Information Sheet

Irrigated

13. VARIETIES

13.25 Variety N40

N40 is recommended for deep, well-drained soils with good irrigation management and should be harvested on an annual cycle. Parents N22 x 78F1025. Selected on data from the Irrigated North breeding program.

BEST FEATURES

N40 has a very high RV content and excellent disease resistance. The very high sucrose and low yields make this an ideal variety for farms that are a long distance from mills. An ideal variety for early season harvesting on deep soils that are well irrigated.

LIMITING FEATURES

N40 is not suited to poorly irrigated soils that suffer periodic stress. Under stressed conditions, carry-over should be avoided where eldana is a problem.

YIELD AND QUALITY

Tons RV	High (110% of N14, 114% of N19, 110% of N25)
Cane yield	Low (98% of N14, 92% of N25)
RV content	Very high (113% of N14, 103% of N19, 104% of N36)
Fibre content	High (124% of N25, 109% of N36)
Purity	High

RV yields of this variety have been very good on deep well drained soils under high potential conditions and good irrigation management. Trial results do indicate very good performance on shallow soils (Katspruit/Sterkspruit forms) with a water table, provided that irrigation management is optimal. Has not performed well under waterlogged conditions in Umfolozi. Indications are that best RV yields are obtained when harvested early to mid-season. Recommended for planting at distance from the mill due to high RV content.

REACTION TO DISEASES AND PESTS

Smut	Resistant
Mosaic	Resistant
Rust	Resistant
Eldana	Intermediate
Nematodes	No data

N40 has excellent disease resistance. It should be planted in smut and mosaic risk areas in the Northern Irrigated regions in place of susceptible varieties (N14, N19, N25 etc.) to help control these diseases.

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

AGRONOMIC CHARACTERISTICS

Germination	Moderate to rapid
Stalk Population	Moderate to low
Stalk Height	Moderate
Canopy	Intermediate to slow
Flowering	Rare
Lodging	Rare
Ratooning	Good

N40 has a moderate to low population of medium thick stalks, which contributes to the low yields. The canopy is fairly sparse with erect, spiky leaves that are easily identifiable. Lodging is generally not severe, due to the lower yields.

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.*

MILLING CHARACTERISTICS	
Colour	Average (123% of N19, 66% of N25, 95% of N26)
Pith: Fibre ratio (Low ratio is desirable)	Average to high (120% of N19, 103% of N25, 122% of N26)

IDENTIFICATION GUIDE

HABIT AND GENERAL APPEARANCE

A low population variety with medium to thick stalks with a slightly open growth habit. The canopy is fairly sparse with erect leaves, medium to broad in width.

LEAF

Blade: medium to broad in width, erect and fairly dark green in colour. Sometimes there is light cholorotic blotching on the midrib.

Sheath: green with wax bloom and hairs present. The hairs are fairly long. The trash can be peeled off easily.

Collar: medium in width; purple-yellow.

Auricle: medium to long; on one side only.

STALK

Internode

The internodes are medium in length and diameter. There are some corky markings present. The stalks are light green-yellow in colour, becoming purple-yellow on exposure.

Wax band: medium width; fairly distinct.

Bud furrow: none.

Node

Growth ring: medium width; green-yellow.

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

Sheath scar: usually neat.

Bud: small; fairly round; seated on sheath scar.

Flange: medium width; usually does not reach the growth ring.

Updated by Sanesh Ramburan (Agronomist: Varieties) February 2010