

POSTER SUMMARY

UPDATE ON NEMATICIDE SCREENING WITHIN THE SOUTH AFRICAN SUGAR INDUSTRY

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Abstract

Since its discovery in 1965, aldicarb has been the nematicide of choice worldwide on a number of crops. Although its withdrawal in 2011 left many growers disappointed, it did provide an opportunity for the revival of the nematicide industry with new active ingredients coming onto the market for the first time in 20 years. This has resulted in more options currently being available for growers. There has also been a shift in nematode management strategy with the movement away from highly toxic red and yellow label chemistries. Sustainable, integrated management systems including environmentally benign blue label chemistries and biological control options are now being encouraged. Screening of new nematicide chemistries at the South African Sugarcane Research Institute began in 2012 with a large number of products being tested in a series of both pot and field trials. A set of rainfed field trials, to test five different unregistered products was planted in 2016 at Umfolozi, the North Coast (Umhlali) and Midlands (Eston) regions of the South African sugar industry. Variety N23 was used in Umfolozi and N52 at Umhlali and Eston. RV yields obtained after treatment with the different products were compared with an untreated control and the current industry standards of Vydate® GR and Curaterr®. Data were subjected to a REMYL of multiple experiments, and significant differences between treatments determined at the 5% significance level using the Sidak test. A significantly increased RV yield was recorded for one product compared with the untreated control and it was not significantly different to the industry standards. This product has since been registered for use in sugarcane. Factors affecting yield responses and product choice will be discussed in the poster.

Keywords: nematicide screening, nematode management, new nematicides