

Information Sheet

13. VARIETIES

13.10 Variety N23

INTRODUCTION

he performance of N23 has been fairly consistent. It is useful on lower potential and less favourable soils but it requires good drainage. Although the plant crop results are usually poor this variety has excellent ratooning ability and yields tend to be stable over ratoons.

Origin: SASRI, South Africa

Year of release: 1992 Variety Code: 81F3402

Parentage: NCo376 x N52/219

CANE QUALITY & YIELD

Tons RV: RV yields are slightly lower than N14 and N19, but N23 is useful on less favourable sites. Sucrose yields improve with successive ratoons. Best yields obtained early season, ripened. Poor yields obtained in the late season.

Cane yield: Moderate (lower than N14 and NCo376, but

higher than N19)

RV content: Low (102%N14, 92%N19, 105%NCo376) **Fibre content:** Moderate (104%N14, 103%N19, 102%NCo376)

Purity: Moderate

Fibre:sucrose ratio: Moderate

Non-sucrose:sucrose ratio: Low to moderate

AGRONOMIC CHARACTERISTICS

Germination (speed and reliability): Moderate speed and usually reliable (can be uneven and poor in cold, wet conditions)

Stalk population (at harvest): High: 134 000/ha

Stalk mass (at harvest): Medium
Stalk height (at harvest): Average
Stalk elongation: Moderately rapid

Canopy formation: Rapid canopy formation. Dense canopy

formed.

Flowering: Profuse

Lodging: Slight and infrequent

 $\textbf{Ratooning ability} \ (\textbf{speed and reliability}) \textbf{:} \ Moderate \ speed$

and reliable

REACTION TO DISEASES & PESTS

Smut: Resistant **Mosaic:** Intermediate

RSD: Intermediate-susceptible

Rust: Resistant
Leaf scald: Resistant
Red rot: Resistant
Nematodes: Intermediate
Eldana: Intermediate

REACTION TO WATER STRESS

Growth during severe water stress: Moderate

Recovery after water stress: Moderate **Ratooning after drought:** Moderate

Poorly drained soils: Moderately intolerant **Salinity tolerance:** Moderately sensitive





NUTRITION

Nitrogen use efficiency: Moderate

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 - recommended

HARVESTING

Best months: Jul-mid Aug

BEST FEATURES

N23 is generally resistant to diseases. It is useful in less favourable conditions or moderate soils. While plant crop yields are relatively poor, yields tend to be stable over many ratoons. While recommended for mid-season harvesting, good yields are obtained early season when ripener is applied. Generally good payloads are achieved with this variety.

LIMITING FEATURES

N23 flowers profusely and should be harvested before mid-October. Cane yields after mid-Aug are poor. Yields are generally mediocre. This variety is not suitable for heavy or poorly drained soils. Germination is poor under cold wet soil conditions. Avoid planting N23 on very sandy soils. Avoid carrying over in severe stress conditions and in areas where eldana is a problem. N23 has a fairly high pith:fibre ratio, thereby leading to poor extraction in the mill.



Identification Guide

HABIT AND GENERAL APPEARANCE

A fairly tall, erect variety with a canopy of dark green, slightly drooping leaves. Flowers profusely.

LEAF

Blade: medium width; dark green to bluish-green. A chlorotic blotch sometimes present.

Sheath: green, with slight brown to purplish blotches occurring towards the base of the sheath on exposure to the sun. Hairs present; usually long, not spiky.

Collar: medium to narrow in width; indistinct.

Auricle: long and pointed.

STALK

Covered with a fair amount of wax bloom. Light yellowish-green, turning to light purple on exposure. Corky markings sometimes present. Cracks may occur, depending on growing conditions. Stalks are fairly thin.

Wax band: indistinct. Bud furrow: absent.

Node

Growth ring: well defined; yellowish-green, sometimes partly purple.

Root band: medium to broad in width; yellowish.

Sheath scar: neat looking; does not protrude.

Bud: small and circular.

Flange: narrow; sometimes with hairs at the apex forming a point.

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

March 2006

