Testing Italian Arum Control Methods in a Greenhouse Setting
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Background: Imported to the region as a garden ornamental, Italian arum (*Arum italicum*) is now listed as a Class C noxious weed by the Washington State Noxious Weed Control Board. It outcompetes native groundcover in wetland and upland areas. It reproduces vegetatively through small bulbs, making control difficult.

The Question
• Can *Arum italicum* be controlled through herbicide, tarping, or soil solarization?

Methods: Three treatments will be tested against a control population in a greenhouse setting.
1. Glyphosate (3%) applied to cut stems during flowering.
2. Tarping with 6 mil black plastic.
3. Soil solarization with 6 mil clear plastic (Summer 2015 only).

Three trials will be run in parallel with cohorts being examined for viability (resprouts) and mass.

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Spring 2015</th>
<th>Fall 2015</th>
<th>Beginning Spring 2016</th>
<th>End Spring 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1</td>
<td>Plant</td>
<td>Bulb Mass and Resprouts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort 2</td>
<td>Plant</td>
<td>2nd Treatment</td>
<td>Bulb Mass and Resprouts</td>
<td></td>
</tr>
<tr>
<td>Cohort 3</td>
<td>Plant</td>
<td>2nd Treatment</td>
<td>3rd Treatment</td>
<td>Bulb Mass</td>
</tr>
</tbody>
</table>

Implications:
1. A reduction in resprouts relative to the control group will imply that a treatment has reduced the viability of *Arum italicum*.
2. A reduction in bulb mass will imply a decrease in overall viability and sexual reproductive potential.
3. Comparisons between treatments can inform future field applications.

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For More information, please email me at zmallon1@uw.edu