



# Information Sheet

## 13. VARIETIES

### 13.27 Variety N42

Recommended under medium to high potential conditions on a short harvesting cycle (12-15 months) along the coast. Parents: 81E1253 x 80Z3167. Selected in the coastal region on data collected from both the Empangeni (high potential) and Gingingdlovu (average potential) programs.

#### BEST FEATURES

N42 has good smut and mosaic resistance. It can be readily carried over when flowering is not profuse. RV yields are very good on medium to high potential soils with high clay content. It is one of the best performers on deep soils in valley bottom situations. Performs well in the early season and is therefore a good complement to N27 under similar conditions.

#### LIMITING FEATURES

N42 flowers profusely and should be harvested before mid-October when flowering occurs. N42 is unsuitable to a longer cutting cycle (>15 months), where it is outperformed by other varieties such as N29 and N12. It does not perform well under low potential, marginal conditions. Under irrigation, N42 is outperformed by other fully irrigated varieties.

#### YIELD AND QUALITY

Tons RV	Moderate to high. 109% N12
Cane yield	Moderate to high. Higher than NCo376
RV content	High. 114% of NCo376
Fibre content	High. 113% of NCo376, 106% of N12
Purity	High

Good RV yields have been produced on deep well-drained soils along the coast and on soils with high clay content. N42 produces good RV yields early in the season on a shorter cutting cycle.

#### REACTION TO DISEASES AND PESTS\*

Smut	Resistant
Mosaic	Resistant
Rust	Intermediate susceptible
Leaf Scald	Intermediate
Eldana	Resistant
Nematodes	Intermediate

N42 has good smut and mosaic resistance. Eldana resistance is better than N27, N29 and N35. Rust has been observed more frequently in the Midlands region recently, and this will be monitored.

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

#### AGRONOMIC CHARACTERISTICS

Germination	Rapid and reliable
Stalk Population	Intermediate
Stalk Height	Intermediate
Canopy	Good
Flowering	Profuse
Lodging	Erect
Ratooning	Rapid and reliable

N42 has a moderate population of thick, heavy stalks (under high potential conditions). It grows vigorously and canopies well while being resistant to lodging. Should be harvested before mid-October when flowering is profuse.

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	Average (68% of N12, 128% of N29)
Pith:Fibre ratio (Low ratio is desirable)	Average to high (120% of N12 & 113% of N29)
Data is from coastal 18 month trials.	

## IDENTIFICATION GUIDE

### HABIT AND GENERAL APPEARANCE

The growth habit is erect. The canopy is a fairly light green and has erect leaves, medium in width, usually with bent leaf tips. The older leaf sheaths or trash virtually cover and enclose the whole stalk.

### LEAF

**Blade:** erect, medium in width, with bent leaf tips. Fairly light green in colour. Sometimes there are chlorotic blotches present.

**Sheath:** lightish green with some purple. There are also often pinkish or brown patches. Hairs are present. The trash can be peeled off fairly easily.

**Collar:** medium to narrow, green-yellow, often also has a slight purple tinge.

**Auricle:** absent.

### STALK

#### Internode

Medium length and thickness. There are often corky markings present. The stalk is yellow-green in colour, and can have a slight zigzag between the internodes.

**Wax band:** narrow to medium, fairly distinct.

**Bud furrow:** none.

#### Node

**Growth ring:** protrudes, yellow-green in colour.

**Root band:** medium to narrow in width, green-yellow in colour.

**Sheath scar:** neat, at a slight angle.

**Bud:** fairly small, rectangular, arises at the sheath scar.

**Flange:** narrow to medium width, arises at the top half of the bud, usually just reaches the growth ring.



Updated by Sanesh Ramburan (Agronomist: Varieties) February 2010

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