

Integrated Pest Management

The IPM Principals that should apply to most Connecticut Rose Growers are distilled (edited) to these:

If spraying is personally not acceptable, or is highly objectionable, select roses that are disease-resistant to begin with. These include rugosas, old roses in general and shrubs. More modern roses, hybrid teas and floribundas, generally are not as disease resistant. Further, Japanese Beetles tend to favor yellow and white blooms over darker ones. If you can't use insecticides, consider avoiding light colors.

If you are not constrained by time available for the garden, you have more flexibility for less 'toxic' methods that require frequent application and effort. These may include Frequently manual picking off beetles, frequent high pressure water sprays of all roses for aphids and spider mites, application of weak solutions of chemicals that don't stick or last (sodium bicarbonate) (and must be repeated after every rain), defensive water sprays for fungal diseases that must dry later in the day to be successful (and are thus most effective in the Early Morning, when most folks are getting ready for work). If Available Time is an issue, and there is a low tolerance for pests, you must be more aggressive.

If you use your roses primarily for cutting for indoors, consider accepting more pest damage in the garden, then spending more effort toward cleaning/grooming the stems before display in the vase.

Remember that the more objectionable part of spray materials might be the solvent/propellant, not the active ingredient. A wettable powder may be a good answer where the petroleum-based solvent is the issue.

Treat for the pests you need to, only when you need to; not widespread anti-everything spraying. Know the seasons (weather conditions) that favor fungal problems. For insects: aphids can be controlled fairly successfully without insecticides, or with mild ones. Japanese Beetles are usually only a problem in CT for a period from the beginning of July for about six weeks. Thereafter, they are much fewer in number (and potentially acceptable without treatment). Fungal Rust, and some insects common to the west coast, are not prevalent in CT- and so need not be defended against.

Systemic fungicides are designed to be applied to a growing rose plant's leaves and stems. There is low benefit from spraying the ground and mulch- since they are not contact fungus killers. And this uses far more spray material than would be necessary to fully coat the leaves! For that matter, use a very fine spray pattern (fog-like). Don't overuse or over spray. Science has determined that leaves have two sides- and both need coverage; but the maximum amount of coverage needed for the leaves is 100%. Overspray is not helpful; it is wasteful and not environment-friendly.

Fall clean up as part of the Winterizing the Rose Garden process is important, and can be done without chemicals. Keeping the garden free of disease one year goes a long way toward the ability of the rose to survive Connecticut 's biggest pest: cold, windy winters.

So take a look at the collection of articles and links to other websites provided here in this section. After reviewing, re-make deliberate decisions concerning your personal rose garden goals and pest tolerance. Then plot a course for Managing your Pests in an Integrated manner. Consider contacting a Consulting Rosarian (from New England , where the climate/weather are understood and the pests are common) to compare your plan with another person. CR's can be a huge help in the planning and action IPM process.

Additional Articles and Links:

- Integrated Pest Management of Roses. Dept. of Horticulture, Cornell <http://www.gardening.cornell.edu/>
- Integrated Pest Management in a Nutshell. Siri Amrit Khalasa. <http://www.tigerflag.com/> (then click on Siri Amrit's Homepage on the left)
Good discussion- mainly roses, but could be applied to other gardening.
- University of Connecticut Integrated Pest Management www.hort.uconn.edu/ipm/ipmprog.htm
- IPM in the Northeast Region www.northeastipm.org
- The Connecticut Agricultural Experiment Station: www.caes.state.ct.us

- and for Lyme Disease Ticks, in particular, : <http://www.caes.state.ct.us/FactSheetFiles/Entomology/fsen025f.htm>
- For ticks, Lyme Disease and other data in CT: <http://www.caes.state.ct.us/FactSheetFiles/IndexHeadingFiles/FStick.htm>
- Environmentally Friendly Rose Care. Cindy Fake, Horticultural & Small Farms Advisor, Placer & Nevada Counties , CA . Pub. 31-147. Oct. 2001. <http://ucce.ucdavis.edu/files/filelibrary/1808/1338.pdf>
Short, but useful. West coast slant
- University of Minnesota IPM Links. <http://ipmworld.umn.edu/>
- IPM Institute www.ipminstitute.org
- Use of Baking Soda as a Fungicide. NCAT Agri. Specialists. Nov 2001. <http://attra.ncat.org/attra-pub/bakingsoda.html>
Fair. Not directly rose-focused, but discusses the rose-directed product Remedy.
- Pest Management at the Crossroads www.pmac.net/
- Gempler's IPM Almanac. www.ipmalmanac.com/
- University of Maryland IPM. www.agnr.umd.edu/users/ipmnet/
- University of Massachusetts AgroEcology. www.umass.edu/umext/agroecology/
- Resource List for Pesticide Alternatives www.members.aol.com/homeview2/info/
- Insect Parasitic Nematodes www2.oardc.ohio-state.edu/nematodes
- Biocontrol Network www.biconet.com/index.html

- National Park Service IPM Manual
www1.nature.nps.gov/wv/ipm/tmanual.htm
- Suppliers of Beneficial Organisms
<http://www.cdpr.ca.gov/>