



Information Sheet

3. VARIETIES

Variety N37

Parents: 74L0775 x MO. Year of release: 2001.

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

Recommended for good growing conditions and humic soils in the Midlands and Hinterland regions and harvested older than 15 months. Also recommended for an annual cutting cycle in frost pockets in the Midlands.

BEST FEATURES

N37 is one of the best varieties for high potential humic conditions in the midlands and hinterland regions. It has quick germination and canopy closure in plant and ratoon crops. Good payloads are achieved with N37 due to the high population of straight stalks with high sucrose content. Acceptable RV yields are achieved on an annual irrigated cutting cycle and in frost pockets in the midlands.

LIMITING FEATURES

N37 is not recommended for carry-over along the coast as eldana damage is common, especially under stressed conditions. Moderate to severe brown rust is common on this variety. It is also susceptible to smut and is therefore not recommended in high smut risk areas. N37 does not perform well on poor soils or in other marginal growing conditions.

YIELD AND QUALITY*

	Age at harvest (hinterland and midlands)		
	12-15 (irrigated/frost pocket)	15-18	18-24
Tons RV	Moderate 87% of N36 98% of N41 110% of N48	Moderate to low 105% of N12 90% of N31 85% of N48	Moderate 105% of N12 94% of N31 89% of N48
Cane yield	Moderate to low 86% of N36 90% of N41 111% of N48	Moderate to low 103% of N12 82% of N31 87% of N48	Moderate to low 101% of N12 85% of N31 88% of N48
RV %	High 102% of N36 109% of N41 113% of N48	Moderate to high 101% of N12 107% of N31 97% of N48	Moderate to high 104% of N12 111% of N31 99% of N48
Fibre content	Moderate to high 104% of N36 98% of N41 108% of N48	Moderate 105% of N12 99% of N31 100% of N48	Moderate 105% of N12 100% of N31 107% of N48

Good RV yields have been achieved in frost pockets on humic soils in the midlands. N37 is outperformed by other inland varieties such as N12, N31, and N48 when grown on poor soils. Under hinterland conditions, best RV yields are achieved on humic soils. Quality and yield of N37 are negatively affected when aged over 22 months in the midlands. Poor RV yields are achieved with N37 along the coast in general.

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

SOIL SUITABILITY

Soil Group*	Performance
Grey crest to midslope	Poor
Grey lower slopes	Poor
Humics	Very good (recommended)
Red	Good (recommended)
Black structured	Moderate

*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	Moderate to high (139 000 stalks/ha)
Stalk Height	Moderate
Canopy speed	Rapid
Flowering	Rare
Lodging	Moderate
Ratoon regrowth	Rapid and reliable
Reaction to water stress	Poor
Reaction to waterlogging	Poor
High populations of straight stalks often give good payloads. Stalk elongation rates are rapid.	

MILLING CHARACTERISTICS

Colour (lower values better)	11% higher colour than NCo376
Processability (higher percolation is necessary)	10% higher percolation than NCo376

REACTION TO DISEASES AND PESTS*	
Smut	Susceptible (Poorer than N12 and N48, similar to N16)
Mosaic	Resistant (Better than N12 and N16, similar to N48)
Brown rust	Intermediate susceptible (Poorer than N12 and N48)
Tawny rust	Resistant
Eldana	Intermediate (Poorer than N12 and N48)
Nematodes	Susceptible (Poorer than N12 and N31)
Frequent and severe eldana infestations have been observed on N37, suggesting that it should not be carried over along the coast or under high eldana risk conditions. Moderate to severe brown rust has been observed in cooler areas. Thrips numbers on N37 have generally been intermediate to low.	

* 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)*	Yes
Ethephon (1.5 L/ha)	Yes
Tandem (Ethephon + Fusilade Forte)	No

*The higher rates should be used when the chemical is applied by aircraft.

IDENTIFICATION GUIDE

Habit and General Appearance

Stalk population is high, and the stalks are medium to thin in diameter. The growth habit is erect. The canopy is dense and fairly light coloured, with erect leaves of medium to narrow width.

Leaf

Blade: medium to narrow; erect; often with bent leaf tips.

Sheath: yellow-green with some wax bloom. Usually no hairs present. The trash is fairly difficult to remove.

Collar: medium width, green-yellow, sometimes with purple.

Auricle: small to medium.

Stalk

Internode

Medium in length and fairly thin. Often there are corky patches present. Light yellow in colour, becoming yellow-green on exposure.

Wax band: medium width; fairly distinct.

Bud furrow: none.

Node

Growth ring: medium to broad in width; protruding slightly; light green-yellow.

Root band: medium to narrow in width; light green-yellow in colour. Normally there are two rows of root primordia.

Sheath scar: protrudes slightly below the bud.

Bud: small; round; arises at the sheath scar, but sometimes there can be a small space between the bud and the sheath scar.

Flange: narrow; arises towards the top of the bud. Normally just reaches the growth ring.



Updated by Sanesh Ramburan (Senior Agronomist: Varieties) December 2014

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