

Ryan's Garden Notes

By Ryan Tilley, *Consulting Rosarian*

The Long Hot Summer

It's easy to overlook keeping yourself adequately hydrated when summer is so hot. Experts say to drink at least a glass of water or other non-alcoholic beverage every 15 minutes when you are in the heat. I thought I was drinking enough liquids and taking enough breaks, but despite my best efforts, I found myself suffering from dehydration not while I am outside, but later in the evening and even the next day. Stomach queasiness and headaches are two signs of dehydration in the 24 hour periods after being outside in the heat. Hopefully, September will bring some much needed cooler weather.

How have the roses fared in this heat? They are not doing well. Since the first week of August, symptoms are always the same – roses showing yellowing leaves with brown tips or a chartreuse ring around the outer leaflets; bushes losing all their lower leaves, and other leaves showing signs of severe spider-mite damage.

Why did this just start happening in August? In August, rain was sparse for almost everyone and combined with 10 days of 95-97° heat, the inadequacies of irrigation systems were exposed. It takes only a few days for the soil to dry out in extreme heat with no clouds, even if there is adequate mulch.

In high heat, once your bushes are under stress, spider-mites swoop in and build up to high numbers seemingly overnight. So if you spray for mites without properly hydrating the rose bushes, you may see even more leaf problems from spray damage. When a rose loses all of its leaves, it is not going to be able to utilize photosynthesis to make sugars and food to be stored in the roots to produce those great autumn blooms that we all look forward to. You then have the triple whammy of damage affecting your bushes for the rest of the year, making them weaker entering winter, which of course makes them more susceptible to winter damage. So when you hear experienced rosarians preaching WATER...WATER....WATER, you really should listen.

Water, Water, Water

But what if you listen and you are still having the same problem? Then you are still not watering enough.

I visited a garden a few weeks back that had all the signs of heat/water stress and spider mites. The roses were being watered with “bubblers” centered on the bud union of each rose. Bubblers are emitters that are punched into plastic tubing and allow a slow, steady, low pressure water flow to come out. They put out more water than drip-irrigation, but the water literally “bubbles” out of the emitters and it pretty much stays in the same area, unless the garden is on a slope. This means that if you have done a good job with your soil and it is well-drained, the water is mainly going downward in one area and is not spreading to the surrounding soil area. If the bubblers are only placed at each bud union, there is no reason for the roots to grow outward. So your roses will never develop a big root system unless there is a lot of rain. If the rose has a big root system and the only place that gets water is at the center of the rose, then the roots will not be able to supply enough water to support growth during hot, dry weather.

This gardener also had an overhead sprinkler in the middle of the rose garden that she claimed gave the roses “lots” of water. In reality, the way it was oriented, it was impossible to provide enough water unless it was on for at least 8 hours at a time. She couldn't believe that the roses were not getting enough water. She firmly declared that she saw them getting lots of water. But by digging her fingers into the soil after the roses had been watered, she learned that even though she had just watered the day before, the ground was bone dry.

I urged her to hand-water her roses every day and to place the bubblers to the side of the roses' bud unions, where the roots were. Then I sprayed her bushes for mites with a combination of Avid and Floramite. Once the mites are dead and once the bushes are getting enough water, good growth should resume in about two weeks.

Fertilizer, Too?

As long as your roses are properly hydrated, you can fertilize them with liquids during the extreme heat. But if roses are receiving enough water and are disease and mite free, they will grow just fine in

extremely hot weather without any fertilizer at all. Most people are surprised at this, but it is true. Your main goal is to get the rose through summer growing well and pest free. Fertilizer may make rose bushes grow a bit better with more blooms in hot weather, but roses will be quite happy simply receiving enough water and keeping blackspot and mites off during the hottest months of summer. Fertilizing can be resumed if and when the weather cools off after the third week of August.

If you are interested in maximizing your roses' performance, you can fertilize, but limit it to liquid fertilizer, alfalfa tea, fish emulsion, or dry organic fertilizers like Mills Magic Rose Mix. This will minimize the chance of burning their roots. If you *do* burn the roots with too much fertilizer or fertilizer applied to dry soil, then you will see leaf damage that mimics heat/water stress which is yellowing with brown areas toward the tip of the rose. Always water the rose bed several hours before you fertilize, and water in your fertilizer.

To decrease your own risk of heat stroke, there's no need to work organics into the soil. You can apply dry fertilizer on top of the mulch and water it in. After all, just as the nutrients work their way through the soil, they can also work their way through your mulch. If you must work it into the soil, be sure to work it in very lightly so you don't damage feeder roots.

