

# Information Sheet

2006

## 13. VARIETIES

### 13.16 **Variety N29**

#### INTRODUCTION

**N**29 is adapted to a wide range of soils. Good yields obtained on most coastal and hinterland sites. Yields particularly well on red loamy sands and dolerite red clays. Can be carried over when flowering is not profuse. N29 has an extremely high sucrose content with a relatively low cane yield. Suitable for planting at some distance from the mill. Preferable to plant on better soils because of its low cane yield to ensure good tonnages. Severe rust infection was recorded in N29 due to cold and wet winter conditions experienced in 2002 and has been observed in this variety since then.

**Origin:** SASRI, South Africa

**Year of release:** 1997

**Variety Code:** 84E1334

**Parentage:** 70E0457 x CP57/614

#### CANE QUALITY & YIELD

**Tons RV:** Although suitable for carryover, its advantage tends to decrease with increasing age (114%NCo376 at 12 months and 110%NCo376, 97%N12 when harvested older than 15 months). Occurrence of rust can reduce these yields substantially. When there is no rust N29 yields its best when harvested early season.

**Cane yield:** Low (lower than N12, N16, NCo376)

**RV content:** Very high (114%N12, 114%N16, 117%NCo376)

**Fibre content:** Moderate (90%N12, 94%N16, 98%NCo376)

**Purity:** Moderate

**Fibre:sucrose ratio:** Low

**Non-sucrose:sucrose ratio:** Low

#### 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):** Short to average

**Stalk elongation:** Moderately rapid

**Canopy formation:** Rapid

**Flowering:** Profuse but produces side shoots readily

**Lodging:** Moderate

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

#### REACTION TO DISEASES & PESTS

**Smut:** Resistant

**Mosaic:** Intermediate

**RSD:** Susceptible

**Rust:** Susceptible

**Leaf scald:** Intermediate

**Red rot:** Resistant

**Nematodes:** Susceptible

**Eldana:** Intermediate-resistant

#### REACTION TO WATER STRESS

**Growth during severe water stress:** Poor

**Recovery after water stress:** Moderate

**Ratooning after drought:** Good

**Poorly drained soils:** Intolerant

**Salinity tolerance:** Unknown



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**NUTRITION**

**Nitrogen use efficiency:** Moderate to low

**RIPENER RECOMMENDATIONS**

**Fusilade Forte:** Ground rigs (250 ml/ha), Aerial (275 ml/ha): Good response (little data)

**Ethephon (1.5 l/ha):** No

**Gallant Super:** No data

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

**HARVESTING**

**Best months:** Apr-mid Oct (when flowered)

**BEST FEATURES**

*N29 has a very high sucrose content. N29 germinates and grows rapidly. Good resistance to eldana. It can be aged and carried over when flowering is not severe. N29 has a moderate tolerance to Aluminium toxicity. N29 has good milling characteristics in that it has a very low pith:fibre ratio, thereby leading to good extraction in the mill.*

**LIMITING FEATURES**

*N29 tends to flower profusely, often producing side-shoots on the top few nodes. It is suitable for soils with good drainage. N29 is sensitive to water stress. It has a moderate to low N use efficiency which indicates that a higher rate of N fertiliser may be required. N29 is not recommended for the Midlands region due to its poor yield performance and susceptibility to rust. Severe rust has been recorded on N29 in coastal as well as hinterland areas.*

## Identification Guide

**HABIT AND GENERAL APPEARANCE**

A fairly erect variety with a canopy that has erect, dark green leaves that often droop towards the tips. The leaf tips are sometimes torn, due to wind damage.

**LEAF**

**Blade:** medium width, erect, dark green with a drooping tip. Leaf tips often torn by wind.

**Sheath:** green, often with some purple. Long, soft hairs that can be brushed off are present on young sheaths. Older sheaths usually have all hairs brushed off. Trash comes away fairly easily.

**Collar:** medium, yellowish-green to purplish.

**Auricle:** none.

**STALK****Internode**

Slightly bobbin-shaped, light yellow with a pinkish tinge which becomes darker on exposure to the sun. Stalks are medium to thin in diameter. A fair amount of wax coating is present.

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

**Bud furrow:** usually present.

**Node**

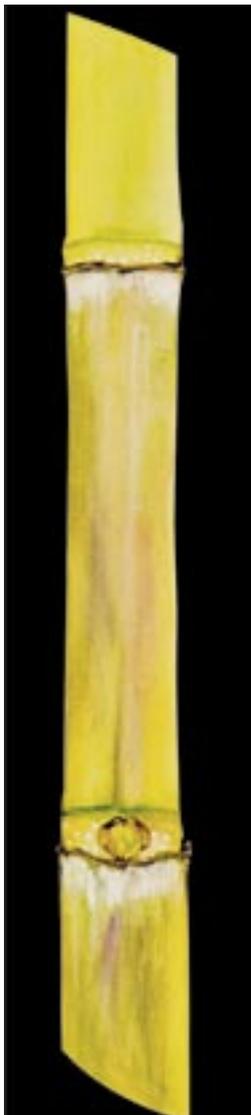
**Growth ring:** yellowish, turning to green at the top of the stalk. Can protrude slightly.

**Root band:** medium width, yellow, but can turn greenish on exposure.

**Sheath scar:** neat.

**Bud:** medium to small, round. Young buds often have a purplish tinge.

**Flange:** medium and arising sometimes from below the centre of the bud. Can reach the growth ring.



All variety information sheets are available at <http://www.sugar.org.za/sasri/variety/index.htm>

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