Synthetic Film Mulches

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Opaque Mulches - Black

Opaque Mulches: Susceptibility to nutsedge penetration

Opaque Mulches: White-on-black mulch

VIF – Virtually Impermeable Film

PE
Polyamide
PE
**TIF – Totally impermeable film**

- **Abuse Layer**
- **Tie Layer**
- **EVAL**™: Fumigant vapor barrier
- **Functional adhesive layer**

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**Relative permeability of fumigant gases through various plastic mulch films**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marketable yield (lbs/acre)</th>
<th>Nutsedge/ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untreated VIF</td>
<td>19735 c</td>
<td>23.8 a</td>
</tr>
<tr>
<td>Untreated VIF</td>
<td>25260 b</td>
<td>6.93 b</td>
</tr>
<tr>
<td>70 GHA TIF</td>
<td>25772 ab</td>
<td>0.39 c</td>
</tr>
<tr>
<td>70 GHA TIF</td>
<td>54737 b</td>
<td>0.18 c</td>
</tr>
<tr>
<td>70 GHA TIF</td>
<td>42616 ab</td>
<td>0 c</td>
</tr>
<tr>
<td>70 GHA TIF</td>
<td>46331 ab</td>
<td>0 c</td>
</tr>
<tr>
<td>70 GHA TIF</td>
<td>45429 ab</td>
<td>0.023 c</td>
</tr>
</tbody>
</table>

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**Metalized Mulch**

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**Red plastic mulch**

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**Transparent Mulch**
Transparent mulch

Infrared transmitting or wavelength-selective film

Spunbonded landscape fabric

Tree well mulching with landscape fabric

Geotextile mulch