

## **Horse fly taxonomy: an integrated approach**

Tabanidae, commonly known as horse flies, are a diverse family of flies, comprising approximately 4400 species distributed worldwide. They are both pollinators and vectors of viruses, bacteria, protozoans and filarial worms. Despite their importance as pollinators and vectors of disease-causing pathogens, the taxonomy of this family is complicated and not well resolved - this is particularly true of the Afrotropical fauna. Efforts regarding the higher classification have revealed paraphyly in the classification of subfamilies and tribes alike. The Tabaninae, comprising over 70% of described horse fly species are especially misunderstood with regards to the taxonomy. This is mostly due to a single genus, *Tabanus* which is in special need of reclassification. As *Tabanus* species have been shown to be vectors of pathogens, it is important for farmers and veterinarians to be able to identify these species. This is not possible with the current taxonomic confusion. This project aims to clarify the taxonomy of *Tabanus* by phylogenetic analysis, providing new occurrence records and producing species pages which will assist with identification of these flies. Baseline knowledge in the form of accurately identified occurrence records, supported by a sound taxonomic backbone, have the potential to reduce financial losses experienced by farmers due to pathogens spread by tabanids.