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]

[1]Sugarcane Breeding Institute, Coimbatore, Tamilnadu, India
[2]NRC on Plant Biotechnology, Indian Agricultural Research Institute, New Delhi, India

Primer Name : **NKS 16**
Forward Sequence :**gacagaatatgccatggataacaa**
Reverse Sequence :**cgttctctggtcctattgagc**
Gene Bank acesion No. of source sequence :**SHY293489**
Type of sequence :**Genomic DNA**

Source Sequence:

```
     1 actccaaagacaagatcattctatgaggtaaatgtataataagcatggtgaaggtcaata

    61 attgttcagtgcatggatatcaaaataaccagcatagtttttgtggaccaaatatttttt

   121 taactagaatgtttgagtggacagaatatgccatggataacaattatccttttctgttaa

   181 gaaagttaacatgtcatttatctactatgaaaagtgagtgagatacataaaatttgcttt

   241 ctctcagagagagagagagagagagagagagagagagagagagagagagagagggagagtaa

   301 aaaaaacacctgataagttctatgtgctcaataggaccagagaacgaaaagaactcatga

   361 agatcactttcagatactctgctcgagaggttagtgacttgtt
```

Repeat Motif :**(ag)23**
Total number and names of the germplasm lines tested:**48** (view table)
No. of PCR products amplified :**4**
The range size of the PCR product : **187 - 210 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: 94^0C (5 min),
25 cycles of Denaturation: 94^0 C (50 sec),
Annealing : 58^0 C (50 sec),
Extension : 72^0 C (50 sec) and
Final extension : 72^0 C (7 min).

Reference: Unpublished