



SOUTH COAST EXTENSION NEWS



FURTHER RESULTS FROM THE DUMISA VARIETY TRIAL

In December 2019 I sent out a newsletter with the results from the Dumisa Variety Trial of the plant crop that was harvested in May 2019 at 18.8 months. The initial results gave us some confidence in the value of growing new varieties in the Hinterland, giving us valuable information on the performance of new varieties grown under these conditions in terms of RV% and tons cane yield, which combined give us tons RV per ha.

Here are the combined results of both plant and first ratoon crops of this same Dumisa Hinterland Variety Trial (planted in October 2017), and which was harvested for the second time in April 2021 at 23 months of age. The trial is on a Glenrosa form soil on Granite parent material. There are 20 varieties in the trial, replicated five times, resulting in 100 plots.

Note: *The trial was not sprayed for eldana control nor chemically ripened.*

RV YIELD

(Tons RV/ha- a product of cane yield and RV%)

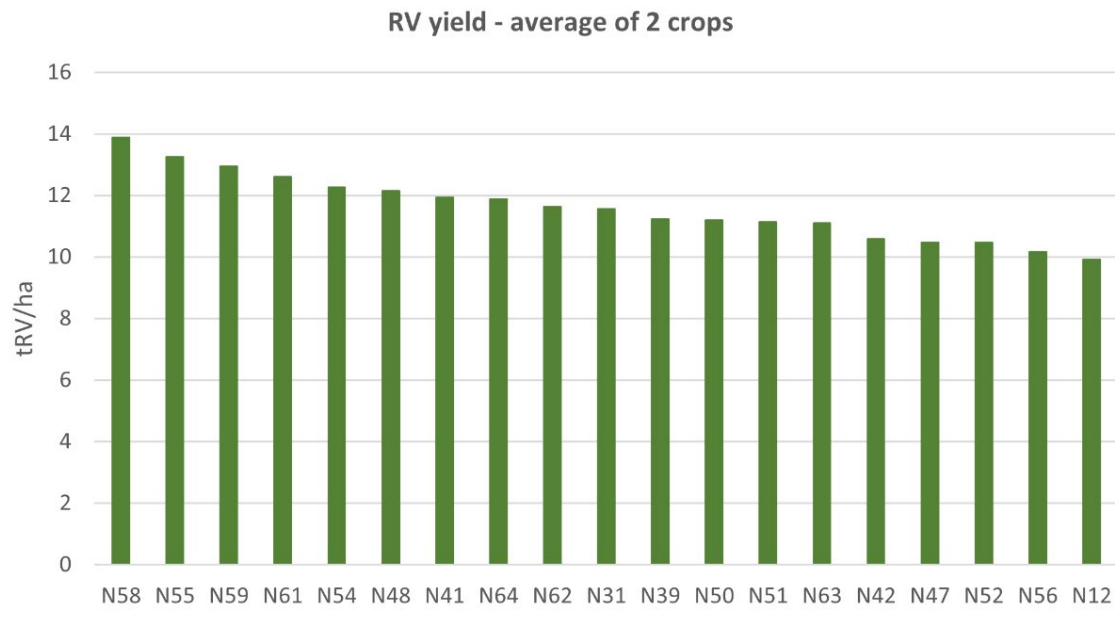


Figure 1: Varieties ranked according to RV yield, from the highest to the lowest.

Comments on the top five best performers

N58 had the highest RV yield, attributed to a combination of good RV% and a high cane yield. This variety is well suited for both coastal and hinterland conditions. Whilst N58 can perform on a wide range of soil types, it remains the 1st choice for shallow/ low potential soils where growing conditions are tough and eldana is a problem.

N55 and N59 ranked 2nd and 3rd in terms of RV yield. Much of the high RV yields on these varieties can be attributed to their high RV%. N55 and N59 are suited to both hinterland and coastal long cycle growing conditions.

N61 ranked 4th in the trial. It grew and canopied quicker than all the varieties in the trial, but it is prone to lodging. It is best suited to sandy soils in the mist belt

areas.

N54 ranked 5th in RV yield. This variety also recorded a combination of high RV% as and good cane yield. It is suitable for growing in the hinterland and mist belt regions on both high potential and sandy soils.

