Tril-21
Contact Fungicide-Bactericide
IR-4 Workshop 2021
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## Tril-21 Contact Fungicide-Bactericide

### Experimental Product Profile

<table>
<thead>
<tr>
<th>Active Ingredient</th>
<th>Thyme oil</th>
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</thead>
<tbody>
<tr>
<td>Mode of Action</td>
<td>FRAC F7: Cell membrane disruption</td>
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<tr>
<td>Crops</td>
<td>All crops, indoor and outdoor</td>
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<tr>
<td>Target Pests</td>
<td>Broad spectrum fungal and bacterial foliar plant pathogens</td>
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<tr>
<td>Application Rate</td>
<td>32-128 fl oz/100 gal (0.25%-1%)</td>
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<tr>
<td>Number of Applications</td>
<td>3-5 applications</td>
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<tr>
<td>Spray Interval</td>
<td>3-7 days, pressure dependent</td>
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<tr>
<td>FIFRA 25(b)</td>
<td>0-hour REI, 0-day PHI</td>
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</tbody>
</table>
Sterilized tomato leaf tissue was inoculated and incubated for 30 min.

Tril-21 treatments were applied and incubated for 30 min.

*P. syringae* were rescued and recovered from the tissue and plated.

Recovered cfu compared to inoculated untreated control to determine percent control.
Sterilized tomato leaf tissue was inoculated with conidia and incubated for 30 min.

Tril-21 treatments were applied and incubated for 30 min.

V. dahlia were rescued and recovered from the tissue and plated.

Recovered cfu compared to inoculated untreated control to determine percent control.
Tril-21 Contact Fungicide-Bactericide
Proof of Concept – *Botrytis cinerea*

- Sterilized tomato leaf tissue was inoculated with conidia and incubated for 30 min
- Tril-21 treatments were applied and incubated for 30 min
- *B. cinerea* were rescued and recovered from the tissue and plated
- Recovered cfu compared to inoculated untreated control to determine percent control
Tril-21 Contact Fungicide-Bactericide
IR-4 Request

Application Information:
• Apply before or when environmental conditions for pest development are high
• Complete coverage of the leaf and plant surfaces, apply to run off
• Make 3-5 consecutive applications 3-7 days apart depending on pressure
• Rates:
  • 64 fl oz/100 gal (greenhouse/indoor high pressure)
  • 128 fl oz/100 gal (outdoor high pressure)
• Apply early in the morning or late afternoon when temperature is under 90 °F

Testing Needs:
• Greenhouse and field efficacy trials on all foliar plant pathogens
• Plant safety trials at 128 fl oz/100 gal, 2x, and 4x