



LOWER SOUTH COAST EXTENSION NEWS



RESULTS OF THE PADDOCK VARIETY TRIAL

The latest harvest involved the third ratoon crop of the hinterland variety trial, which was initially planted in September 2017. The trial underwent successive harvests, with the first in May 2019 at 20 months, followed by November 2020 at 18 months, then May 2022 at 18 months, and most recently on 13th November 2023, at 17 months.

The trial site is in Paddock, characterised by a Cartref soil form, with the parent material identified as Natal Group Sandstone. This trial accommodates 20 varieties, encompassing coastal short-cycle, coastal long-cycle, and inland varieties. The trial consists of five replications, totaling 100 plots.

The results of the combined analysis (Plant, 1st ratoon, 2nd ratoon, and 3rd ratoon) are shared below, showing cane yield (tons cane/ha), RV%, and RV yield (tons RV/ha).

RV yield is the most important parameter to look at, as it is a product of both cane yield and RV% and is closely related to sugar yield (tons ERC).

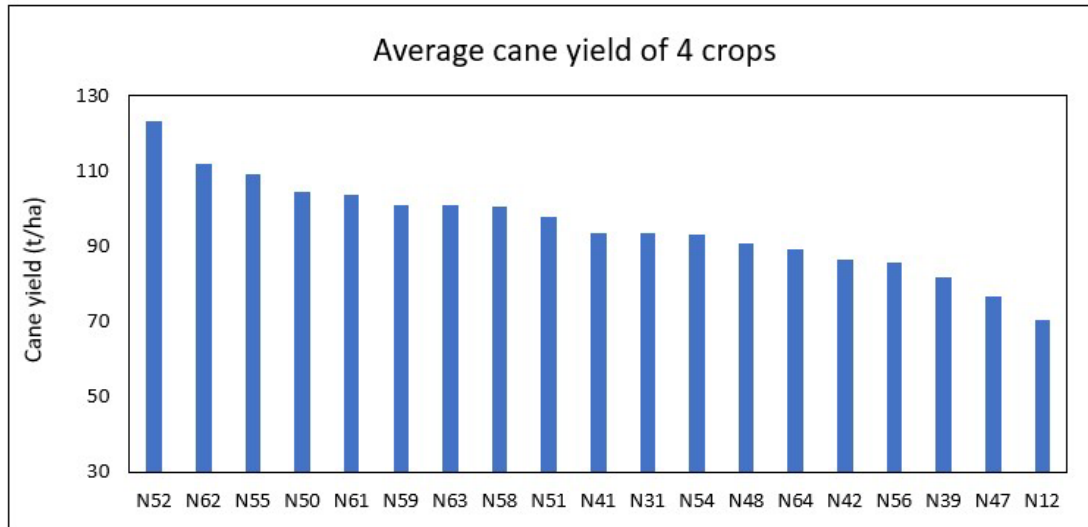


Figure 1: Average cane yield (t/ha) over 4 crops.

N52 showed the highest average cane yield over the four crops. It is a very high yielding variety and is suited to average potential soils. This has been consistent from the 1st ratoon crop. N52 is, however, prone to lodging.

N62 had the second highest cane yield across four crops. It had the highest yield on plant cane (harvested at 20 months) and the yields were lower when harvested younger. This is an inland variety, suited to harvesting older than 18 months.

N55 ranked 3rd in terms of cane yield. It is a coastal long cycle variety and suited to harvesting between 15 to 18 months.

N12, a widely grown variety in the area, ranked last, mainly because of the harvesting age of this trial. N12 is bred for harvesting at 22 to 24 months.

