

Murder by Roundup

By Maryjane Roe,

"It takes very little spray drift to affect any plant and since Roundup is a nonspecific poison, it will damage or kill anything it comes in contact with."

--Jack Shoultz, SDRS Consulting Rosarian

You may not be aware of the dangers of using the commonly applied weed killer Roundup™ anywhere near your rose garden. This article is to alert everyone to the potential damage that you can inadvertently cause to your rose bushes with just one squirt of the deadly weed killer. In Victoria Paris's rose garden in San Diego, the roses are precious, gifts from friends and family, some transported from a former home. Last year's season produced spectacular growth and beautiful blooms. But this spring something changed. After the first bloom, which was magnificent, she noticed that the new growth (leaves and shoots) became stunted and weak. The red leaves turned pale and yellowish; the rose buds were tiny and discolored. They had installed a new irrigation system so her first thought was that she had been over watering. Next, she noticed that the buds that did open were malformed and of a different color.

The 'Ronald Reagan' rose, usually a deep velvety red on a long stem, was opening up miniature in size, pinkish and on a very short stem. 'Veterans' Honor' was losing its leaves, the roses weren't opening and the leaves, once green, were now very dirty yellow. Horrified when all the new growth was stunted, leaves were yellowish and curled, and the new blooms were either not opening or opening small and discolored, she decided a call of distress was in order. She wrote to the San Diego Rose Society.

When Jack Shoultz, SDRS Consulting Rosarian, arrived to have a look, Victoria told him that her gardener had sprayed the grass but had assured her that there would not be any danger of damage to the roses. Jack saw the characteristic spiky needlelike growth of the new leaves and produced the disheartening diagnosis: murder by Roundup. The poison had apparently worked its way into the soil or drifted onto the roses. Because the consensus was to try to save the roses rather than to replace them, Jack recommended an organic approach that would push the roses to develop their own defenses. This entailed removing all the affected leaves and new growth, then treating the soil with EnviroGrow™, mixing in 2 cups of Biosol organic fertilizer, and spraying the bushes with WORMagic® tea.

Victoria wasn't the first to experience the horror of losing roses to Roundup. SDRS Consulting Rosarian Sue Streeper reports that the rose society receives many calls of distress from people who have unintentionally destroyed or damaged their roses by using herbicides. Victor and Janet Lipp had been exhibiting roses for two or three years and were well aware of the dangers of

getting Roundup on any living plant. Janet had a backpack sprayer that she had previously filled with a solution of Roundup to kill some weeds. Thinking that if she cleaned the sprayer carefully she could still use it to spray the roses, she vigorously scrubbed it with soap and water. Janet told *Rose Ramblings*, “I couldn’t have cleaned it more carefully...I re-washed and re-rinsed. I poured scalding water in the sprayer. I let it dry completely in the sun, hoping all traces of the poison would be made inert. When I was finally satisfied that all was OK, I mixed my spray solution, filled the tank and went to work.” The eagerly awaited first bloom of the year was less than spectacular. The blooms appeared split and feathery, more like a chrysanthemum than a velvety petaled rose, and the leaves had yellowed.

I, too, had Roundup damage in my garden a couple of years ago. It was my own doing. I was spraying liberally for weeds among the rocks that were in the nearby landscaping and there was often a slight wind. I didn’t know that the spray, even the smallest droplet, could travel. I did lose one rose that year and I didn’t immediately realize what the problem was, but I began to suspect that Roundup had been the cause when another bush nearby developed the same symptoms and was barely surviving.

Roundup (active ingredient glyphosate) can drift offsite during applications and, studies show that from 14-78% of it can go as far as 1300 feet downwind. Research discloses that although Roundup may remain in the soil for up to a year, it is bound to soil particles and is not picked up by the roots. Therefore, no special soil treatment is needed to remedy its effects. A recent article in the *American Rose* suggested that symptoms of damage from Roundup may not even appear during the season of application. Furthermore, a few droplets drifting onto mulch can even cause green canes to be exposed when the mulch is brushed against them.

Roses are amazingly hardy, however. This spring my own bush that had been damaged by Roundup was back blooming and relatively healthy again. After taking to heart Jack Shoultz’s advice, Victoria Paris’s roses are mostly coming back, and the second new growth is looking better. She may still, however, lose one or two bushes. Says Victoria, ‘I have been kicking myself....I listened to the gardener and in retrospect, shouldn’t have. I understand my garden better than anyone.’ Fortunately, the Lipps didn’t lose any bushes and by the second or third bloom, the roses were back on track. “We all learn from our mistakes,” Janet told *Rose Ramblings*. “I hope I can save someone from making the same mistake that I made.”

Beware of Roundup!

- If you have a gardener working in your rose garden, clarify with that person that Roundup is NEVER to be used on or near the roses.

- Be aware that drifting spray of Roundup used elsewhere in the garden is lethal to roses. If it must be used somewhere, the wind must be totally still (early in the morning is best, and it still is not a great idea).
- Figure out a method of benign weed control. Prepare the soil well in a large area around the roses. Mulch deeply at least once a year. Pull or dig weeds when they are tiny.
- If you must use an herbicide, dedicate one sprayer for that use only.
- Use a pre-emergent seed control on top of the soil in a clean bed before weeds come up. The pre-emergents will not hurt the roses and they prevent weed seeds from germinating.

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