

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 14
Forward Sequence	: ttccaccagtgcatttcagc
Reverse Sequence	: ccaacagcagctttcttcctt
Gene Bank accession No. of source sequence	: SHY293487
Type of sequence	: Genomic DNA

Source Sequence:

```
1 accatatgantcaagaaagcaagantctggaaatggaacggagctggggccatcccatcca
61 tccgtccgtccctgcttgcttggaacccgttcttggatgcacaagtcgcttgctggtcgatgg
121 atgttgccctcttgccggggagtcaggtccatggttgcatggattgcgctccattccttt
181 ccaccagtgcatttcagcaacacacaaaggccacaagatctgatcgntctgaggtttttt
241 ttttgcagttcaagtccttttactctagagagatagatagatagatgatgcttactggttag
301 cctatcattcttcttagctctgtgctggagagagagagagagagagagagagagagagaga
361 gagagagagaggcaaaaaaggaagaagctgctggttgtgggtaagtcgcctcagtgctagtg
421 gtggtattatgacgttttcatgagttggaagacctggaagaagaggtcgttagtgcacat
481 ctttttgttgaaagatcaaaatatagtattataacgcacatgaaaatatgcctgcgtgacgc
541 cggccagaccctcggtggagctgacctgacctgacctgacctgccaaacagctgaaatca
601 aatgtgaactaaacaggggaacaaggatgaaagaagcttccttaacttcatcttcagtttt
661 agt
```

Repeat Motif	: (ga) 22
Total names of the germplasm lines tested	: 48 (view table)
No. of PCR products amplified	: 6
The size range of the PCR product	: 172 – 206 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°C (5 min),
	25 cycles of
	Denaturation: 94°C (50 sec),
	Annealing : 58°C (50 sec),
	Extension : 72°C (50 sec) and
	Final extension : 72°C (7 min).

Reference: Published