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 45**
Forward Sequence :**gtcggtcgtgagaaggaaag**
Reverse Sequence :**cacgtataaaggccctgtgg**
Gene Bank acesion No. of source sequence :**SHY401325**
Type of sequence :**Genomic DNA**

Source Sequence:

```
  1 gattggcggagagcgccatcagcgagcagagcaggacggcggcggcgagcagcggccgcc

 61 acgacggtggcattgtgtcgatcgtcgtcgcgtcggtcgtgagaaggaaagaaggtagat

121 actagcttgcagtcgtgagaaaactgatcgaggaaatggacgagaaagctggtcgcttg

181 tgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtg

241 tgtgtgtgttgagcccgggtgctgccacagggcctttatacgtgttctggtgcgaaccgg

301 tcgggtgcaagtgtatatatgcatgcgtgtgctctatttggacaaatggttcaagtgttg
```

Repeat Motif :**(tg)35**
Total number and names of the germplasm lines tested: **48** (view table)
No. of PCR products amplified :**5**
The size range of the PCR product :**132 – 155 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Reference: Unpublished