



Information Sheet

3. VARIETIES

Variety N48

Parents: 76H0333 x CP70/1133. Year of released: 2007.

Permitted Pest, Disease and Variety Control Areas: Entumeni, North Coast, Midlands North, Midlands South, Sezela, Umzimkulu.

Recommended for planting in the midlands and hinterland regions and harvested older than 15 months.

BEST FEATURES	
N48 is one of the highest RV yielding varieties for inland growing conditions on both sandy and humic soils. It is one of the varieties recommended for frost pockets in the midlands. N48 has very high sucrose content. Performance on poor soils and during drought conditions has been better than other midlands varieties. It has very quick germination and canopy closure. N48 also shows good ratooning ability.	

LIMITING FEATURES	
N48 lodges readily at high tonnages. Smut and cosmetic Pokkah Boeng have been observed on this variety. There have been recent reports of high eldana levels in N48, especially in the midlands south area. Reports of thrips damage have also been common. N48 has a high pith:fibre ratio (lower ratios are desirable for milling).	

YIELD AND QUALITY*			
	Age at harvest		
	12-15	15-18	18-24
Tons RV	Only recommended for frost pockets at this age	High 139% of N12 102% of N39 108% of N50	High 116% of N12 103% of N31 79% of N50
Cane yield	Only recommended for frost pockets at this age	High 138% of N12 104% of N39 101% of N50	Moderate 113% of N12 92% of N31 78% of N50
RV %	Only recommended for frost pockets at this age	High 103% of N12 99% of N39 108% of N50	Moderate to high 103% of N12 111% of N31 103% of N50
Fibre content	Only recommended for frost pockets at this age	Moderate 94% of N12 96% of N39 99% of N50	Moderate 99% of N12 95% of N31 98% of N50
RV yields have generally been higher than N12, N16, N31 and N37 on both sandy and humic soil types in the midlands. Excellent RV yields have been achieved under hinterland conditions. Similar RV yields to N36 and N41 have been achieved in frost pockets.			

**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)	Low
Processability (higher percolation is better)	Unknown

SOIL SUITABILITY	
Soil Group*	Performance
Grey crest to midslope	Good
Grey lower slopes	Good
Humics	Very 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	Rapid and reliable
Stalk Population	Moderate (120 000 stalks/ha)
Stalk Height	Moderate (170 cm)
Canopy speed	Rapid and dense (wide leaves)
Flowering	Rare
Lodging	Moderate (severe at high tonnages)
Ratoon regrowth	Rapid (patchy at times)
Reaction to water stress	Good
Reaction to waterlogging	Unknown
N48 produces a moderate population of thick, heavy stalks. Ratooning ability (high RV yields over multiple ratoons) of N48 has been good. Ratoon re-growth seems patchy due to moderate stalk population.	

REACTION TO DISEASES AND PESTS*	
Smut	Intermediate (Better than N16, N31 and N50)
Mosaic	Resistant (Better than N12, N16 and N31)
Brown rust	Intermediate-resistant (Better than N16, N37 and N39)
Tawny rust	Intermediate
Eldana	Intermediate (Poorer than N47, better than N16 and N37)
Nematodes	Unknown
Eldana levels on N48 have been high, especially in the midlands south area. N48 has shown better brown rust resistance than most other inland varieties. Smut and cosmetic Pokkah Boeng have been observed. Thrips numbers on N48 have been intermediate to high.	

* 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)*	Yes
Ethephon (1.5 L/ha)	No
Tandem (Ethephon + Fusilade Forte)	No

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

IDENTIFICATION GUIDE

HABIT AND GENERAL APPEARANCE

Low stalk population, thick stalks; slightly open growth habit; tendency to lodge when cane yield is high.

LEAF

Blade: Medium to broad width of leaf blade at the longitudinal mid-point; erect leaves; tends towards having a big canopy; flat ligule

Sheath: Medium adherence to the stalk; coarse hairs present on the sheath; green sheath with purple markings

Collar: Medium to broad collar; dark green; waxy

Auricle: Inner auricle is broad; medium to long and quite pointed; outer auricle is short and broad

STALK

Internode

Obconoidal (narrow at the bottom of the internode near the bud, wider at the top of the internode); very weak zig-zag alignment of the stalk; cracks sometimes present on older internodes; yellow-green in colour

Wax band: Narrow, fairly distinct wax band

Bud furrow: Distinct; only extends half way up the internode

Node

Growth ring: Raised; distinct

Root band: Yellow; darker yellow on older nodes; more than 2 rows of primordia

Sheath scar: Protrudes; untidy; quite distinct

Bud: Triangular-pointed bud; extends well beyond the growth ring

Flange: Distinct; extends almost all round the bud



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