IPM & Organic Strategy for The Rose Exhibitor

by Kitty Belendez

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It wasn't long after I first began growing roses more than 25 years ago that I got completely hooked on rose show exhibiting. I was hungry for knowledge and therefore I picked the brains of every exhibitor I met and read every book I could get my hands on. I wanted to grow prize-winning roses so I was determined to do everything by the book. I was told repeatedly by top exhibitors that I MUST spray and feed my roses EVERY WEEK in order to grow the best roses.

So I sprayed my roses once a week with chemicals (every week, year round!) to control diseases and insects. Within two years my garden was a complete mess. I had destroyed the natural habitat I had in my garden when I first began growing roses. The spider mites, cucumber beetles, aphids and other BAD bugs were now running rampant because they had become resistant to the same chemicals I used over and over. But all the good bugs such as ladybugs, lacewings and praying mantis were gone. Mildew had taken hold and would not let go because I sprayed too often so the fungus had become immune. Roses were dying because they had no foliage. The birds had all disappeared.

I was at a loss. I had done everything I had been told, and yet my roses looked worse than ever before. To be honest, it was heartbreaking to see my roses in such a sad state when I had done so much work to make them beautiful. Even though I was mixing the chemicals properly according to their package directions, the spray chemicals were actually burning the foliage. And the expensive, exotic chemicals I was lavishing on my roses were costing me a small fortune. I was using not only liquid spray materials, and the dry granular fertilizer I was applying to the soil around my roses contained pesticide too!

About this time, I took notice that some of my rose growing friends did not spray their roses at all, and they seldom fed their roses. However, I did not like what I saw as these gardens did not produce roses that met my level of expectation. Although their roses were lovely, they were not the show quality roses that I wanted. There had to be a happy medium somewhere.

Coincidentally, around the same time, I began reading articles and hearing speakers on **"Integrated Pest Management"** (IPM for short). Although IPM seemed rather complicated, I wanted to know more.

The Food and Agriculture Organisation of the UN defines IPM as "the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. IPM emphasizes the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms."

The important principles that I customized and chose to implement from the IPM philosophy were:

1. Use the least toxic chemicals available; avoid products labeled "Danger".
2. Only spray chemicals when necessary
3. Spray fungicide to prevent fungus but only when needed
4. Spray insecticide only when bad bugs or damage are visible, not for prevention
5. Spray early morning before birds and bees are out
6. Do not apply pesticides to the soil on a regular basis
7. Generously apply mulch and other organics in the garden to build up the soil and encourage earthworms and other microelements.

So I decided to lower the frequency of my spraying routine. Instead of spraying every week year round, I changed to an as-needed basis. For me, the rose exhibitor, this means spraying only during rose show season, plus one winter dormant spray. Regarding fertilizing, I rarely use products that also contain pesticide. Once per year during thrips season is all. Fertilizing will continue, but with a more balanced chemical/organic ratio. And mulch is applied twice a year.

Here is how my IPM strategy looks:

January: Prune roses and strip all foliage. Apply dormant spray once on rose bushes with horticultural oil after pruning is finished. No fertilizing this month.

February: Apply a 3-inch layer of mulch (such as Kellogg's Gromulch) around each rose bush. Apply Preen weed pre-emergent.

March: Fertilize weekly, rotating with a balanced water soluble chemical fertilizer specifically formulated for roses, and liquid organic fertilizer (such as fish emulsion); spray weekly, rotating insecticide and fungicide.

April: Fertilize weekly, rotating with

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water soluble chemical fertilizer (such as NPK 8-10-8) and liquid organic fertilizer (such as fish emulsion and liquid kelp); spray weekly, rotating insecticide and fungicide, plus include liquid seaweed in spray mix.

May: First week, apply one application of dry granular systemic fertilizer combined with insecticide (such as Bayer Advanced 2-in-1). No further spraying or pest control over the summer.

June: Apply one application of 90-day slow release fertilizer, chemical type such as Osmocote. No spraying. Wash down foliage daily with water wand. Keep roses watered well.

July: Apply one application of dry organic type fertilizer such as Dr. Earth, Grow More, or Gardener and Bloome. No spraying. Wash down foliage daily with water wand.

