### LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>3D</td>
<td>Three dimensional</td>
</tr>
<tr>
<td>4CL</td>
<td>4coumurate ligase</td>
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<tr>
<td>As</td>
<td>Adenine</td>
</tr>
<tr>
<td>Bp/Mbp</td>
<td>Base pair/MegaBasepair</td>
</tr>
<tr>
<td>BLAST</td>
<td>Basic Local Alignment Search Tool</td>
</tr>
<tr>
<td>BLOSUM</td>
<td>BLOcks SUbstitution weight Matrix</td>
</tr>
<tr>
<td>Cs</td>
<td>Cytosine</td>
</tr>
<tr>
<td>cDNA</td>
<td>Complementary deoxyribo Nucleic Acid</td>
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<tr>
<td>cpDNA</td>
<td>Chloroplast deoxyribo Nucleic Acid</td>
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<tr>
<td>DDBJ</td>
<td>DNA Databank of Japan</td>
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<tr>
<td>DNA</td>
<td>Deoxyribo Nucleic Acid</td>
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<tr>
<td>EMBL</td>
<td>European Molecular Biology Laboratory</td>
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<tr>
<td>EST</td>
<td>Express Sequence Tags</td>
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<tr>
<td>PDB</td>
<td>Protein DataBank</td>
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<tr>
<td>PIR</td>
<td>Protein Information Resources</td>
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<tr>
<td>Pfam</td>
<td>Protein Family</td>
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<tr>
<td>Gs</td>
<td>Guanine</td>
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<tr>
<td>Ha</td>
<td>Hectare</td>
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<tr>
<td>H.P.</td>
<td>Himachal Pradesh</td>
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<tr>
<td>Km/m</td>
<td>Kilometer/meter</td>
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<tr>
<td>MEGA</td>
<td>Molecular Evolutionary Genetics Analysis</td>
</tr>
<tr>
<td>mRNA</td>
<td>Messenger RNA</td>
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<tr>
<td>NCBI</td>
<td>National Centre of Biotechnology Information</td>
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<tr>
<td>Nr/nr</td>
<td>Non-redundant database</td>
</tr>
<tr>
<td>ORF</td>
<td>Open Reading Frame</td>
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<tr>
<td>RAM</td>
<td>Root Apical Meristem</td>
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<tr>
<td>rRNA</td>
<td>Ribosomal Ribo-Nucleic Acid</td>
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<tr>
<td>SAD</td>
<td>Sinapyl Alcohol Dehyrdrogenase</td>
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<tr>
<td>SAM</td>
<td>shoot apical meristem</td>
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<td>Sq.</td>
<td>Square</td>
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<tr>
<td>SAVeS</td>
<td>Structural Analysis and Verification Server</td>
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<tr>
<td>Ts</td>
<td>Thymine</td>
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<tr>
<td>tRNA</td>
<td>Transfer Ribo Nucleic Acid</td>
</tr>
<tr>
<td>WGDB</td>
<td>Wood Gene Data Base</td>
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