



# Information Sheet

2006

## 3. VARIETIES

### Variety N33

#### INTRODUCTION

**N**33 was released mainly for its good resistance to eldana. It is suited to the coastal rainfed regions, on low potential soils. Suitable for planting on Red and Grey recent sands. Should be planted below an altitude of 300 m due to its susceptibility to rust. N33 must be harvested at 15-18 months. It can be carried over because of its good resistance to eldana and sparse flowering nature.

**Origin:** SASRI, South Africa

**Year of release:** 1998

**Variety Code:** 85L1781

**Parentage:** 75L1463 x N8

#### CANE QUALITY & YIELD

**Tons RV:** 108% of NCo376 (at 18 months) on low potential soils. Average RV yields are 1 t RV/ha >NCo376 on Red recent sands and 0.5 t RV/ha > NCo376 on Grey recent sands. Poor economic yields when harvested annually.

**Cane yield:** Moderate - can be high when harvested at 18 months (110%NCo376 on low potential soils).

**RV content:** Moderate (100%N12, 103%N16, 103%NCo376)

**Fibre content:** Moderate to high (100%N12, 103%N16, 103%NCo376)

**Purity:** Moderate

**Fibre:sucrose ratio:** Moderate to high

**Non-sucrose:sucrose ratio:** Moderate (when harvested younger than 14 months, this ratio is high)

#### AGRONOMIC CHARACTERISTICS

**Germination (speed and reliability):** Rapid and reliable

**Stalk population (at harvest):** High: 120 000/ha

**Stalk mass (at harvest):** Medium

**Stalk height (at harvest):** Average

**Stalk elongation:** Slow for 12 months and then rapid

**Canopy formation:** Slow in plant cane, moderately rapid in ratoons.

**Flowering:** Sparse

**Lodging:** Erect

**Ratooning ability (speed and reliability):** Moderate speed and reliable

#### REACTION TO DISEASES & PESTS

**Smut:** Intermediate

**Mosaic:** Intermediate

**RSD:** Intermediate-resistant

**Brown Rust:** Susceptible

**Tawny Rust:** Unknown

**Leaf scald:** Intermediate

**Nematodes:** Intermediate

**Eldana:** Resistant

#### REACTION TO WATER STRESS

**Growth during severe water stress:** Good

**Recovery after water stress:** Good

**Ratooning after drought:** Good



Rainfed

**RIPENER RECOMMENDATIONS**

**Fusilade Forte:** Ground rigs (250 ml/ha), Aerial (275 ml/ha): No data

**Ethephon (1.5 l/ha):** Yes

**Gallant Super:** No data

**Tandem (Ethephon + Fusilade Forte):** No data

**HARVESTING**

**Best months:** Jul-Dec

**BEST FEATURES**

*N33 germinates quickly. This variety yields best when harvested at 15 to 18 months. It is a tough variety that is suitable for the weak sands (Red and Grey recent sands). It does not flower and is resistant to eldana (can be aged and carried over). It produces higher yields than N12 on the weak coastal sands.*

**LIMITING FEATURES**

*N33 has been observed with severe rust in all areas. Avoid planting N33 on cool, moist slopes. It is not recommended for annual harvesting. Do not plant N33 on shales, as its yield performance is poor on these soils.*

## Identification Guide

**HABIT AND GENERAL APPEARANCE**

A fairly tall variety that has a high population of thin, purple stalks with a slightly open growth habit. The canopy is erect.

**LEAF**

**Blade:** medium to narrow in width; erect; often with bent tips. Light chlorotic blotching usually present on the midrib and also on the blade near the base.

**Sheath:** light green with some purple patches; on exposure turns dark purple. No hairs present.

**Collar:** medium width; light yellow with some purple.

**Auricle:** absent.

**STALK****Internode**

Thin, slightly staggered; fairly short; purple with dark purple just above the growth ring. All turn to dark purple on exposure. There is a lot of wax bloom, and sometimes sooty black patches are present.

**Wax band:** medium in width; fairly distinct.

**Bud furrow:** usually absent.

**Node**

**Growth ring:** medium in width; light yellow, turning to purple on the older nodes. Protrudes slightly.

**Root band:** medium to narrow width; yellow. Root primordia have slightly purple centres.

**Sheath scar:** neat.

**Bud:** medium; round; often arising from within the sheath scar.

**Flange:** medium to narrow in width; arises well above the centre of the bud. The flange usually just reaches the growth ring.

