



INTEGRATED PEST MANAGEMENT PRESCRIPTION

Old man's beard (*Clematis vitalba*)

Description:

Old man's beard (*Clematis vitalba*), also known as traveler's joy, is a member of the Buttercup family of plants (Ranunculaceae). It is a woody perennial vine that has a vigorous growth habit and can grow up to 95 feet long.

The vine produces compound leaves that emerge opposite each other and consist of five leaflets, with the upper leaflet sometimes three lobed. Individual flowers are about an inch in diameter, greenish white and found in clusters. The flowers do not have petals, they consist of four sepals and many stamens and styles.

The common name "old man's beard" is from the seed stage of the flower, when a mass of white is produced from the long, feathery styles that elongate and stay attached to the small hairy seed. Fluffy seed-heads persist through winter.



Photo by Nancy Ness

Impacts:

Old man's beard is a non-native, invasive vine in the Pacific Northwest. In New Zealand, it is reported that vines climb the tallest forest trees, forming a dense canopy that blocks sunlight and suppresses all vegetation beneath it. At one forest reserve, up to 25 percent of the understory species has been lost. Old man's beard can be so vigorous that the weight of the plant can break the supporting trees.

- Old man's beard can grow five to seven times faster than ivy, with each stem capable of producing 30 feet of growth in one season.
- Each plant can produce over 100,000 seeds, which are dispersed by wind, water, people and animals.
- Seeds can remain viable and dormant for up to 10 years, allowing a substantial seed bank to form.
- Plants can also sprout from broken stem fragments, usually from older stem fragments which can hold more water.



Control Options:

Thurston County's Integrated Pest Management emphasizes cultural, biological, and manual control methods to keep pests and vegetation problems low enough to prevent damage. The goal of Thurston County's Integrated Pest Management is to minimize the use of pesticides by utilizing and providing information about the most effective control options that are available and practical.

► Cultural / Habitat

Do not plant old man's beard in your landscape. Planting conifers in an area where these plants have been removed or chemically controlled can help reduce seed germination by reducing available sunlight. Dense, native ground cover may also significantly reduce seed germination and re-establishment of old man's beard.

► Manual / Mechanical

Young plants and seedlings can be pulled or hand dug. All vines running along the ground and just under the surface must be dug out. Roots broken off at least 2 inches below the surface usually do not survive. Climbing vines can be cut at waist height and left to die in the trees. Leaving the vines in the trees to dry out before removing may reduce damage to the trees, but ensure that no hanging vines are in contact with the ground. After cutting climbing vines, the lower vines and shallow roots need to be removed or they will re-sprout.

► Biological

There are currently no biological control agents available for old man's beard in the United States.

► Chemical

Contact herbicides kill the plant tissue it touches, and systemic herbicides are taken into the plant and transported throughout the plant to kill all the tissue. A systemic herbicide is recommended for control of old man's beard because even small stem fragments left alive can root and start a new plant.

Glyphosate is an active ingredient in many systemic herbicide products that are effective in the control of old man's beard. Application methods vary for the type and size of the infestation; foliar applications (spraying leaves and stems) are recommended for large ground infestations, basal bark applications (applying product to vine after removing a section of the outer layer of bark) work when upper portions of vines are inaccessible, and cut stem applications (applying directly onto cut vine stumps) are most effective when combined with manual removal of vines and plant fragments.

Control of old man's beard is good with at least 2% glyphosate in the foliar spray solution to be effective. Pre-mixed or "ready-to-use" products usually contain less than 2% glyphosate and are not recommended. Use of a concentrated glyphosate containing product (like Roundup® Original, Glyphos® Herbicide, etc.) with 41% active ingredient, can be used to mix to effective glyphosate concentrations. Thurston County rates glyphosate products high in hazard for carcinogenic potential. The risk from spot spraying old man's beard is considered low provided the applicator wears a long sleeved shirt, pants and chemically resistant gloves.



Timing:

Plants can be treated anytime they are green in color, though late season (September/October) treatments are known to be somewhat more effective. Do not treat dormant plants when the foliage is brown and/or gray. Remove and dispose of flower spikes whenever they appear.

Treatment method	Product Rates	Mix (Beginning with a 41% glyphosate product)
Foliar application	2%	To 1 gallon of water add 2.66 ounces of a 41% glyphosate product to reach a 2% product spray solution.
Basal Bark application Cut stem application	50% or 100%	For younger, greener stems, add equal parts water to a 41% glyphosate product. For older, woody vines, use full strength.

Pollinator Protection:

To minimize negative impacts to bees and other pollinators, treatment prior to blooming is recommended. Removal of flowers before treatment can be an option. If treatment must occur during blooming period, try to spray early or late in the day or on cloudy cool days.

READ AND FOLLOW ALL LABEL DIRECTIONS AND RESTRICTIONS. Use of brand names does not imply endorsement and is for reference only; other formulations of the same herbicides may be available under other names. Information provided is current as of the date of the fact sheet. Pesticide product registration is renewed annually and product names and formulations may vary from year to year.

REFERENCES:

Oregon Department of Agriculture,
http://www.oregon.gov/ODA/PLANT/WEEDS/statelist2.shtml#B_List

Washington State Noxious Weed Control Board, Old Man's Beard.
http://www.nwcb.wa.gov/weed_info/clematis_vitalba.html

The Nature Conservancy
<http://www.invasive.org/gist/moredocs/clevit01.pdf>



Thurston County Public Health & Social Services
412 Lilly Road NE
Olympia WA 98506
Phone: 360-867-2586
T.D.D. 360-867-2603

www.co.thurston.wa.us/health/ehipm/index.html

