

## POSTER SUMMARY

**IMPORTED SUGARCANE VARIETIES:  
LIFE AFTER QUARANTINE**

VAN ANTWERPEN T, ZHOU M AND RUTHERFORD RS

*South African Sugarcane Research Institute, Private Bag X02, Mount Edgcombe, 4300, South Africa**Tania.vanantwerpen@sugar.org.za Marvellous.Zhou@sugar.org.za**Stuart.Rutherford@sugar.org.za***Abstract**

The earliest known sugarcane grown in southern Africa was found in the 17th century along the coast of northern KwaZulu-Natal. This cane was believed to have entered Mozambique from Indonesia. According to Zhou (2013) the first sugar in South Africa was produced in 1852 and was derived from varieties of noble cane (*Saccharum officinarum*). In the early years South Africa was dependent on imported sugarcane varieties but because of disease susceptibility the South African Sugarcane Research Institute (SASRI) started to breed new varieties suited specifically for South African growing conditions. Although almost 60 South African sugarcane varieties have since been bred at SASRI, exchange of sugarcane varieties with many different countries, including Australia, the United States of America, Colombia, Brazil, Barbados and Zimbabwe is ongoing, mainly to increase the genetic pool of parents for breeding purposes. Imported varieties are also evaluated as potential commercial varieties. Imported varieties are kept in the SASRI quarantine glasshouse for a period of two years before being released to a post-quarantine area for another two years. During this period the clones undergo a series of stringent tests for exotic diseases and pests. After a total of four years since the import date, clones are released to the plant breeding programme. This poster shows the percentage of imported varieties that are eventually released from quarantine and how many were utilised as parents in the breeding programme or as commercial varieties over the past 20 years. The poster also describes new strategies for use in future imported sugarcane varieties.

*Keywords:* sugarcane, breeding programme, quarantine, imported varieties