POSTER ABSTRACT

CROP LOSS DUE TO THRIPS, *FULMEKIOLA SERRATA* (KOBUS) (THYSANOPTERA: THRIPIDAE), IN PLANT AND RATOON SUGARCANE CROPS

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Abstract

Sugarcane thrips (*Fulmekiola serrata*) persists in the South African sugarcane industry. In two field trials conducted from 2008 to 2011 in annual crops grown under rainfed conditions at Gingindlovu in KwaZulu-Natal, South Africa, populations of sugarcane thrips were reduced and final yields of plant and first ratoon crops were higher in plots treated with furrow and foliar applications of the insecticide imidacloprid compared with untreated controls. Yield increases of 16-28% were measured in plant crops, and 4-13% in the first ratoon crops. These findings provide evidence that this pesticide can have a two-year residual effect in suppressing thrips when applied in the furrow. However, further research is required to determine commercial application rates that would be economically viable, since in these trials highly concentrated and repeated applications were used. It is encouraging that the greatest impact on yield was measured in the plant crops, which usually suffer the highest pressure from thrips. The numbers of thrips were not reduced in the second ratoon crops, and yields were lower in plots that had received the highest dose compared with the untreated plots. This aspect requires further investigation.

*Keywords*: sugarcane, thrips, yield loss, field trials, imidacloprid