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(P: Piriformospora indica; Ps: Pseudomonas fluorescens; Az: Azotobacter chroococcum)
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(P: *Piriformospora indica*; Ps: *Pseudomonas fluorescence*;
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(a) OM=6300X, FM=18900X; (b) OM=1500X, FM=4500X;
(c) OM=1550X, FM=4650X; (d) OM=1950X, FM=5850X;

OM=Original magnification; FM=Final magnification;
CW=Cell Wall; CM=Cell membrane; MT=Mitochondria;
VA=Vacuole; Li=Lipid bodies;
Fig. 35: Transmission electron micrograph of *P. indica* colonized roots of Bacopa
(a) OM=4600X, FM=13800X; (b) OM=6300X, FM=18900X;
(c) OM=3400X, FM=10200X; (d) OM=4600X, FM=13800X.
OM=Original magnification; FM=Final magnification
Pl= *P. indica*
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(a) OM=2650X, FM=7950X; (b) OM=3400X, FM=10200X;
(c) OM=3400X, FM=10200X; (d) OM=1150X, FM=3450X.
OM=Original magnification; FM=Final magnification;
P1= *P. indica*; VA=Vacuole; HY=Hyphae
Fig. 36: Transmission electron micrograph of *P. indica* colonized roots of Bacopa
(a) OM=2650X, FM=7950X; (b) OM=3400X, FM=10200X;
(c) OM=3400X, FM=10200X; (d) OM=1150X, FM=3450X.
OM=Original magnification; FM=Final magnification;
PI= *P. indica*; VA=Vacuole; HY=Hyphae
Fig. 37: Graphical representation of Antioxidants Production in *B. monniera*

<table>
<thead>
<tr>
<th>Sample</th>
<th>Antioxidant activity (nmoles trolox/g equivalent)</th>
<th>Relative Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacopa 1 (Kafer Control)</td>
<td>0.766</td>
<td>-</td>
</tr>
<tr>
<td>Bacopa 2 (Kafer treated)</td>
<td>6.095</td>
<td>7.95 X</td>
</tr>
<tr>
<td>Bacopa 3 (MMN 1/10 Control)</td>
<td>5.236</td>
<td>-</td>
</tr>
<tr>
<td>Bacopa 4 (MMN 1/10 treated)</td>
<td>8.028</td>
<td>1.53 X</td>
</tr>
</tbody>
</table>
Fig. 38: Radar plot of fluorescence kinetics of Bacopa with *P. indica* treated

(Green colour - control; Red colour - *P. indica* inoculated)

**Specific fluxes or specific activities (per active reaction center):**
- ABS/RC: Energy flux absorbed
- TR0/RC: Energy flux trapped
- ETO/RC: Electron transport flux

**Phenomenological fluxes or phenomenological activities (per excited cross-section):**
- ABS/CS0: Energy flux absorbed
- TR0/CS0: Energy flux trapped
- ETO/CS0: Electron transport flux
- RC/CS0: Density of active reaction centers

**Yields or ratio of fluxes:**
- PI/(abs): Performance index based on equal transport
- PHI/P0: Maximum quantum yield of primary photochemistry
- PHI/E0: Maximum quantum yield of electron transport
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M: Marker; 1: Inoculated Bacopa root; 2: Uninoculated control

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M: Marker; 1: Control (20 days); 2: Treated (20 days); 3: Control (30 days); 4: treated (30 days)
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M. Marker; Lane 1: *P. indica* inoculated; Lane 2: *P. indica* un-inoculated (control)