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Research article

PCR Optimization Prior to Genetic Diversity Assessment of Sesame (*Sesamum indicum L.*) Genotypes Using Inter-Primer Binding Site (IPBS) Markers

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Table (1): Mixing ratios and final reaction volume of PCR components.

Component	Amount
10X PCR Buffer	2 µL
10 mM Dntp	2 µL
25 mM MgCl2	0.5 µL
Taq DNA polymerase	0.5 µL
100 pmol primer	1 µL

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Table (2): Names and 5'→3' sequences of the 22 different iPBS primers used in gradient PCR analyses.

Primer No	IPBS Primer	Sequence 5-3’
1	2077	CTCACGATGCCA
2	2218	CTCCAGCTCCGATTACCA
3	2226	CGGTGACCTTTGATACCA
4	2228	CATTGGCTCTTGATACCA
5	2230	TCTAGGCGTCTGATACCA
6	2232	AGAGAGGCTCGGATACCA
7	2237	CCCCTACCTGGCGTGCCA
8	2243	AGTCAGGCTCTGTTACCA
9	2244	GGAAGGCTCTGATTACCA
10	2246	ACTAGGCTCTGTATACCA
11	2249	AACCGACCTCTGATACCA
12	2251	GAACAGGCGATGATACCA
13	2252	TCATGGCTCATGATACCA
14	2253	TCGAGGCTCTAGATACCA
15	2272	GGCTCAGATGCCA
16	2277	GGCGATGATACCA
17	2379	TCCAGAGATCCA
18	2380	CAACCTGATCCA
19	2389	ACATCCTTCCCA
20	2393	TACGGTACGCCA
21	2401	AGTTAAGCTTTGATACCA
22	2402	TCTAAGCTCTTGATACCA

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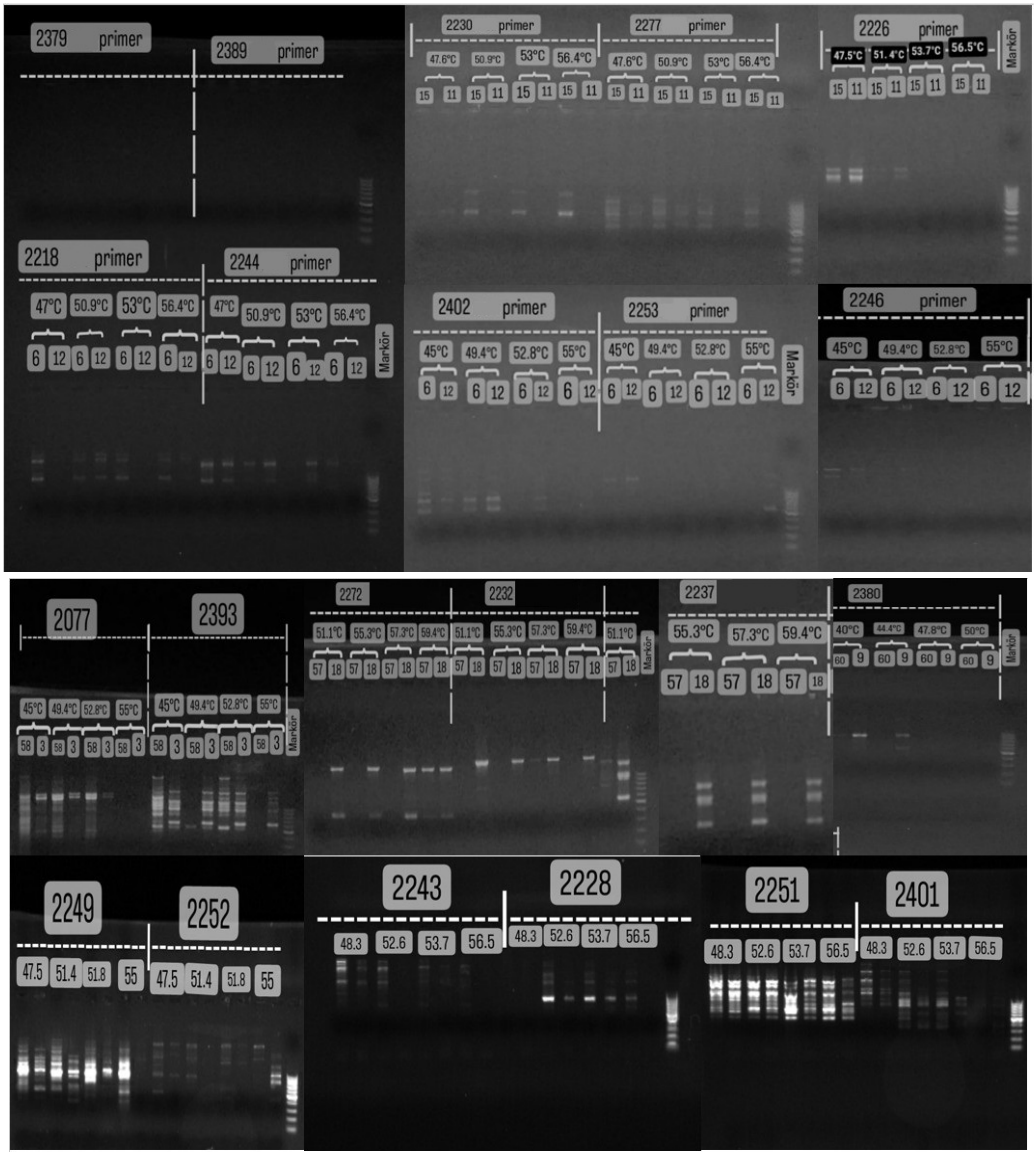

Figure (1): Agarose gel electrophoresis images showing PCR band profiles produced by 22 different iPBS primers at various optimized annealing temperatures, revealing genetic diversity in DNA samples.

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