Don't Squish That Bug! Organic Pest Management for Home Gardens Lisa Taylor, Garden Speaker / Educator / Author / Consultant Author of *Your Farm in the City, Maritime Northwest Garden Guide* www.gardenwithlisa.com

## IPM or OPM, what is it?

Integrated Pest Management or Organic Pest Management An alternative to pesticides or herbicides for controlling pests and diseases. Considers pest and disease problems with a holistic, ecological point of view.

Basic steps

- Observe and positively identify pest or disease.
- Learn all about habits and habitats, lifecycles and where organism fits into the bigger scheme of things.
- Decide on a course of action.
- Set tolerance levels. How far will you go? What is your definition of pest or weed?
- Take action, monitor and evaluate. Adjust.

Use a treatment only when needed and treat only the critical area Change conditions to discourage pest or increase natural enemies.

Tolerable Damage?

Setting your levels, is it a nuisance problem?

Observe and identify Pest or Guest?

See Pest	OR	See Damage
Stages of life and		no creatures present during day
linking larva, adult, pupa		look at night, dawn, cool or hot weather
collect plants, frass and other		look at bite marks
evidence		look for frass or exoskeleton
notice any other inse	ect activity	

After positive identification, learn about lifecycle, habitats, habits and role in the ecosystem. Is this a problem?

Can you remedy the situation with proper cultural practices?			
Build healthy soil	Use the least toxic approach		
Work with nature	Water wisely		
Right plant, right place	Learn as you grow		
Encourage biodiversity			

If it is a problem, apply tactics.

Treatment strategies typically begin with indirect controls and move toward direct controls if pest populations are not responding.

<u>Indirect Suppression</u> Design/redesign Habitat modification Human behavior changes/Education

<u>Direct Suppression</u> Physical/mechanical controls Biological controls IPM includes least toxic chemical controls

Basic lifecycle of insects that pupate Adult-egg-larva-pupa-adult

Basic lifecycle of insects that do not pupate Adult-egg-nymph-adult

## Resources

Garden Hotline (206) 633-0224, gardenhotline.org

## Books

*Maritime Northwest Garden Guide, 2<sup>nd</sup> ed.*, Lisa Taylor, 2014 *Your Farm in the City*, Lisa Taylor, 2011

Garden Insects of North America, Whitney Cranshaw, 2004 Gardener's Guide to Common Sense Pest Control, Olkowski and Olkowski, 2013 Insects of the Pacific Northwest, Peter Haggard and Judy Haggard, 2006 Landscape Plant Problems, WSU Cooperative Extension, Byther, Foss, Antonelli, Maleike and Bobbit, 1996 Living With Wildlife in the Pacific Northwest, Russell Link, 2004 Natural Enemies Handbook and Gallery, https://ipm.ucanr.edu/natural-enemies Pacific Northwest Insects, Merrill A. Peterson, 2018 Pest of Landscape Trees and Shrubs, An Integrated Pest Management Guide, Publication 3359, Steve Dreistadt, Jack Kelly Clark, Mary Louise Flint, 1994 Pest of the Garden and Small Farm, A Grower's Guide to Using Less Pesticide, Publication 3332, Mary Louise Flint, 1990 Plants and Animals of the Pacific Northwest, Eugene N. Kozloff, 1980 Rodale's Color Handbook of Garden Insects, Anna Carr, 1979 Wild Plants of Greater Seattle, Arthur Lee Jacobson, 2008 Weeds of the West, Tom D. Whitson, 2006