

“Bug Wars: Using Beneficial Insects in the Garden & Greenhouse”

New England Grows – February 4, 2010
Suzanne Wainwright Evans · Buglady Consulting

Suppliers of Biological Control Agents and Supplies

Name	Address	Website	Phone	About
Applied Bionomics	Romoland, CA	www.appliedbio-nomics.com	(951) 943-2819	Predatory mites
Becker Underwood	Ames, IA	www.beckerunderwood.com*	(800) 232-5907	Beneficial nematodes
Beneficial Insectary	Redding, CA	www.insectary.com	(800) 477-3715	Green lacewings and others
BioBest Biological Systems	Leamington ON, Canada	www.biobest.be*	(519) 322 -2178	Assortment of beneficial insects and mites
Biotactics, Inc.	Perris, CA 92570	www.benemite.com	(909) 943-2819	Predatory mites
BioWorks, Inc.	Victor, NY	www.bioworksbiocontrol.com	(800) 977-9443	Beneficial nematodes, biological disease control
BioLogic Company	Willow Hill, Pa	www.biologicco.com	(717)349-2789	Beneficial nematodes
Buglady Consulting	Slatington, PA	www.bugladyconsulting.com	(610) 767-9221	Sticky cards, hand lenses and consulting
Koppert Biological Systems	Romulus, MI	www.koppert.com*	(800) 928-8827	Assortment of beneficial insects and mites
Sterling Insectary	Delano, CA	www.sterlingnursery.com*	(661) 725-1832	Predatory mites, <i>Cryptolaemus</i>
Syngenta BioLine	Oxnard, CA	www.syngenta-bioline.co.uk	(805) 986-8265	Assortment of beneficial insects and mites
The Bug Factory	Nanoose Bay BC, Canada	www.thebugfactory.ca	(250) 468-7912	Assortment of beneficial insects and mites

*Have chemical compatibility tables on website.



Books

“Ball Identification Guide to Greenhouse Pests and Beneficials” by Stanton Gill and John Sanderson	Comprehensive guide to identifying arthropod pests and their natural enemies on crops grown in U.S. greenhouses. ISBN: 1-883052-17-3, 256 pages
“Biocontrol in Protected Culture” edited by Roy G. Van Driesche, Kevin M. Heinz, and Michael P. Parella	Reference for biological control measures in greenhouses, shadehouses, and other protected environments. Chapters are devoted to general biocontrol theories and practices, as well as specific crops and pests. ISBN: 1-883052-39-4, 560 Pages
“Garden Insects of North America: The Ultimate Guide to Backyard Bugs” Whitney Cranshaw.	This is the most comprehensive and user-friendly guide to the common insects and mites affecting yard and garden plants in North America. 656 pp.
“Identification of Insects and Related Pests of Horticultural Plants”	This new edition illustrates the life stages and crop damage of the major insect, mite, and related pest groups of greenhouse crops. More than 175 color photographs, 48 pages. O.F.A Services, INC. WWW.ofa.org or (614) 487-1117
“Knowing and Recognizing: The Biology of Glasshouse Pests and Their Natural Enemies, Second Edition”	M. H. Malais and W. J. Ravensberg. This publication covers IPM for greenhouse crops, both vegetable and ornamental. Monitoring, sanitation, biological controls, biorational pesticides, insect growth regulators, and disease control methods are discussed. Tables include information on the newest biorational pesticides and biological control organisms. 288 pp. Hardcover
“Natural Enemies Handbook: The Illustrated Guide to Biological Pest Control”	Mary Louise Flint and Steve H. Dreistadt 154 pp. Softcover University of California. (800) 994-8849 Publication # 3386 http://www.ipm.ucdavis.edu/IPMPROJECT/ADS/manual_naturalenemies.html

Free Online Books

- “Greenhouse IPM with an Emphasis on Biocontrols” - <http://paipm.cas.psu.edu/63.htm>
- “Beneficials on farmland: Identification and management guidelines” - http://www.hgca.com/cms_publications.output/2/2/Publications/Publication/Beneficials%20on%20farmland%e2%80%93%20Identification%20and%20management%20guidelines.aspx?fn=show&pubcon=4538
- “Biological Control of insects and other pests of greenhouse crops” <http://learningstore.uwex.edu/pdf/ncr581.pdf>
- “Biological Control of Insects and Mites: An Introduction to Beneficial Natural Enemies and Their Use in Pest Management” <http://learningstore.uwex.edu/Biological-Control-of-Insects-and-Mites-An-Introduction-to-Beneficial-Natural-Enemies-and-Their-Use-in-Pest-Management-P1248C0.aspx>

Helpful Websites

- ANBP (Association of Natural Biological Producers) – www.anbp.org
- Biological Control: A Guide to Natural Enemies in North America - www.nysaes.cornell.edu/ent/biocontrol/
- Buglady Consulting - www.bugladyconsulting.com Articles on pest management
- BugWood Network - www.bugwood.org Extensive library of insect photos
- Cooperative Extension Insect Publications (Colorado State University) - www.ext.colostate.edu/Pubs/insect/pubins.html Fact Sheets
- Featured Creatures: The Good, The Bad and The Pretty - <http://creatures.ifas.ufl.edu> Fact Sheets
- Insect Parasitic Nematodes - <http://www2.oardc.ohio-state.edu/nematodes/>
- Simple Key to Insect Orders - <http://www.lucidcentral.org/keys/cpitt/public/Insects/html/intro.htm>
- Beneficial Insect Fact Sheets - <http://entweb.clemson.edu/cuentres/cesheets/benefici/> Clemson University
- Safe Lawns www.safelawns.org
- EPA Exempt Products http://www.epa.gov/oppbppd1/biopesticides/regtools/25b_list.htm
- EPA Exempt Products, 25b Minimum Risk Pesticides http://www.epa.gov/oppbppd1/biopesticides/regtools/25b_list.htm

Scopes

- IPM scope - http://www.specmeters.com/IPM_and_Plant_Health_Tools/IPM_Scope.html Spectrum Technologies (800) 248-8873
- MiScope® - <http://www.zarbeco.com/products-misc.shtml> Zarbeco, LLC (973) 933-2043

Pest Newsletters

- University of Maryland Greenhouse IPM Report www.ipmnet.umd.edu
- PA Capital Region Woody Ornamental Pest Update <http://york.extension.psu.edu>
- Oregon State IPM Pest Alerts - email Robin.Rosetta@oregonstate.edu
- BYGL (Buckeye Yard and Garden online) <http://bygl.osu.edu/>
- ATTRA National Sustainable Agriculture Information Service <http://attra.ncat.org/>

*Thank you for coming to my talk!
The Buglady*