



Information Sheet

2006

13. VARIETIES

13.5 **Variety N16**

INTRODUCTION

N16 is a popular variety in the Midlands and on the Coast and is best suited to the more favourable areas on a farm. Good yields can be obtained on the humic and deeper soils in the Midlands (NGS Mistbelt). It yields well on south facing slopes. N16 is not suited to weak sands and waterlogged areas. On the coast, N16 should be harvested annually. It is intolerant of water stress and yields best on the better, deeper soils. It has below average K requirements, but higher P requirements.

Origin: SASRI, South Africa

Year of release: 1982

Variety code: 68D0004

Parentage: NCo376 x Co331

CANE QUALITY & YIELD

Tons RV: Yields well in Midlands harvested at 18-24 months and when harvested annually at the coast. On average 1 t RV/ha >NCo376 on NGS Mistbelt and dolerite soils. Best yields obtained on high potential soils (high TAM) when harvested mid-late season.

Cane yield: High (higher than NCo376 and N12)

RV content: Average 103%NCo376, 99%N12. Similar to NCo376 until June and then sucrose content tends to be higher than NCo376 towards the end of the season.

Fibre content: Moderate (103%NCo376, 97% N12)

Purity: Moderate

Fibre:sucrose ratio: Moderate

Non-sucrose:sucrose ratio: Low

AGRONOMIC CHARACTERISTICS

Germination (speed and reliability): Rapid and reliable

Stalk population (at harvest): High: 133 000/ha

Stalk mass (at harvest): Medium

Stalk height (at harvest): Average

Stalk elongation: Rapid

Canopy formation: Rapid

Flowering: Sparse

Lodging: Moderate (can be severe on occasion)

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

REACTION TO DISEASES & PESTS

Smut: Susceptible

Mosaic: Intermediate

RSD: Intermediate-susceptible

Rust: Intermediate

Leaf scald: Resistant

Red rot: Intermediate

Nematodes: Susceptible

Eldana: Susceptible



Rainfed

REACTION TO WATER STRESS

Growth during severe water stress: Moderate. N16 can show early signs of stress

Recovery after water stress: Moderate

Ratooning after drought: Good

Poorly drained soils: Intolerant (needs drainage)

NUTRITION

Nitrogen use efficiency: Moderate to low

RIPENER RECOMMENDATIONS

Fusilade Forte: Ground rigs (250 ml/ha), Aerial (275 ml/ha): Yes

Ethephon (1.5 l/ha): Yes

Gallant Super: No data

Tandem (Ethephon + Fusilade Forte): Yes

HARVESTING

Best months: Jul-Dec, best late in the season

BEST FEATURES

N16 germinates and grows rapidly. It is useful for short cutting cycles along the coast as well as a 24 month cutting cycle in the Midlands. It has good yield performance on high potential soils. Good payloads are achieved from N16.

LIMITING FEATURES

N16 is susceptible to smut and the eldana borer. Do not carry over on the Coast or in areas where there is water stress and eldana is a problem. It produces low yields on the weak coastal sands and on low potential soils. It has a low tolerance to Aluminium toxicity. Moderate to low N use efficiency indicates that a higher rate of N fertiliser may be required.

*Identification Guide***HABIT AND GENERAL APPEARANCE**

An erect cane, similar in many respects to NCo376.

LEAF

Blade: narrow to medium in width; erect but drooping towards the tips. A small chlorotic blotch may be present, but is always less pronounced than in NCo376.

Sheath: slightly hairy on the abaxial surface. Green in colour, with some purpling near the sheath scar.

Collar: narrow to medium in width. Green in colour.

Auricle: usually present; small and rounded.

STALK**Internode**

Medium in thickness and texture, cylindrical or slightly bobbin-shaped. Yellow or yellow-green with pink tinge, developing a deep pink colour on exposure.

Wax band: narrow and constricted.

Bud furrow: may be present, or there is an indentation above the bud.

Node

Growth ring: yellow or greenish-yellow in colour. May be raised slightly above the root band to form a ridge.

Root band: narrow; usually slightly swollen. Yellow in colour.

Sheath scar: ciliate; protrudes near the bud, but does not sag.

Bud: circular, arising at the sheath scar, often with a small peg-like projection at the base. Young, immature buds are distinctly pink or red in colour.

Flange: narrow and inconspicuous. There may be a fringe of hairs at the apex.



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

March 2006