



Information Sheet

2006

3. VARIETIES

Variety N35

INTRODUCTION

N35 is suited to the high potential soils (good Lower/Middle Ecca, dolerite). It is intolerant of water stress and waterlogging. N35 has a very high sucrose content with a low cane yield. This variety yields well on better soils along the coast and performs particularly well on a 12 month harvesting cycle. N35 is susceptible to eldana and must not be harvested older than 12 months.

Origin: SASRI, South Africa

Year of release: 1999

Variety Code: 87W0052

Parentage: 68W1049 x CP57/614

CANE QUALITY & YIELD

Tons RV: Yields are better than NCo376 on high potential soils (1 t RV/ha >NCo376 on dolerites and good Lower/Middle Eccas). Average RV yield is 94%N12 when harvested older than 15 months.

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

RV content: High (113%N12, 119%N16, 118%NCo376)

Fibre content: Moderate to high (99%N12, 102%N16, 104%NCo376)

Purity: High

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): Average

Stalk elongation: Moderately rapid

Canopy formation: Rapid

Flowering: Sparse (can be moderate on South Coast)

Lodging: Erect

Ratooning ability (speed and reliability): Rapid and moderate ratooning ability (depends on water stress)

REACTION TO DISEASES & PESTS

Smut: Resistant

Mosaic: Resistant

RSD: Intermediate

Brown Rust: Intermediate

Tawny Rust: Intermediate

Leaf scald: Resistant

Red rot: Intermediate

Nematodes: Susceptible

Eldana: Susceptible

REACTION TO WATER STRESS

Growth during severe water stress: Poor

Recovery after water stress: Moderate

Ratooning after drought: Moderate

Poorly drained soils: Generally intolerant, although it has done well in wet Cartrefs and Kroonstads (soils with clay <15%)



Rainfed

NUTRITION

Nitrogen use efficiency: Unknown

Gallant Super: No data

Tandem (Ethephon + Fusilade Forte): No data

RIPENER RECOMMENDATIONS

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

HARVESTING

Best months: Apr-Dec

Ethephon (1.5 l/ha): Yes

BEST FEATURES

N35 has a high sucrose content. It is a sparse flowering variety. It is best suited to annual harvesting on the higher potential soils.

LIMITING FEATURES

Avoid planting N35 on shallow soils as it performs poorly under these conditions. It is intolerant of water stress and waterlogged conditions. N35 generally produces lower yields than N16 on high potential soils in the Midlands and yields are worse than N12 on the lower potential soils. Do not carry over on the Coast or in areas where there is water stress and eldana is a problem. Very high levels of eldana damage were reported during a severe water stress situation (2003 and 2004 drought). Has occasionally been severely infected with rust.

Identification Guide

HABIT AND GENERAL APPEARANCE

An erect variety that has a good population of fairly thin stalks, with a light green-yellow canopy of narrow leaves.

LEAF

Blade: narrow, fairly long and arched; light green-yellow in colour.

Sheath: light green-yellow, with a few hairs sometimes present. The entire stalk is usually covered with claspings trash, which can be peeled away fairly easily.

Collar: narrow, green-purple.

Auricle: usually absent; when present it is small.

STALK**Internode**

Fairly thin, purple, sometimes with a bit of green present, becoming darker purple on exposure. Often sooty black patches are present. The centre of the internode is slightly thinner than the ends.

Wax band: medium to narrow, usually not very distinct.

Bud furrow: rarely present; when it is present it is usually on older internodes and not very distinct.

Node

Growth ring: yellow-green and narrow to medium in width, protruding slightly.

Root band: yellow-green and medium in width, with aerial rooting sometimes present.

Sheath scar: usually neat.

Bud: round or slightly longer than broad; sometimes a narrow space can occur between the bud and leaf scar.

Flange: narrow to medium-brown, arises at the middle of the bud and reaches the growth ring.



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

March 2006