

Development of New STMS markers for sugarcane

Govindaraj P.¹, Balasundaram N.¹, Sharma T.R.², Bansal K.C.², Koundal K.R.² and Singh N.K.²

¹Sugarcane Breeding Institute, Coimbatore, Tamilnadu, India

²NRC on Plant Biotechnology, Indian Agricultural Research Institute, New Delhi, India

Primer Name	: NKS 42
Forward Sequence	: accgattgttcagtgggaag
Reverse Sequence	: aacctagcaatttacaagagaattaga
Gene Bank acesion No. of source sequence	: SHY401320
Type of sequence	: Genomic DNA

Source Sequence:

```
1 ctggtataagccgctttgccatctcttcatcttcatctgcaaagaattcttgacgtgaaa
61 acacaaagacaaaaacctgatctttgaatagaaaaaagagtggatccgaagtcccaaatt
121 aattagcttatttgaaaaaaaagtcttcttcttcgagagatatatctcgtatatggtatt
181 gcatcgttctaccctgcaggaagtccgaatcagtttcttgcacctcggcagcaacaaatt
241 cagattccggactatttaagcatgggacaaaaaatattcaacgattttcacgaggaaaa
301 tggtaagcatgttctgatgaatagttccaactcgctcttatccaagtgtccaattgtct
361 catcgaccgattgttcagtgggaagaaaacgtattttctgatccgtctcgttgcaatgaa
421 attagtagtttactgggtccaaccacatgacgaagaagtgggtgtgtatatgtgtgtgtgtg
481 tgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgac
541 tctaattctcttgtaaattgctaggtt
```

Repeat Motif	: (tg) 35
Total number and names of the germplasm lines tested:	48 (view table)
No. of PCR products amplified	: 4
The size range of the PCR product	: 138 – 158 bp
The general PCR protocol used	: 200 µM of each dNTPs, 6pmol each of the forward and reverse primer, 0.5 units of Taq DNA polymerase

The PCR cycling condition:	Pre-denaturation:	94 ⁰ C (5 min),
	25 cycles of	Denaturation: 94 ⁰ C (50 sec),
		Annealing : 57 ⁰ C (50 sec),
		Extension : 72 ⁰ C (50 sec) and
	Final extension :	72 ⁰ C (7 min).

Reference: Unpublished