



LOWER SOUTH COAST EXTENSION NEWS



RESULTS OF THE HARDING VARIETY TRIAL

The results from the third ratoon crop of the variety trial conducted in Harding have been gathered following its April harvest and subsequent analysis. This overview for inland growers, represents the combined analysis of the plant, first ratoon and second ratoon crops.

The trial itself was initiated on 8 October 2015, with subsequent harvests carried out on 21 August 2017 (after 22 months), 13 June 2019 (at 21.5 months), 12 April 2021 (after 22 months), and most recently on 12 April 2023 (after 24 months).

Trial Profile

Location: Pleasant View Farm

Soil Parent Material: Dwyka tillite

Soil form: Glenrosa (*The trial is on a slightly higher rainfall area and the soils are deeper because of the organic matter build-up.*)

Varieties: 20 varieties replicated 5 times which equals 100 plots.

Plot size: 6 rows of 10m length at 1m row spacing.

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

INTERPRETATION OF RESULTS

Cane yield was determined by actual weighing of net plots (4 Rows by 10m) and RV% was measured at the SASRI sucrose laboratory.

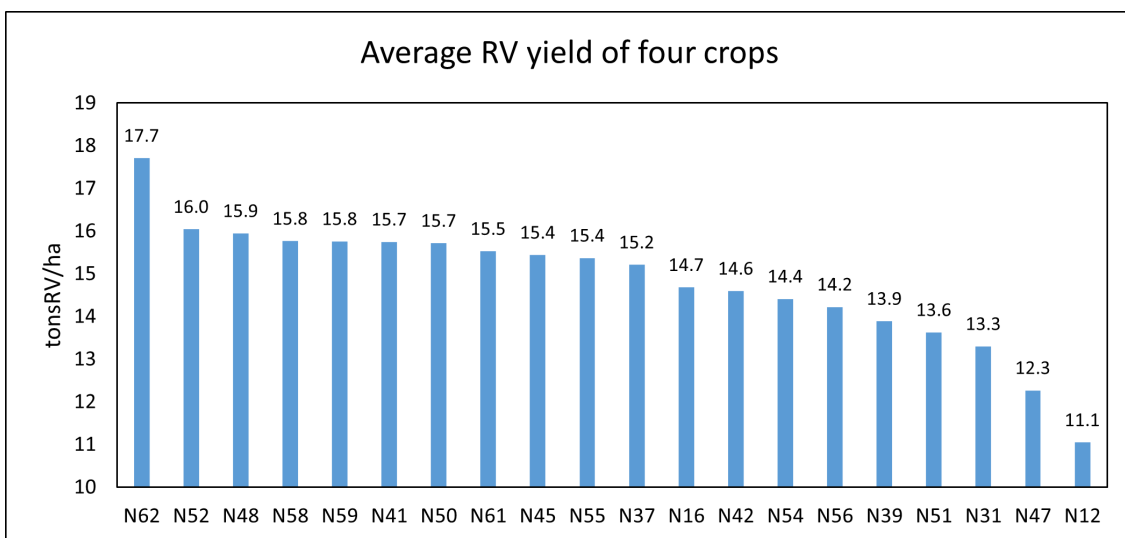


Figure 1: Varieties ranked according to RV yield, from the highest to the lowest for all varieties over three crops. N62 was significantly higher than the rest.

RV yield (a product of cane yield and RV%) was calculated using the mentioned parameters and the results discussed here will be the RV yield for combined (plant + 1st ratoon + 2nd ratoon + 3rd ratoon) analysis.

The ratooning ability of the five best performing variety in the trial, as well as three inland varieties, commonly grown in the area, are presented below:

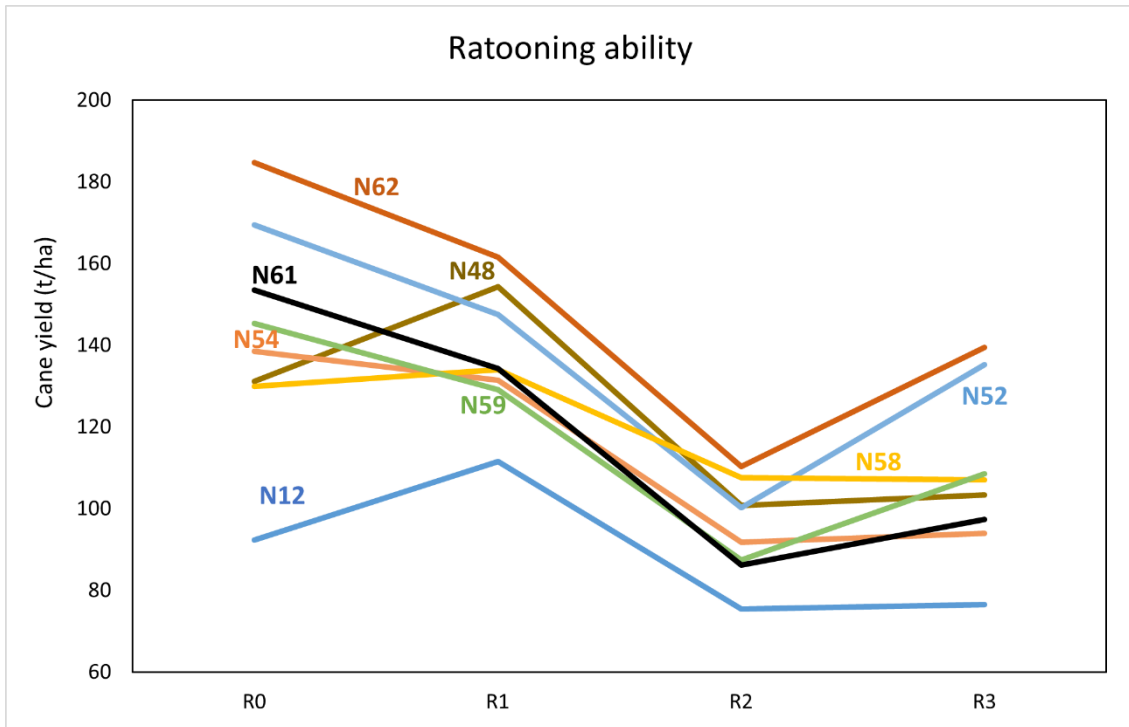


Figure 2: The ratooning ability of the top 5 varieties as well as three inland varieties in the trial.

COMMENTS ON THE TOP FIVE BEST PERFORMING VARIETIES

N62 (123% TRV of N54 and 160% TRV of N12) and **N52** (111% TRV of N54 and 145% of N12) were the top two varieties in terms of RV yield. This is attributed to their exceptionally high cane yields which were 67% and 55% higher than N12 for N62 and N52 respectively. Out of the 20 varieties in this trial, N62 and N52 ranked 18th and 19th respectively, in terms of RV%, further emphasizing the benefit of ripening these varieties. They also showed very good ratooning ability, when their yields increased on the 3rd ratoon after a drop in the 2nd ratoon due to dry weather conditions.

N48 ranked third in the combined analysis. N48 had a good balance of high cane yield, attributed to its very thick stalks, as well as good RV%. N48 has however shown a decrease in cane yield over the ratoons, implying a compromised ratooning ability. This was similar to N12 and N54.

N58 and **N59** ranked fourth and fifth respectively, in the combined analysis. It's important to note that these are Coastal long cycle varieties. They both have a good balance of good cane yields as well as good RV%. During the dry season (2nd ratoon crop), N58 was the least affected in terms of cane yield. These two varieties have a potential to be grown in the frost prone areas in Harding.

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