

## POSTER ABSTRACT

**THYSANOPTERA DIVERSITY IN THE SOUTH AFRICAN SUGAR INDUSTRY**WAY MJ<sup>1</sup>, MWELASE ZI<sup>1</sup>, THABETHE V<sup>2</sup> AND HARRACA V<sup>1,2</sup><sup>1</sup>South African Sugarcane Research Institute, P/Bag X02, Mount Edgecombe, 4300, South Africa<sup>2</sup>School of Life Sciences, College of Agriculture, Engineering and Science, University of KwaZulu-Natal, Pietermaritzburg Campus, P/Bag X01, Scottsville 3610, South Africa  
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vincent.harraca@sugar.org.za**Abstract**

Invasion by sugarcane thrips, *Fulmekiola serrata* (Kobus) (Thysanoptera: Thripidae), into the South African sugarcane industry prompted a study of the diversity of Thysanopteran species present in fields in the Umfolozi district of KwaZulu-Natal. Aerial populations were sampled on sticky card traps placed in the interrows of sugarcane fields, and leaf spindle communities were determined from laboratory extraction techniques. Thrips morphological features such as body length and antenna shape were discerned from digital images taken under a dissecting microscope. A cluster analysis was performed to assign groupings based on similarities in the morphometric study. Preliminary data indicate there are 10 groups present in sugarcane fields. These data provide a foundation for developing a key for Thysanoptera occurring in the South African sugar industry that will be used to assist researchers. It is important to study the taxonomy of this group because some of the thrips species present in these sugarcane fields do not attack the crop, and certain species are predacious. If numbers of these particular species can be enhanced, they might impact by suppressing numbers of the sugarcane thrips pest.

*Keywords:* *Fulmekiola serrata*, taxonomy, digital images, morphometric analysis, thrips community