



Information Sheet

3. VARIETIES

Variety N49

Parents: 87E1331 x N30. Year of release: 2008.

Permitted Pest, Disease and Variety Control Areas: Lowveld, Pongola, Umfolozi, Midlands North, Sezela.

Recommended for planting in the irrigated northern regions and harvested both early and late in the season.

BEST FEATURES

N49 has better smut and mosaic resistance than most other irrigated varieties. It has very high sucrose content with moderate cane yields, and would therefore be ideal for planting at a distance from the mill. Good RV yields are achieved both early and late in the season.

LIMITING FEATURES

Lodging can be an issue at very high tonnages. N49 is susceptible to eldana and carry-over in the irrigated areas is not recommended.

YIELD AND QUALITY*

	Age at harvest		
	12-15	15-18	18-24
Tons RV	High 103% of N36 101% of N41 117% of N46	Not recommended	Not recommended
Cane yield	Moderate to low 93% of N36 89% of N41 99% of N46	Not recommended	Not recommended
RV %	Very high 110% of N36 114% of N41 117% of N46	Not recommended	Not recommended
Fibre content	Moderate 98% of N36 91% of N41 106% of N46	Not recommended	Not recommended

RV yields of N49 have been higher than other popular irrigated varieties both early and late in the season. Consistently high RV yields have been achieved under both low and high yield potential conditions.

**Based on average performance relative to control varieties under the same conditions. Performance may vary under different conditions and levels of management.*

MILLING CHARACTERISTICS

Colour (lower values better)	High (137% of N25, 114% of N36, 204% of N40)
Processability (higher percolation is desirable)	Unknown

SOIL SUITABILITY

Soil Group*	Performance
Grey crest to midslope	Moderate to good
Grey lower slopes	Moderate to good
Humics	Good
Red	Good
Black structured	Unknown

**For soil forms that fall within these groups consult SASRI's Soils Bulletin or your local Extension Specialist.*

AGRONOMIC CHARACTERISTICS

Germination	Moderate speed and reliable
Stalk Population	Moderate (120 000 stalks/ha)
Stalk Height	Moderate
Canopy speed	Moderate (similar to N19)
Flowering	Rare
Lodging	Moderate to high
Ratoon regrowth	Moderate speed and reliable
Reaction to water stress	Unknown
Reaction to waterlogging	Unknown

Lodging can become a problem with N49 under very high yielding conditions, especially in the plant crop. Good RV yields have been achieved in plant plus three ratoon crops in trials.

REACTION TO DISEASES AND PESTS*	
Smut	Resistant (Better than N25, N36 and N41)
Mosaic	Resistant (Better than N25, N36 and N41)
Brown rust	Intermediate (Poorer than N36, similar to N41 and N25)
Tawny rust	Intermediate susceptible
Eldana	Intermediate-susceptible (Poorer than N41)
Nematodes	Intermediate
N49 has good smut and mosaic resistance and is a good variety to manage these diseases in high risk areas. Ratings for thrips susceptibility are not available as yet.	

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

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

*The higher rates should be used when the chemical is applied by aircraft.

IDENTIFICATION GUIDE

HABIT AND GENERAL APPEARANCE

Intermediate to low stalk population; good canopy

LEAF

Blade: Medium width at longitudinal mid-point; new leaves erect, other leaves fairly arched; distinct ligule

Sheath: Medium adherence to the stalk; fairly easy to trash at the bottom of the stalk; green sheath with purple tinge; thick layer of hair on sheath

Collar: Medium; distinct; dark brown-green in colour

Auricle: Inner auricle is very long, pointed and distinct; outer auricle is small and of medium width

STALK

Internode

Bobbin-shaped; absent or very weak zig-zag stalk alignment; yellow-green when not exposed to the sun; red-purple colour on exposure to the sun; corky markings sometimes present; cracks sometimes present

Wax band: Narrow wax band

Bud furrow: Present but shallow and fairly indistinct

Node

Growth ring: Protruding; distinct in younger nodes

Root band: Medium; sometimes raised; light yellow; dark green on exposure to sun

Sheath scar: Very distinct; protruding; neat; not perpendicular to stalk

Bud: Indistinct buds; round and small

Flange: Broad flange; reaches the growth ring; some mature more prominent buds have hairs on flange



Updated by Sanesh Ramburan (Senior Agronomist: Varieties) December 2014

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