



# SOUTH COAST EXTENSION NEWS



## RESULTS OF THE SCOTTBURGH VARIETY TRIAL FOR COASTAL GROWERS (Plant crop)

### ***Trial Profile***

***Soil Parent Material:*** Dwyka Tillite

***Soil form:*** Glenrosa

***Soil System:*** Coastal sands

***Altitude:*** 91 m

***Plant Date:*** 19 January 2023

***Harvest Date:*** 25 April 2024 (Plant crop)

***Aspect:*** Md-slope – North and East facing

***Number of Varieties:*** 14

***Trial layout:*** Each variety replicated 4 times

This variety trial was established on 19 January 2023, and the plant crop was harvested on 25 April 2024, at 15 months. The objective of this trial was to compare the newer SASRI varieties with the commonly grown standard varieties on the coast: N36, N39, and N41. The long-term plan is to harvest the trial at 14 months to determine which varieties are better suited for the area at that harvest age.

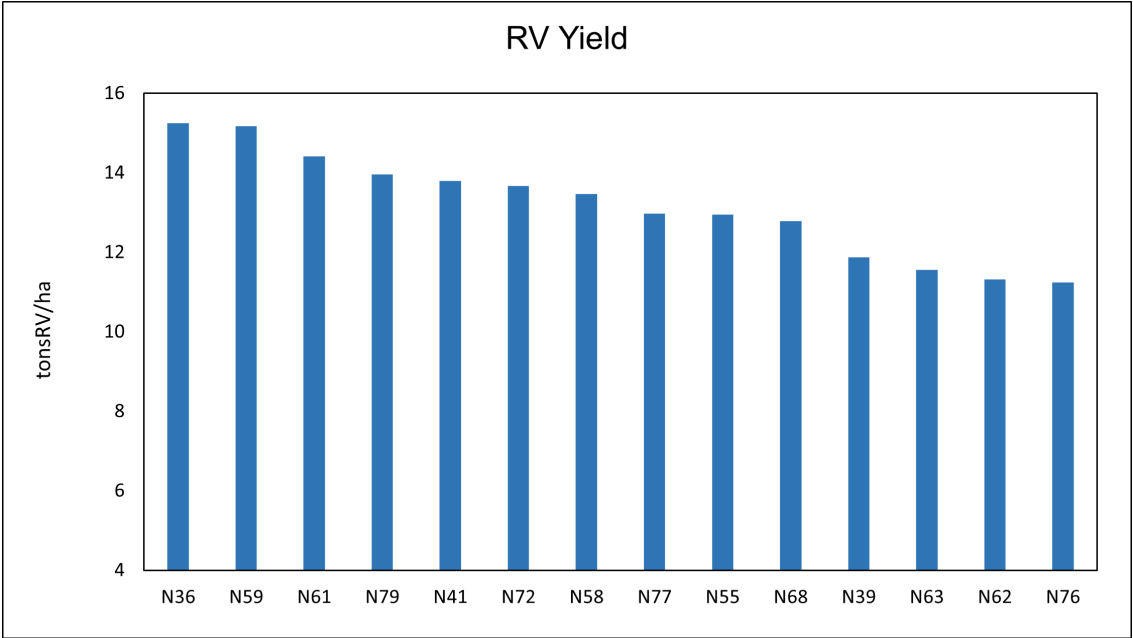
Dryland cane, unlike irrigated cane farming, can result in significant variations