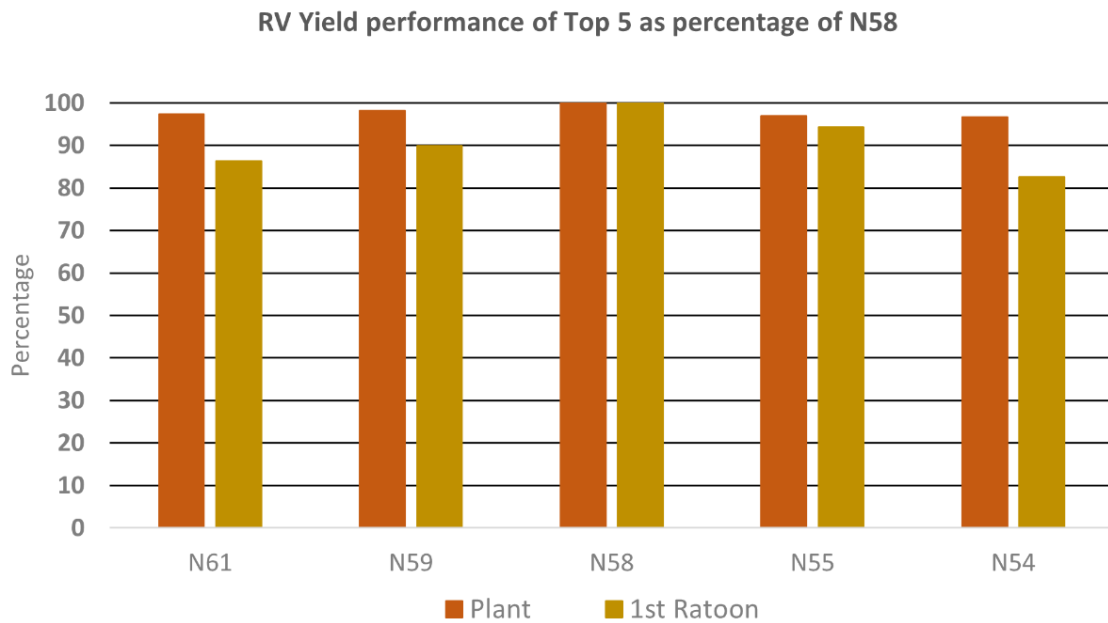


Figure 2: RV Yield performance of the Top 5, as a percentage of N58 for both plant (R0) and first ratoon (R1) crops.

N58 showed more consistency in RV yields in the plant and first ratoon crops, despite harvesting the first ratoon crop older than the plant crop. This variety's versatility when it comes to harvest cycle could prove useful to growers in managing cane grown in the hinterland.

Hinterland varieties like N62, N61, N54 and N52 showed a significant increase in RV yield when harvested at 23 months

For the other hinterland varieties like N58, N55 and N59, these had better RV yields when harvested at 19 months compared to the first ratoon harvest which

was at 23 months. This possibly indicates these variety's preference for a relatively shorter cropping cycle of around 18 months.

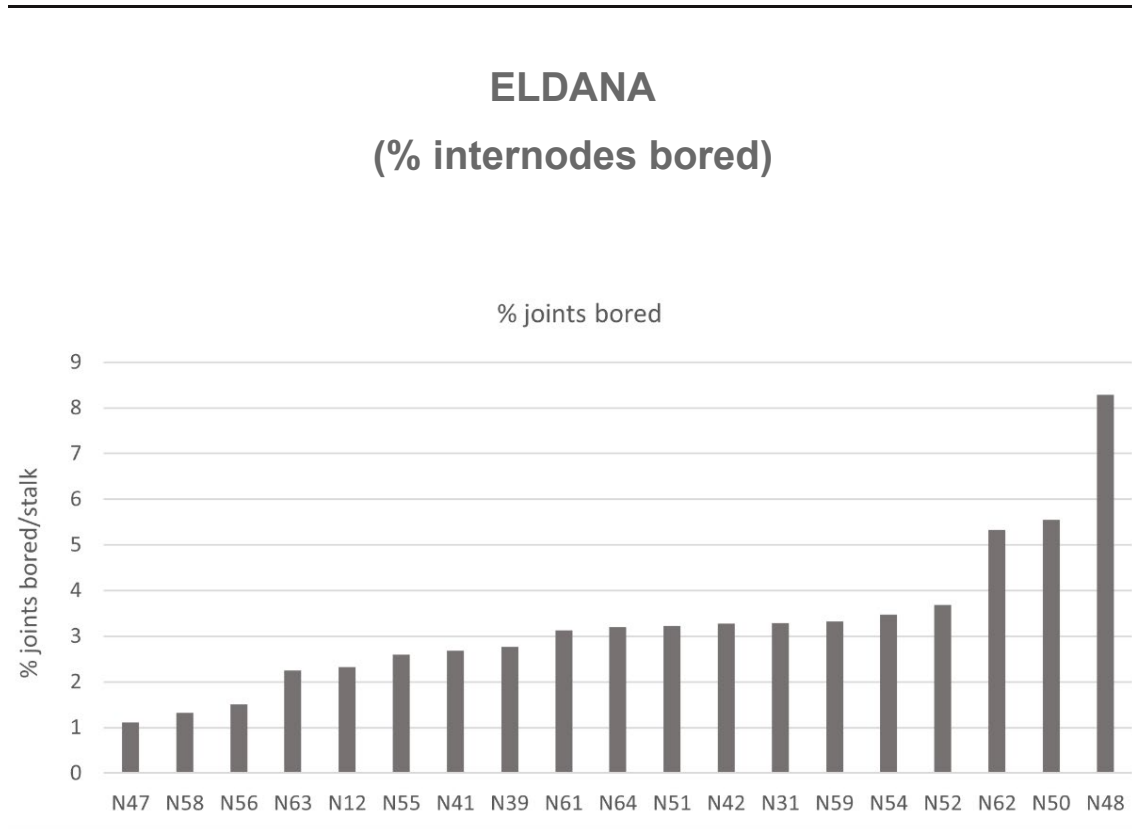


Figure 3: Varieties ranked according to % Internodes bored, from the least damaged to the most damaged.

N47 is intermediate resistant to eldana and this was confirmed in this trial on both plant and first ratoon crops where it had the least damage of all the varieties.

N58 did not only have high RV yields but it also showed very good eldana resistance.

It is worth mentioning that the coastal varieties recorded relatively lower levels of eldana damage compared to mist belt varieties. Varieties are only approved for release in the coastal areas if they show some resistance to eldana.

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