



Information Sheet

3. VARIETIES

Variety N47

Parents: 87M0965 x N12. Year of release: 2007.

Permitted Pest, Disease and Variety Control Areas: Mkuze/Makhatini, Umfolozi, Felixton, Entumeni, Amatikulu, North Coast, Midlands North, Midlands South, Sezela, Umzimkulu.

Recommended for planting in the coastal and hinterland regions and harvesting between 15 to 18 months of age.

BEST FEATURES

N47 generally produces good RV yields under average to low potential conditions along the coast and hinterland, when aged and carried over, and when eldana levels are high. It has very good disease resistance and excellent eldana resistance. It has a higher RV% than N12. It also has good resistance to brown rust. Tawny rust has not been observed on this variety.

LIMITING FEATURES

Very slow canopy formation. Not suited to the coastal 12 month cutting cycle. It is generally outperformed by other varieties in the midlands region. N47 is sensitive to hot water treatment.

YIELD AND QUALITY*

	Age at harvest (Months)**		
	12-15	15-18	18-24
Tons RV	Moderate to low	Moderate	Low
	156% of N12 93% of N39 95% of N41	116% of N12 95% of N39 83% of N48	90% of N12 81% of N31 67% of N48
Cane yield	Moderate	Moderate	Low
	132% of N12 97% of N39 99% of N41	109% of N12 97% of N39 86% of N48	86% of N12 73% of N31 67% of N48
RV %	Moderate	Moderate to high	High
	115% of N12 95% of N39 95% of N41	107% of N12 99% of N39 95% of N48	104% of N12 104% of N31 101% of N48
Fibre content	Moderate to high	Moderate	Moderate
	94% of N12 103% of N39 106% of N41	99% of N12 98% of N39 101% of N48	102% of N12 101% of N31 101% of N48

Latest trial results show that N47 is not suited to harvesting on a coastal short cutting cycle, where it is generally outperformed by other varieties such as N39 and N41. RV yields of N47 tend to improve with increasing harvest age, with an optimum around 15 to 18 months of age. The relative advantage of N47 increases as eldana pressure increases in the coastal and hinterland regions. In the midlands, N47 has been outperformed by other varieties like N31 and N48. Recent trial results indicate that N47 shows very good yield responses when growing through a cane residue layer.

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

**Harvest age is related to region, where 12-15 months represents coastal, 15-18 represents hinterland, and 18-24 represents midlands conditions, in general.

SOIL SUITABILITY

Soil Group*	Performance
Grey crest to midslope	Moderate (<i>tends to stress in very sandy soils</i>)
Grey lower slopes	Good
Humics	Moderate to poor (<i>relative to other varieties</i>)
Red	Moderate
Black structured	Moderate to poor

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

AGRONOMIC CHARACTERISTICS

Germination	Intermediate to slow (<i>similar to N12</i>)
Stalk Population	Moderate (<i>120 000 stalks/ha</i>)
Stalk Height	Moderate (<i>170 cm</i>)
Canopy speed	Slow (<i>prostrate growth habit</i>)
Flowering	Rare
Lodging	Moderate to low
Ratoon regrowth	Moderate speed but reliable
Reaction to water stress	Good
Reaction to waterlogging	Unknown

N47 is characterised by a prostrate (flat) growth habit. It generally forms a canopy very slowly (similar to N12). Slow growth has been observed through a crop residue layer, however, this does not negatively affect yields.

N47 is sensitive to HWT.

REACTION TO DISEASES AND PESTS*	
Smut	Intermediate (<i>Better than N16, N31 and N50</i>)
Mosaic	Intermediate resistant (<i>Better than N12, poorer than N48</i>)
Brown Rust	Resistant (<i>Better than N31, N37 and N39</i>)
Tawny Rust	Unknown
Eldana	Intermediate resistant (<i>Better than N48</i>)
This variety has generally shown very good eldana resistance in trials and in commercial production (one of the most eldana resistant varieties available). Low thrips numbers have been observed in general.	

* 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)	Yes
Tandem (Ethephon + Fusilade Forte)	No
*The higher rates should be used when the chemical is applied by aircraft.	

MILLING CHARACTERISTICS	
Colour (lower is better)	Intermediate (<i>Lower than NCo376</i>)
Pith: Fibre ratio (Low ratio is desirable)	Low
N47 has lower colour than NCo376 but higher colour than N29. It has 10% less pith than NCo376, and 20% less than N29.	

IDENTIFICATION GUIDE

HABIT AND GENERAL APPEARANCE

Slow to germinate and canopy; stalk population intermediate, lower than N12

LEAF

Blade: Medium blade width at longitudinal mid-point; fairly erect leaves; small chlorotic patches on mid-rib; large ligule

Sheath: Medium adherence to the stalk; very waxy sheath; coarse and long hairs present; green with purple on exposed parts

Collar: Indistinct; darker green

Auricle: Medium and broad on one side and small and broad on the other side; both with distinct tufts of hair

STALK

Internode

Conoidal (wide at the bottom of the internode near the bud, narrow at the top of the internode); weak to medium zig-zag stalk alignment; pale yellow when not exposed to the sun; some wax present on the internodes

Wax band: Indistinct; very narrow

Bud furrow: Absent

Node

Growth ring: Protruding growth ring; indistinct

Root band: Medium to broad root band

Sheath scar: Present; protruding; distinct

Bud: Rhomboid; young buds are pinkish-red; bud does not always reach growth ring

Flange: Narrow and indistinct



Updated by Sanesh Ramburan (Senior Agronomist: Varieties) November 2016