2009 Liverwort Efficacy

Final

Ornamental Protocol Number: 09-024

Objective: Determine efficacy of oregano oil extract for managing liverwort in containers.

Experimental Design:

Plot Size: Must be adequate to reflect actual use conditions.

Replicates: Minimum of 5 individual pot replications in RCB (other experimental designs are acceptable as well as long as there are at least 5 pots treated)

Application Instructions: One application, then wait one month to determine whether to apply again. Applications should be made over the top of the plants using application equipment consistent with conventional commercial equipment. Target dry foliage. If dew is present at the time of application, note it. Irrigate with ½ inch water between 1 and 4 hours after application.

Plant Materials: Contact your Regional Coordinator for an up-to-date list. Plants grown in field containers are preferred to in-ground.

Treatments:

<table>
<thead>
<tr>
<th>Product</th>
<th>Priority</th>
<th>Rate Product (ai) per acre</th>
<th>Special Instructions</th>
<th>Contact Information to obtain materials</th>
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</thead>
<tbody>
<tr>
<td>Bryophyter (Oregano Oil Extract)</td>
<td>C</td>
<td>½ %</td>
<td></td>
<td>For technical information: Bill Rohlfsen, <a href="mailto:bill@mossbuster.com">bill@mossbuster.com</a>, 515-480-6964</td>
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<td></td>
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<td>For shipment: Eric Hemann, <a href="mailto:eric@mossbuster.com">eric@mossbuster.com</a>, 641-357-1455</td>
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<tr>
<td>Untreated</td>
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Evaluations: At 1, 2, and 4 weeks after each application, record efficacy on a scale of 0 to 10 (0 = No efficacy; 10 = Complete kill). If pots contain a crop in addition to the liverworts, record any phytotoxicity observed on a scale of 0 to 10 (0 = No phytotoxicity; 10 = Complete kill) and take pictures comparing treated and untreated plant material.

Recordkeeping: Keep detailed records of weather conditions including temperature and precipitation, soil-type or soil-less media, application equipment, irrigation, liner size, plant height & width, and plant growth stage at application and data collection dates.

Reports: Reports submitted electronically on the standard IR-4 Ornamental Horticulture Research Report Form are preferred.

A report submitted electronically is preferred but not required. If the report is provided electronically, the basic report can be sent in MS Word or WordPerfect, the recordkeeping information as pdf or other electronic documents, and the raw data in MS Excel or other suitable program such as ARM.

Please direct questions to: Cristi Palmer, IR-4 HQ, Rutgers University, 681 US Hwy 1 S, North Brunswick, NJ 08902-3390, Phone 732-932-9575 x4629, palmer@aesop.rutgers.edu OR Ely Vea, 308 Aston Forest Lane, Crownsville, MD 21032, Phone & FAX#: 410-923-4880, E-mail: evvea@comcast.net.