Carbon Metabolism and Water Relations of Six Woody Weed Species and Their Modification by Paraquat and 2, 4, 5-T

Thesis submitted to Sri Venkateswara University for the Degree of Doctor of Philosophy

BY

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To my brother

Late Sri I.V. Subba Rao
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<tbody>
<tr>
<td>ADP</td>
<td>Adenosine diphosphate</td>
</tr>
<tr>
<td>ATP</td>
<td>Adenosine triphosphate</td>
</tr>
<tr>
<td>Atrazine</td>
<td>2-chloro-4-ethylamino-6-(isopropylamino)-s-triazine</td>
</tr>
<tr>
<td>CAM</td>
<td>Cressulaceae acid metabolism</td>
</tr>
<tr>
<td>Cyt</td>
<td>Cytochrome</td>
</tr>
<tr>
<td>DCMU</td>
<td>3-(3,4-dichlorophenyl)-1,1'-dithioureia</td>
</tr>
<tr>
<td>TCP/IP</td>
<td>2,6-dichlorophenol indophenol</td>
</tr>
<tr>
<td>Diquat</td>
<td>6,7-dihydrodipyrido (1,2-a:2',1'-c) pyrazinediuron</td>
</tr>
<tr>
<td>Diuron</td>
<td>3-(3,4-dichlorophenyl)-1,1'-dithioureia</td>
</tr>
<tr>
<td>DTT</td>
<td>Dithiothreitol</td>
</tr>
<tr>
<td>Urea</td>
<td>Ethylenediamino tetraacetate</td>
</tr>
<tr>
<td>xg</td>
<td>Gravity</td>
</tr>
<tr>
<td>GA</td>
<td>Gibberellic acid</td>
</tr>
<tr>
<td>HP</td>
<td>High potential</td>
</tr>
<tr>
<td>IC₅₀</td>
<td>The molar concentration of inhibitor giving 50% inhibition</td>
</tr>
<tr>
<td>IAA</td>
<td>Indoleacetic acid</td>
</tr>
<tr>
<td>LP</td>
<td>Low potential</td>
</tr>
<tr>
<td>mCi</td>
<td>Millisieverts</td>
</tr>
<tr>
<td>m. eq</td>
<td>Milli equivalents</td>
</tr>
<tr>
<td>NAD</td>
<td>Niacinamide adenine dinucleotide</td>
</tr>
<tr>
<td>NADP</td>
<td>Niacinamide adenine dinucleotide phosphate</td>
</tr>
<tr>
<td>nm</td>
<td>Nanometer</td>
</tr>
</tbody>
</table>
(iv)

OAA : Oxaloacetate

gD : Optical density

Paraquat : 1,1'-dimethyl-4,4'-bipyridinium ion

PEP : Phosphoenolpyruvate

Pentachlor : 3'-chloro-2-methyl-p-valero-toluidide

Phenmedipham : Methyl m-hydroxycarbanilate m-methyl carbanilate

Picloram : 4-amino-3,5,6-trichloronicotinic acid

Pi : Inorganic phosphate

Proetryne : 2,4-bis(isopropylarino)-6-(methylthio)-s-triazine

Propanil : 3',4'-dichloropropanilide

Pyrazone : 5-amino-4-chloro-2-phenyl-3-(2H)-pyridazinone

RuBP : Ribulose bisphosphate

SE : Standard error

Simazine : 2-chloro-4,6-bis(ethylarino)-s-triazine

s.g : Specific gravity

TCA : Trichloroacetic acid

Terbacin : 3-tert-butyl-5-chloro-6-methyluracil

2,4-D : (2,4-dichlorophenoxy) acetic acid

2,4,5-T : (2,4,5-trichlorophenoxy) acetic acid