



# Information Sheet

## 13. VARIETIES

### 13.37 Variety N52

**Parents:** 77L1143 x N31. *Year of release: 2010.*

**Permitted Pest, Disease and Variety Control Areas:** Entumeni, Amatikulu, North Coast, Midlands North, Midlands South, Sezela, Umzimkulu.

*Recommended for planting in the midlands and hinterland regions and harvesting older than 18 months.*

#### BEST FEATURES

N52 is one of the highest cane yielding varieties for midlands growing conditions. It has very good general pest and disease resistance. Good RV yields have been achieved in water limited conditions compared with other varieties.

#### LIMITING FEATURES

N52 has very low sucrose content and poor quality. Lodging can be a major problem with N52.

#### YIELD AND QUALITY\*

	Age at harvest (Months)**		
	12-15	15-18	18-24
Tons RV	<b>Moderate</b> 113% of N12 104% of N31 93% of N39	<b>Moderate to high</b> 134% of N12 109% of N31 104% of N39	<b>Moderate to high</b> 135% of N12 114% of N31 87% of N48
Cane yield	<b>High</b> 142% of N12 132% of N31 104% of N39	<b>Very high</b> 152% of N12 115% of N31 127% of N39	<b>Very high</b> 142% of N12 114% of N31 98% of N48
RV %	<b>Very low</b> 82% of N12 81% of N31 89% of N39	<b>Low</b> 88% of N12 95% of N31 82% of N39	<b>Low</b> 94% of N12 100% of N31 89% of N48
Fibre content	<b>Moderate to low</b> 96% of N12 94% of N31 118% of N39	<b>Moderate</b> 105% of N12 100% of N31 99% of N39	<b>Moderate</b> 106% of N12 102% of N31 102% of N48

N52 is a very high cane yielding, low sucrose content variety. Very good RV yields have been obtained in the midlands on sandy and humic soils. Along the coast, N52 is generally outperformed by coastal varieties like N39 and N41 when harvested at 12 months of age. It is also not suited to growing in frost pockets in the midlands due to its very low sucrose content. N52 has produced higher RV yields during the drought compared with other varieties grown under the same conditions.

#### SOIL SUITABILITY

Soil Group*	Performance
Grey crest to midslope	Good
Grey lower slopes	Good
Humics	Very good
Red	Good
Black structured	Unknown

\*For soil forms that fall within these groups consult SASRI's Soils Bulletin or your local Extension Specialist

#### AGRONOMIC CHARACTERISTICS

Germination	Rapid and reliable
Stalk Population	High
Stalk Height	Very tall (>200cm)
Canopy speed	Rapid and reliable
Flowering	Rare
Lodging	Severe (especially when aged)
Ratoon regrowth	Rapid and reliable
Reaction to water stress	Good
Reaction to waterlogging	Unknown

N52 exhibits very rapid stalk elongation rates. Stalk bending is very common, which contributes to severe lodging and even stool tipping (especially in plant crops). Late tillers are very common in this variety, which further reduces the stalk sucrose content. The establishment of the plant crop may be patchy under certain conditions.

\*Based on average performance relative to control varieties under the same conditions. Performance may vary under different conditions and management.

\*\*Harvest age is related to region, where 12-15 months represents coastal, 15-18 represents hinterland, and 18-24 represents midlands conditions, in general.

REACTION TO DISEASES AND PESTS*	
Smut	Intermediate (Better than N16, N31, and N50)
Mosaic	Resistant (Better than N12 and N31)
Brown Rust	Resistant (Better than N16, N37 and N50)
Tawny Rust	Has not been observed
Eldana	Intermediate resistant (Better than N31 and N48)

\* Reactions vary depending on pest and disease pressure and were accurate at the time of publishing.

REACTION TO CHEMICAL RIPENING	
Fusilade Forte (250 – 275 ml/ha)*	No data
Ethephon (1.5 L/ha)	No data
Tandem (Ethephon + Fusilade Forte)	No data
*The higher rates should be used when the chemical is applied by aircraft.	

MILLING CHARACTERISTICS	
Colour (lower is better)	Low (48% of N31, 49% of N37, 74% of NCo376)
Pith: Fibre ratio (Lower ratio is desirable)	Low (98% of N31, 105% of N37, 85% of NCo376)

## IDENTIFICATION GUIDE

### Habit and General Appearance

N52 is a high population variety with medium to thin stalks, with an erect growth habit. This variety has a good canopy, with erect, light-green leaves. Brown spot sometimes present.

### Leaf

**Blade:** Medium to wide leaves with bent tips. Chlorotic blotching often present on both the blade and midrib.

**Sheath:** Yellow-green with an abundance of long, spiky hairs. The crop residue is fairly clingy.

**Collar:** Medium width, yellow-green (similar to sheath).

**Auricle:** Underlapping leaf: short, broad and deltoid (triangular).

**Overlapping leaf:** very indistinct, broad.

### Stalk

#### Internode

Long internodes of thin to medium thickness. The stalks are yellow-green; dark-green and purple-red on exposure. A zigzag alignment is often present.

**Wax band:** Narrow to medium, distinct.

**Bud furrow:** Present, very pronounced in older stalks.

#### Node

**Growth ring:** Green to yellow-green, slightly raised.

**Root band:** Narrow, yellow-green, three rows of root primordia.

**Sheath scar:** Pronounced.

**Bud:** Medium, round, with pointed tip.

**Flange:** Present, arises at the top half of the bud.



Updated by Sanesh Ramburan (Senior Agronomist: Varieties)  
November 2016

Copyright subsists in this work. No part of this work may be reproduced in any form or by any means without the publisher's written permission. Whilst every effort has been made to ensure that the information published in this work is accurate, SASRI takes no responsibility for any loss or damage suffered by any person as a result of the reliance upon the information contained herein.