Cooling Off For Fall

How about cool weather care in the fall? Late August into September is a good time to fertilize; continue using liquids or alfalfa tea. Use a balanced fertilizer with numbers like 18-24-12 or 20-20-20, or 14-8-12. Miracle-Gro, Peters, Mills Easy Feed, etc., are all good. In north Georgia, you should stop all fertilizing about the second week of September, although you can probably continue liquids until the end of September. You don't want to apply a lot of nitrogen too close to the onset of cold weather because you don't want a lot of new growth at that time which can be damaged by a hard frost or freeze. You will also delay the rose's preparation for winter if there is too much nitrogen in the soil in October and November. Since liquids move through the soil more quickly than granular fertilizers do, they have less risk of holding nitrogen in the soil late in the year.

You can use a liquid fertilizer that is called a "bloom builder" 2-3 weeks before blooming time to maximize the color and quality of the blooms. A "bloom builder" will have the second number, phosphorous, much higher than the first number, nitrogen. Look for a fertilizer that has a number like 50 for phosphorous and you will have a "bloom builder".

Once the end of August arrives, I will go back to my every-other-day watering regime and do a little fertilizing. I want the garden to look as nice as it can since it is on the GRITS National Rose Conference Garden Tour in early October.

Dealing With Mites

The lack of rain this summer really caused mite problems. I used Avid in each spray and did my Avid/Floramite spray, and still had mites a few weeks later, AARRGH! So I tried the new miticide, Shuttle, which I had wanted to try anyway, and also one spray of Tetra San. I think the mites are finally dead, but it was a struggle. Hard to say if Shuttle was better than the others, but it is supposed to have a longer effective period and will be good to have in the rotation. I will have to get after the mites earlier next year.

How Does Your Garden Grow?



With the tough summer nearly behind me, I can look back and see how some of the new varieties fared. Without a doubt, the rose I was most impressed with was '*White Licorice*', a floribunda with, of course, a licorice fragrance. I usually find floribundas lacking in fragrance, but not '*White Licorice*'. The fragrance was heavy and consistent. The bush was a good grower, but an inconsistent one. It was always a big bloomer with lovely yellowish cream blooms. Buy it!

'*Marlon's Day*' was exactly as advertised, with blooms very similar to '*Moonstone*' on a plant that grows like '*Moonstone*'. The pink edge should be a bit darker and more distinct than '*Moonstone*', but it's hard to tell over the summer. When October comes, I will have a better idea. So far, it's growing and blooming well on '*Fortuniana*' rootstock.

'*Jo-Anne Edwards*' is another look-alike. This time the creamy blooms with a coral edge look like

'*Gemini*' or '*Brigadoon*'. The bush is growing okay with sparse blooms so far. We'll see what happens in October.

The surprise in my garden was '*Moon Over Miami*'. It has grown well with nice large white blooms like '*Denali*' with a touch of yellow. I don't have a lot of luck with whites; both '*Full Sail*' and '*Pope John Paul II*' were disappointments for various reasons. But this one may deliver.

'*Peppermint Splash*' (formerly from Jackson & Perkins, now available from Weeks) got off to a very slow start, but has begun to pick up speed. It's still too early to tell much about it, but it is growing and the red-and-white splashed blooms seem to have larger red areas than other red and white roses.

'*Sedona*' (another J&P rose soon to be available from Weeks) wowed everyone who saw it, especially in tree rose form. In the ground it was a slow starter with few blooms. But the red-and-orange blend blooms are worth waiting for. Once the weather cools down a bit, I hope to see it put on more of a show.

I loved '*Malibu*'s' orange and yellow color last year, but again this year, it just hates summer. It loses leaves and will not grow. If it does not come back well with October blooms, it is going bye-bye.

So far the best new English rose is '*Princess Alexandra of Kent*', with large, pretty, fragrant blooms on a smaller, well-behaved plant. I am hoping it becomes the small pink English rose I can start using in clients' gardens to replace the slow-growing, sluggish '*Pretty Jessica*'.

Two roses that I did not expect much from were '*Marco Polo*' and '*Rouge Royale*'. Both grew very well. '*Marco Polo*' is that elusive great yellow bloomer with strong growth, good pepper-spice fragrance, and pretty medium-yellow double blooms. It is an older rose from Meilland offered through Star Roses.

'*Rouge Royale*' is a Romantica hybrid tea from Star Roses, and like many other roses from Star, it has an old-fashioned English rose look to it. The raspberry red blooms so far have out-performed my other new small, bushy red English roses in that the blooms are larger, even in July and August, hold their color better, and hold open on the bush without going flat or dropping petals. It should be better for cutting than small English roses. And the berry fragrance is outstanding. The bush has grown to about 3 feet with lots of blooms and that is fine with me.



Be sure to check out the GRITS national convention October 7-11.

This article originally appeared in the September 2010 issue of The Phoenix, newsletter of the Greater Gwinnett Rose Society, Bobbie Reed, Editor. It received an ARS Award of Merit for 2010. Photo for '*White Licorice*' by Weeks Roses. Photo for '*Rouge Royale*' by Star Roses.