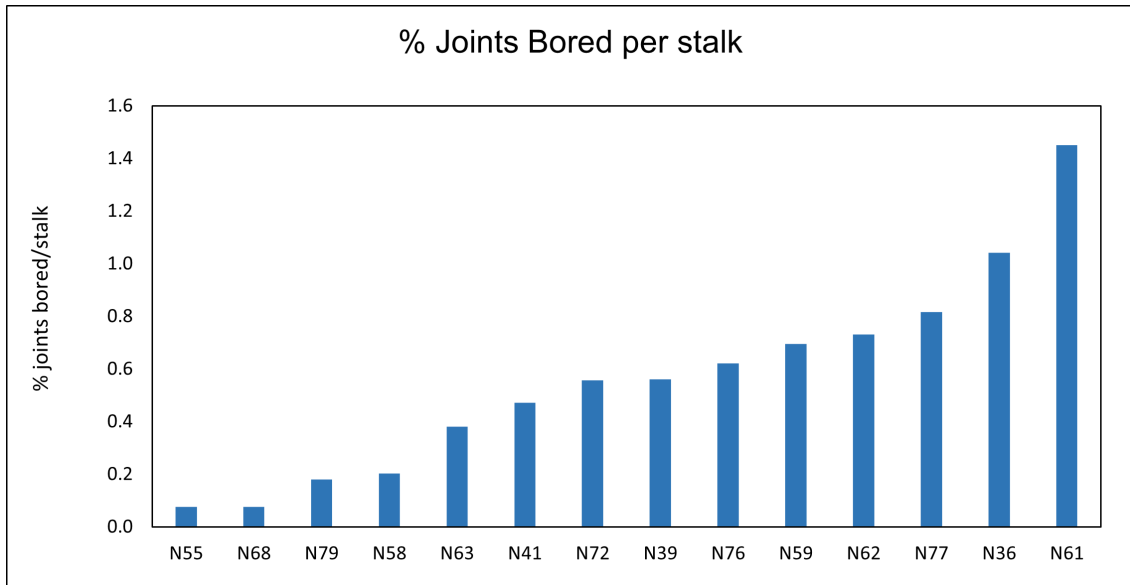
in yield due to erratic rainfall. For example, during the life of this plant crop, the rainfall from January 2023 to December 2023 was 116% of the long-term mean (LTM). From January to April 2024, the rainfall was also above LTM (101%); however, included in this period were February and March, both very dry months.

This uneven distribution further emphasizes the variability of rainfall and the reason why the following results should be viewed as trends, supporting the many other factors that will eventually provide enough evidence for reliable recommendations.

### RESULTS

Results of RV yield (which is a product of cane yield and RV% and % of joints bored (which is measure of eldana damage) are provided below.





**N36** produced the highest tons RV yield in the plant crop but, also had the second highest % joints bored indicating its relative susceptibility to eldana. This variety is more suited to high potential soils and low lying, valley bottom growing conditions and is not recommended for carryover.

**N59** ranked 2nd in the trial. This could be attributed to a combination of very high cane yield (where it was 1st in the trial), as well as its RV% (where it was 5th). N59 is suited to average to high potential soils on the coast for long cycle harvesting and for the hinterland areas, also on a longer cutting cycle. Statistically the RV yields of N36 and N59 were similar.

**N61** had the third highest RV yield in the plant crop. This could be attributed to a combination of an above average cane yield and relatively high RV% (where it was 4th). This variety is recommended for sandy soils in the hinterland and inland growing condition at a cutting age of 18 to 22 months. Lodging becomes severe when planted on good soils.

**N79** is a new variety which is still in bulking in the Sezela area and has not yet been released to growers. In this trial, N79 had the fourth highest cane yield at

an average RV%. It is a coastal short cycle variety which so far appears better suited for high potential soils, but might also perform well on average potential soils.

**N41** also performed well and had the fifth highest RV yield. This variety is arguably the most widely adapted commercial variety in the industry that performs well under rainfed and irrigated conditions. Good RV yields are achieved under waterlogged and heavy clay soil conditions. N41 generally tends to perform poorly when aged beyond 16 months.

**N72** is recommended for the coast to be planted on average and high potential soils on a shorter cutting cycle of 12 to 14 months.

**N58** also performed very well and was ranked 7th in RV yield. From previous observations, this variety does consistently well under low potential growing conditions on the coast, cut on a longer cycle. N58 has thin stalks and a high stalk population, aiding the variety to ratoon well. Its exceptionally low % joints bored in the plant cane was encouraging, indicating its lower susceptibility to eldana.

**N55** had the highest RV% and least susceptibility to eldana of all varieties in the trial. The variety has relatively low population of thicker stalks with an open canopy. It is suited for the coastal and hinterland areas on average and high potential soils.

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