



# Information Sheet

## 13. VARIETIES

### 13.26 Variety N41

N41 is suited to a range of conditions throughout the industry under rainfed and irrigated conditions. It is recommended for moderate to high potential soils with high clay content and is suitable for annual as well as carryover cane. Parents: 77F790 x 82W1542. Selected on data from the Coastal and Irrigated North breeding programs.

#### BEST FEATURES

N41 is a widely adaptable variety that has shown good performance under rainfed and irrigated conditions. It produces good RV yields under waterlogged conditions as well as under medium and high potential irrigated conditions. Performance has been particularly good on heavy clays and shallow soils. It is well suited to high potential, frost prone valley bottoms in the Midlands on a 12-month cutting cycle. N41 has very straight, long stalks that tend to resist lodging under irrigation. Trial results suggest that yields tend to improve with ratoons.

#### LIMITING FEATURES

N41 is outperformed by other Midlands varieties on a long cutting cycle (>18 months). Growth under low potential, stressed conditions may not be good and eldana damage has been observed under these dry conditions. It has a sparse canopy in general (rainfed), which may allow for prolific weed growth. Smut could become a problem in high risk areas.

#### YIELD AND QUALITY

Tons RV	Moderate to high. 114% of NCo376. 108% of N27. 102% of N25 (irrigated)
Cane yield	Moderate. 103% NCo376. 108% of N27
RV content	High. 112% of NCo376. 100% of N27
Fibre content	Moderate. 100% of NCo376. 96% of N27
Purity	High

Good RV yields have been obtained on soils with high clay content in general. Under irrigation, RV yields have been good on shallow and deep soils. The RV yield advantage of N41 seems to decline when harvested older than 18 months compared to other varieties like N12. Better RV yields are obtained early and mid-season.

#### REACTION TO DISEASES AND PESTS\*

Smut	Intermediate
Mosaic	Intermediate
Rust	Intermediate
Eldana	Intermediate resistant
Nematodes	Intermediate

N41 must be monitored for smut in high risk areas. Eldana damage has been observed under stressed conditions in the South Coast.

\* Reactions vary depending on pest and disease pressure and were accurate at the time of publishing.

#### AGRONOMIC CHARACTERISTICS

Germination	Rapid and reliable
Stalk Population	Intermediate
Stalk Height	Tall
Canopy	Moderate
Flowering	Rare
Lodging	Moderate (under irrigation)
Ratooning	Rapid and reliable

N41 has a moderate population of straight, tall stalks that will give good payloads. It has a fairly upright, sparse canopy as a result of the narrow and erect leaves. Lodging is generally rare, except under very high yield potential conditions.

REACTION TO CHEMICAL RIPENING	
Fusilade Forte (250 – 275 ml/ha)*	Yes
Ethephon (1.5 L/ha)	Yes
Tandem (Ethephon + Fusilade Forte)	Yes

\* The higher rates should be used when the chemical is applied by aircraft. N41 shows very good response to the combination ripener treatment.

MILLING CHARACTERISTICS	
Colour	Average to high (132% of NCo376, 138% of N27)
Pith:Fibre ratio (Low ratio is desirable)	Average (107% of NCo376, 108% of N27)
Data is from coastal 12 month trials.	

## IDENTIFICATION GUIDE

### HABIT AND GENERAL APPEARANCE

The growth habit is slightly open, with a medium population of stalks. The stalks are medium to thin and sometimes grow with a bend in the bottom half. The canopy is fairly sparse, with erect, narrow leaves.

### LEAF

**Blade:** thin; erect. Sometimes there is light chlorotic blotching on both the midrib and blade.

**Sheath:** green, with a fair amount of wax bloom. Hairs are present which can be brushed off. The trash comes off easily.

**Collar:** medium width, yellow, sometimes with a purple outline.

**Auricle:** small to medium; on one side only.

### STALK

#### Internode

Medium length and medium to thin diameter, sometimes with small, shallow cracks present. There are sometimes corky markings on the stalk. The stalk can have a slight stagger or zigzag. Green, becoming green-yellow on exposure.

**Wax band:** medium to narrow; distinct.

**Bud furrow:** normally absent, but sometimes a slight, shallow furrow can be present.

#### Node

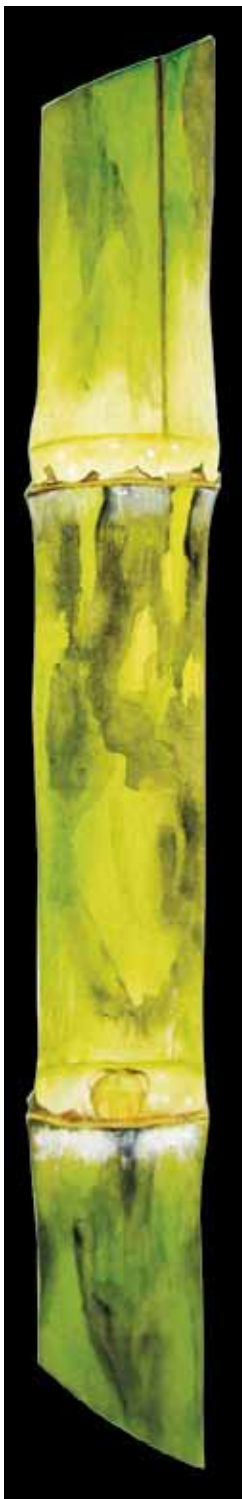
**Growth ring:** medium; slightly protruding; light yellow-green.

**Root band:** medium to narrow in width; light green-yellow in colour.

**Sheath scar:** slanting slightly; neat.

**Bud:** small; round; arises at the sheath scar.

**Flange:** narrow to medium; usually just reaches the growth ring.



Updated by Sanesh Ramburan (Agronomist: Varieties) February 2010