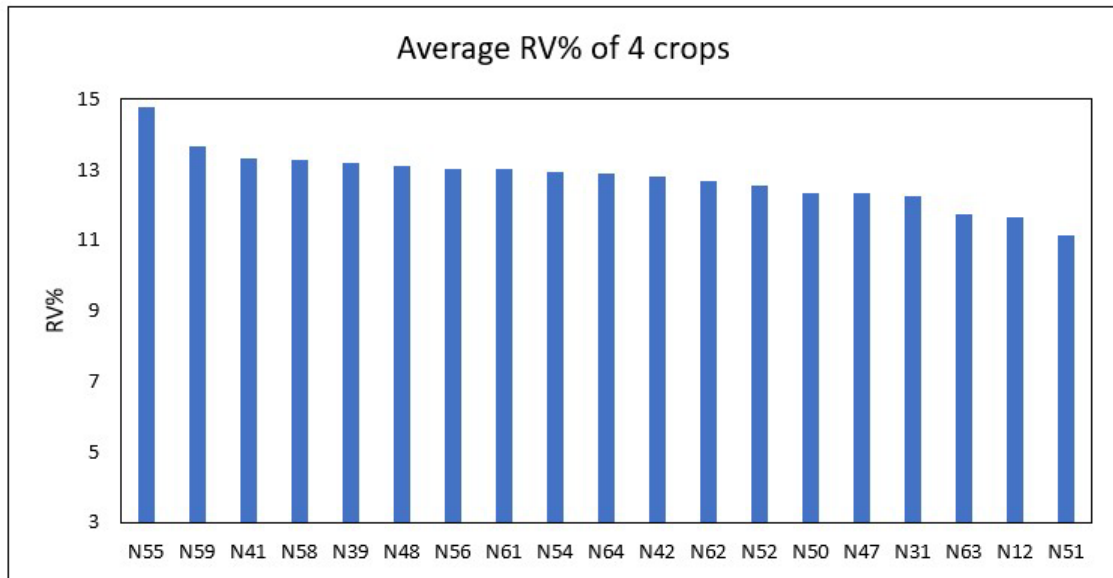


Figure 2: Average RV% over four crops.

N55 ranked the highest in terms of RV%. Its high RV content has been consistent across all four crops. This was observed in other trials in the area.

N59 and **N41** ranked second and third respectively. Both these varieties are known to be high in sucrose. N59 is a coastal long cycle variety and is suited for harvesting between 15 and 18 months, especially in these hinterland conditions.

It's interesting to note that **N62** and **N52** (which had the highest cane yields), ranked 12th and 13th respectively in terms of RV%.

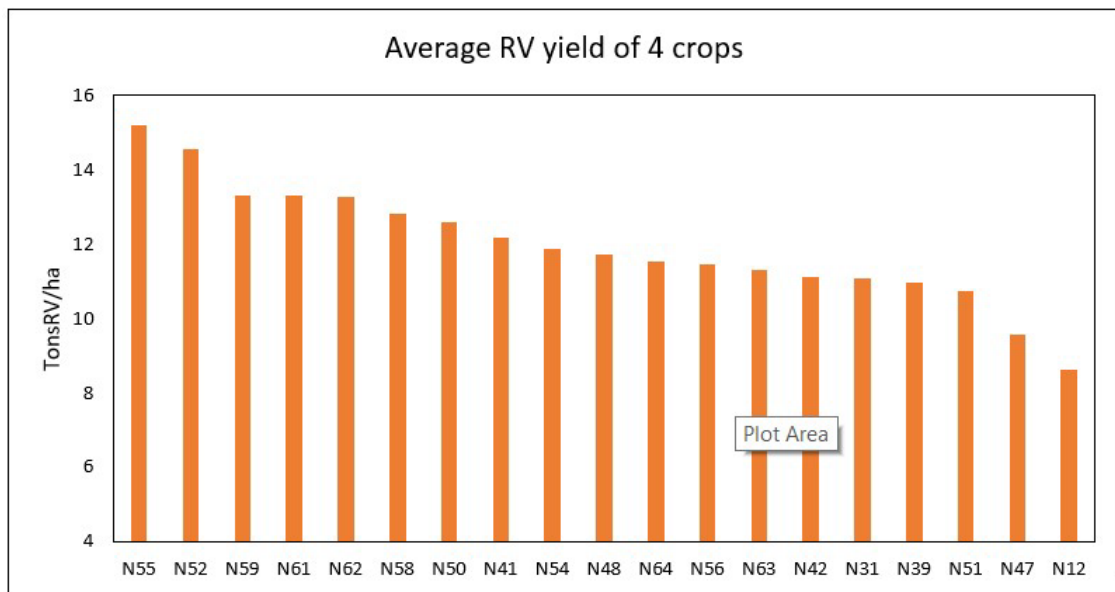


Figure 3: Average RV yield over four crops

As mentioned earlier, RV yield is the most significant parameter to consider.

N55 had the highest RV yield, attributed to its RV % (highest in the trial) as well as its cane yield (3rd highest in the trial). This variety is also highly resistant to eldana.

N52 ranked second in terms of RV yield, and this is mostly attributed to its high cane yield. There was no significant difference observed in performance when harvested in May versus when harvested in November, but it is recommended to harvest this variety during dry winter months, where natural ripening occurs, if no chemical ripening is applied.

N59 ranked third in terms of RV yield. N59 is another variety that consistently gives good cane yields and good sucrose. It is also prone to lodging and should not be harvested too old. It is susceptible to smut in the northern regions and it's important to monitor it closely.

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