol* 11: 251-62.