



Information Sheet

3. VARIETIES

Variety N41

Parents: 77F790 x 82W1542. Year of release: 2002 (south) and 2006 (north).

Permitted Pest, Disease and Variety Control Areas: Permitted for planting in all areas. Recommended for planting under a wide range of growing conditions in the coastal and hinterland regions and harvested at 12-15 months of age. Recommended for harvesting early to mid-season in the irrigated regions. Also recommended for annual harvesting in frost pockets and under supplementary irrigation in the midlands.

BEST FEATURES

N41 is currently the most widely adapted commercial variety that performs well under rainfed and irrigated conditions. Good RV yields are achieved under waterlogged conditions and heavy soils, as well as under sandy soils under irrigation. It has good ratooning ability compared to other varieties, as yields generally improve with ratoons. Performance during periods of drought have been better than other varieties. It is one of the best varieties for frost pockets and for irrigated annual harvesting in the midlands. It is a very good early season variety for the irrigated northern regions. N41 produces long, straight stalks that are generally resistant to lodging and that give good payloads.

LIMITING FEATURES

N41 is generally outperformed by most other coastal varieties when harvested older than 15 months. Low RV yields are obtained in the midlands on a long cutting cycle compared with other midlands varieties. It produces a sparse canopy, especially in the plant crop. Pokkah boeng is common on N41, but symptoms are generally cosmetic. There have been recent reports of poor performance on very sandy soils in the rainfed regions. Reports of high eldana (coastal) and smut (irrigated) levels have recently been received.

YIELD AND QUALITY*

	Region				
	Coastal and hinterland		Irrigated	Inland	
Age at harvest (months)	12-15	15-18	12-15	12-15 (frost pocket)	18-24
Tons RV	High	Moderate to high	Moderate	Moderate	Low
	127% of N12	103% of N12	100% of N25	105% of N35	96% of N12
	114% of N27	111% of N27	97% of N36	95% of N36	82% of N31
Cane yield	Moderate to high	Moderate	Moderate	Moderate to high	Very low
	119% of N12	88% of N12	92% of N25	121% of N35	93% of N12
	108% of N27	102% of N27	101% of N36	99% of N36	76% of N31
RV %	High	High	Moderate to high	Moderate	High
	108% of N12	116% of N12	108% of N25	88% of N35	105% of N12
	105% of N27	108% of N27	97% of N36	97% of N36	107% of N31
Fibre content	Low	Low	High	Moderate	Low
	87% of N12	90% of N12	116% of N25	98% of N35	94% of N12
	99% of N27	104% of N27	107% of N36	99% of N36	92% of N31
	94% of N39	89% of N39	119% of N46	106% of N48	94% of N48

Along the coast, best RV yields are achieved when harvested younger than 15 months as the yield advantage compared to other varieties tends to decline when aged. Poor RV yields are achieved when harvested on a long cutting cycle in the midlands. In the irrigated regions, better RV yields have been achieved when harvested early to mid-season compared with other varieties but also gives acceptable RV yields in the late season.

*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)	Average to high (132% of NCo376, 138% of N27)
Processability (higher percolation is better)	Unknown

SOIL SUITABILITY

Soil Group*	Performance
Grey crest to midslope	Good (relative to other varieties)
Grey lower slopes	Good
Humics	Moderate (relative to other varieties)
Red	Good (relative to other varieties)
Black structured	Good (Recommended)

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

AGRONOMIC CHARACTERISTICS	
Germination	Moderate speed
Stalk Population	Moderate (rainfed) to high (irrigated)
Stalk Height	Very high (>220cm)
Canopy speed	Moderate to slow (especially in plant crops)
Flowering	Rare
Lodging	Moderate (less than N25 and N36)
Ratoon regrowth	Rapid and reliable
Reaction to water stress	Good
Reaction to waterlogging	Good
N41 is known for its very good ratooning ability. It produces narrow, erect leaves that result in a sparse canopy. Stalk population improves with ratoons.	

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.

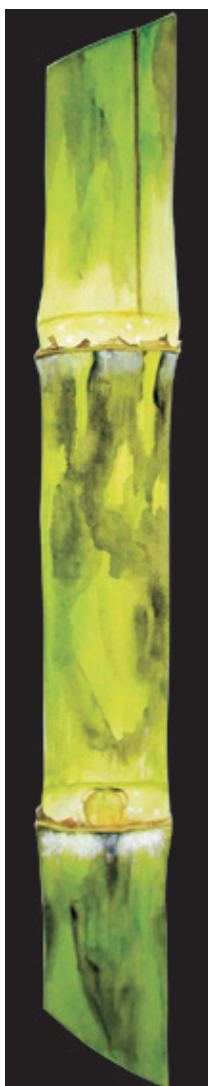
Flange: Narrow to medium; usually just reaches the growth ring.

REACTION TO DISEASES AND PESTS*	
Smut	Intermediate-susceptible (Poorer than N36 and N46, similar to N25)
Mosaic	Intermediate (Similar to N36, poorer than N46)
Brown rust	Intermediate (Better than N42 and N39)
Tawny rust	Susceptible
Eldana	Intermediate-resistant (Better than N27, poorer than N39)
Nematodes	Intermediate (Better than N27 and N36)
High levels of eldana have been reported recently along the coastal areas in N41. Thrips numbers on N41 have generally been intermediate to high. Smut has been observed in some fields of N41 in the northern irrigated regions. Fields need to be inspected regularly and rogued when necessary to manage the disease.	

* 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)	Yes (highly recommended)

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



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