Eighteen markers which showed robust amplification were validated in four wild sesame collections (M20, M21, MLB, and M22 ) and 16 released varieties (G-Til-2, RT-127, TKG-21, VRI(SV)-2, HT-2, G-Til-10, TKG-22, TMV-7, JLT-408, Savithri, RT-351, Nirmala, Hima, RT-346, Swetha, and DS-5 ) to assess the extent of polymorphism (table 1 and figure 1). Figure 1 illustrates polymorphism of two markers, SIM 154 and SIM 197, among released varieties and wild sesame collections.

The polymorphic information content (PIC) value ranged from 0.3 to 0.59 among a set of 16 released varieties. These markers are of practical significance for Indian sesame genotyping.



 Figure 1: Four percent agarose gel electrophoregram showing the polymorphism of marker SIM 154 among released varieties and wild sesame collections. 1-16, different varites: G-Til-2, RT-127, TKG-21, VRI(SV)-2, HT-2, G-Til-10, TKG-22, TMV-7, JLT-408, Savithri, RT-351, Nirmala, Hima, RT-346, Swetha, and DS-5; A and B, markers SIM 154 and SIM 197; a-d, different wild collections (M20, M21, MLB,M22)

 Table 1: List of markers and their polymorphic information content (PIC) value

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#**  | **Marker**  | **PIC**  | **#**  | **Marker**  | **PIC**  |
| 1.  | SIM006  | 0.4  | 10.  | SIM074 | 0.35  |
| 2.  | SIM019 | 0.59  | 11.  | SIM076 | 0.5  |
| 3.  | SIM025 | 0.5  | 12.  | SIM079 | 0.5  |
| 4.  | SIM028 | 0.48  | 13.  | SIM114 | 0.6  |
| 5.  | SIM031 | 0.35  | 14.  | SIM127 | 0.45  |
| 6.  | SIM040 | 0.54  | 15.  | SIM154 | 0.4  |
| 7.  | SIM053 | 0.46  | 16.  | SIM155 | 0.5  |
| 8.  | SIM059 | 0.45  | 17.  | SIM164 | 0.56  |
| 9.  | SIM063 | 0.3  | 18.  | SIM197 | 0.5  |