



ISSR Marker Plant Identification Services

ISSR Marker Plant Identification Services use DNA markers to create unique genetic fingerprints, ensuring accurate plant species identification, crucial for agriculture, forestry, and conservation efforts.

Rs 9000

Per Sample

+91-8977624748

Our service extracts DNA, amplifies it using ISSR primers, and analyzes the unique patterns generated. These patterns are compared to a reference database for precise identification. This method supports the verification of genetic authenticity, crucial for breeding programs, conservation efforts, and ecological research. It ensures that plant species are correctly identified, aiding in biodiversity protection and sustainable agriculture.

Our ISSR Marker Plant Identification Service follows a detailed, step-by-step process to ensure precise and reliable identification of plant species. Below is an overview of the key stages involved:

1. **Sample Collection**

Collect plant tissue samples ensuring proper labeling and storage to preserve DNA integrity, which is crucial for accurate downstream analysis in the identification process.

2. **DNA Extraction**

Extract DNA using standardized protocols to obtain pure genetic material, setting the foundation for successful amplification and accurate identification.

3. **PCR Amplification**

Amplify specific DNA regions using ISSR primers in a PCR machine, generating polymorphic DNA fragments that will be used for identification.

4. **Gel Electrophoresis**

Separate the amplified DNA fragments on an agarose gel to visualize unique banding patterns, which are critical for species identification.

5. **Data Analysis**

Analyze the banding patterns using specialized software to create a genetic fingerprint, ensuring precision in species differentiation.

6. **Comparison with Database**

Compare the genetic fingerprint with a reference database to accurately determine the species identity or verify the plant's genetic integrity.

7. **Result Interpretation**

Interpret the DNA analysis results, providing insights into the species' identity, and delivering a detailed report with comprehensive findings.

8. **Final Report**

Prepare and deliver a final report to the client, summarizing the identification process, results, and any relevant data insights.

9. **Client Consultation (Optional)**

Offer consultation to discuss the results, providing recommendations and insights based on the genetic analysis findings.

10. **Follow-up Services**

Provide additional testing, re-analysis, or further consultation based on client needs, ensuring satisfaction and thorough investigation.