Parasitological Prevalence of Bovine Trypanosomosis in Kubo Division of Kwale County of Costal Kenya N. Mbahin et al.
icipe – International Centre of Insect Physiology and Ecology
The number of people at risk is 65 million.

The number of people infected is between 300,000 and 500,000.

African trypanosomiasis claims 50,000 human lives every year.

The area of Africa continent affected is 9 million square kilometres.

Thirty-six countries are affected by African trypanosomiasis.
The number of cattle at risk is 50 million.
The number of vaccine doses administered annually is 35 million.
African trypanosomiasis claims 3 million cattle every year.

Losses in agricultural: US$ 4.5 billion per year.

To control vector icipe develops trapping technology and tsetse repellent technology.
Both are environmentally friendly & can be integrated.
METHODOLOGY

Parasitological & entomological baseline data collection in Shimba Hills (Kwale District)
Parasitological baseline data collection in Shimba Hills

- cross-sectional survey
- 584 adult cattle were examined
- Ten different Locations
- Parasitological method was used for blood diagnosis
METHODOLOGY

Entomological baseline data collection in Shimba Hills

- Two traps were deployed by location,
- Traps were checked every day for three days,
- Records were kept of the number, species and sex of the tsetse captured in each trap,
- A daily mean Index of Abundance (IA)
RESULT

Overall Parasitological Prevalence

Trypanosome prevalence in cattle (%)
RESULT

Types of infections

- T. congolense: 61.1
- T. vivax: 38.9
RESULTS

Parkecell Volume of negative and positive animals

![Bar chart showing the number of observations for PCV negative and positive animals across different PCV categories: 13 or less, 14-18, 19-23, 24-27, 28-32, 33-37, 38-42, and 43 or more. The chart indicates that the majority of observations fall in the PCV 28-32 and 33-37 categories for both negative and positive animals.](chart.png)
## RESULTS

**Entomological baseline data collection**  
**Tsetse flies species in Shimba Hills**

<table>
<thead>
<tr>
<th>District</th>
<th>Tsetse fly species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kwale</td>
<td><em>G. pallidipes</em></td>
</tr>
<tr>
<td></td>
<td><em>G. brevipalpis</em></td>
</tr>
<tr>
<td></td>
<td><em>G. austeni</em></td>
</tr>
</tbody>
</table>

*G. pallidipes*  
*G. brevipalpis*  
*G. austeni*
RESULTS

Mean apparent density of tsetse fly

- G. pallidipes: 30
- G. austeni: 0.8
- G. pallidipes: 0.4
In view of the risk of trypanosomosis,

Division was selected for the large scale field trials of the new tsetse repellent technology validation.
ACKNOWLEDGEMENT

AU-IBAR & EC
Thank you!