Plant Propagation Protocol for *Polypodium scouleri*
ESRM 412 – Native Plant Production
Spring 2015

(Source: “Polypodium scouleri”, *Rainy Side Gardens*)

North American Distribution
From the USDA Plants Database

Washington State Distribution
# TAXONOMY

<table>
<thead>
<tr>
<th>Plant Family</th>
<th>Scientific Name</th>
<th>Polypodiaceae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Name</td>
<td>Polypody</td>
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</tbody>
</table>

## Species Scientific Name

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Polypodium scouleri Hook. &amp; Grev.</th>
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</table>

## Varieties

<table>
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<tr>
<th>Sub-species</th>
<th>Cultivar</th>
</tr>
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</table>

## Common Synonym(s)

- Leathery polypody, Scouler’s polypody, coast polypody, leather-leaf fern

## Species Code (as per USDA Plants database)

- POSC4

# GENERAL INFORMATION

## Geographical range

- Coastal British Colombia to California; See maps above for North American and Washington State distribution.

## Ecological distribution

- Found on coasts, generally in heavy fog or salt spray zones.

## Climate and elevation range

- 0-160m, prefers moist soils, salt spray, and partial shade.

## Local habitat and abundance

- Exposed cliffs, banks, tree trunks, or other coastal crevasses exposed to salt spray.

## Plant strategy type / successional stage

- Drought-tolerant

## Plant characteristics

- Perennial fern, growing from exposed rhizomes. Simple, leathery fronds of a dark evergreen shade, up to 12in in length.

# PROPAGATION DETAILS

## Ecotype

## Propagation Goal

- Plants/ferns

## Propagation Method

- Sexual spores

## Product Type

- Containers

## Stock Type

- Plants/ferns

## Time to Grow

- 6-12 months

## Target Specifications

- 6-24in long fronds, varying heights and widths

## Propagule Collection Instructions

- Ensure that spores are ripe before collecting; they will usually be a cinnamon color. Choose a fern leaf to propagate from, set it between two pieces of paper for 1-2 weeks to allow it to dry. When dry, remove debris from the paper carefully.

## Propagation Method

- Vegetative

## Product Type

- Containers, bareroot/rhizomes
<table>
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<tr>
<th>Stock Type</th>
<th>Plants/ferns</th>
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<tbody>
<tr>
<td>Time to Grow</td>
<td>0-2 months$^9$</td>
</tr>
<tr>
<td>Target Specifications</td>
<td>6-24in long fronds, varying heights and widths</td>
</tr>
<tr>
<td>Propagule Collection Instructions</td>
<td>Divided rhizomes can be transplanted immediately$^{1,3,11}$</td>
</tr>
<tr>
<td>Propagule Processing/Propagule Characteristics</td>
<td></td>
</tr>
<tr>
<td>Pre-Planting Propagule Treatments</td>
<td>Be sure that both medium and container are sterile$^{3,11}$</td>
</tr>
<tr>
<td>Growing Area Preparation / Annual Practices for Perennial Crops</td>
<td>Compost or other rich, moist media works best, can be kept moist by putting pot in plastic bag$^4$.</td>
</tr>
<tr>
<td>Establishment Phase Details</td>
<td>Ensure rich and consistently moist soil as it grows into maturity$^{4,7}$. Access to light and even temperatures (about 50-60 F) for 2-4 weeks$^{1,11}$</td>
</tr>
<tr>
<td>Length of Establishment Phase</td>
<td>2-5 months$^{12}$</td>
</tr>
<tr>
<td>Active Growth Phase</td>
<td>Prothalli to sporophyte stage$^{3,11,12}$</td>
</tr>
<tr>
<td>Length of Active Growth Phase</td>
<td>6-12 months$^{11}$</td>
</tr>
<tr>
<td>Hardening Phase</td>
<td></td>
</tr>
<tr>
<td>Length of Hardening Phase</td>
<td></td>
</tr>
<tr>
<td>Harvesting, Storage and Shipping</td>
<td></td>
</tr>
<tr>
<td>Length of Storage</td>
<td></td>
</tr>
<tr>
<td>Guidelines for Outplanting / Performance on Typical Sites</td>
<td>Outplanting can occur in late spring, early summer of the following year$^{4,9}$</td>
</tr>
<tr>
<td>Other Comments</td>
<td><em>Polypodium</em> has some herbal medicinal qualities$^{4,5}$, although significance in <em>P. scouleri</em> is unknown. Rhizomes and other parts of the plant were used by Native Americans as a kind of food or candy$^{5,16}$</td>
</tr>
</tbody>
</table>

**INFORMATION SOURCES**

**References**


16 Turner, Nancy J., and Barbara S. Efrat. Ethnobotany of the Hesquiat Indians of Vancouver Island. Victoria:
Other Sources Consulted


Protocol Author

Sara Emrick

Date Protocol Created or Updated

Created 5/10/2015