August: Apply one application of dry organic type fertilizer such as Dr. Earth, Grow More, or Gardener and Bloome. No spraying. Wash down foliage daily with water wand.

September: Lightly trim all rose bushes the first week of the month to encourage full blooming around late October. Do not remove foliage. Apply a 3-inch layer of mulch (such as Kellogg's Gromulch or compost) around each rose bush. Apply Preen weed pre-emergent. Fertilize weekly, rotating with water soluble chemical fertilizer (such as Grow More) and liquid organic fertilizer (such as fish emulsion plus liquid seaweed); spray weekly, rotating insecticide and fungicide.

October: Fertilize weekly, rotating with a balanced water soluble chemical fertilizer specifically formulated for roses, and liquid organic fertilizer (such as fish emulsion); spray weekly, rotating insecticide and fungicide.

November: No fertilizing or spraying.

December: No fertilizing or spraying.

Now keep in mind that this is the method that works for me and my semi-desert garden in Santa Clarita, California. Roses in humid coastal areas may need to be sprayed with fungicide more often to keep fungus under control.

Quick California Compost

By Lynn Bennett

Mention the word compost and most people get a funny look on their face and tell you "it smells" or "it's too much work." When done properly, a compost pile smells very "earthy" much like rich soil and it only takes a few minutes to add ingredients and turn it. Compost is the best soil amendment and plant food you can add to your rose garden and wouldn't it be better than filling up trash cans and landfills? Any plant grown with compost is much stronger and healthier and therefore can fight off attacks from bugs, diseases and harsh weather conditions. The soil also benefits by becoming richer, more porous and retains a lot more water. My method is called "Quick California Compost" and is designed to give you finished compost in as little as two weeks or two months depending on how often you turn it.

The following is a list of ingredients you can add to your compost pile:

Grass clippings, animal manure, coffee grounds and coffee paper filters, tea bags, eggshells, fruit and vegetable scraps, leaves, pine needles, dirt, hay, straw, and earthworms.

DO NOT ADD:

- Any type of fish, meat or bones (they will smell and they also attract unwanted animals).
- Bread -- feed that to the birds!
- Sawdust and wood shavings -- they take one year to break down, so build a separate pile and just let it sit there for a year.
- ANY parts from a rose bush or any plant that has a disease or is infested with bugs (if your compost pile isn't hot enough, bugs and diseases will live and multiply in it).

Start by selecting an area in your yard about 4 ft x 4 ft, and locate it away from any solid walls or fences. Good air circulation is a must to break down a compost pile. It can either be free standing or totally enclosed in 1-inch chicken wire. Concrete blocks or pieces of wood can also be used for an enclosure as long as there are air spaces on all sides. Alternate ingredients in about 2-inch thick layers, misting each layer lightly as you go. Always keep the compost pile moist but not soggy, and shred all material into the smallest pieces possible. When completed, the pile should be about 4 ft x 4 ft x 4 ft high, and when mine gets that size I will start another one. This way I always have compost ready to use year round. Using a pitchfork, turn the pile once a week and you will have finished compost in about two months. If you want to speed things up, turn it once a day and you'll have finished compost in about two weeks.

If your compost pile is built properly, it will start to heat up in a few days and can reach a temperature of 160 degrees. If not, the following list will help you correct the problem.

The pile doesn't heat up

- The pile may be too small so rebuild it and make it larger.
- It might be too dry so rebuild it and mist each layer.
- The pile has too much dried material and too little nitrogen. Turn it and add some high-nitrogen organic fertilizer like diluted fish emulsion or some leafy green organic matter.

The compost smells bad

- If it smells like ammonia, it has too much green matter. Layer in some straw, hay or leaves.
- If it smells like rotten eggs, it's too wet. Turn it and add some dry ingredients.

Composting is nature's way to recycle and is the foundation for a successful organic rose garden "what comes out of the ground, goes back into the ground" and "feed the soil not the plants."

Sources:

American Rose Annual, 1993; The Self-Sufficient Gardener, Doubleday & Company, Inc., 1980; The Organic Gardener's Complete Guide to Vegetables and Fruits, Rodale Press, Inc. 1982.

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