



Aguamenti! – The Magic Water Wand

Fans of Harry Potter may recall the magic spell *Aguamenti*, a charm that conjures a jet of clean, drinkable water from the tip of the caster's wand. Also known as the *Water-Making Spell*, it is taught to sixth year students at Hogwarts School of Witchcraft and Wizardry in Charms class.

Recorded uses included its use by Fleur Delacour in the First Task of the Triwizard Tournament in order to extinguish the flames of a Common Welsh Green dragon. And it was used by Rubeus Hagrid and Harry Potter during the Battle of the Astronomy Tower, to put out the fire on Hagrid's hut after Death Eater Thorfinn Rowle had set it afire.

Closer to home, it is a useful spell for the maintenance of your roses, especially now with the approaching hot days of summer here in San Diego and throughout the Desert Southwest. And, in order to cast that spell, you need a wand, specifically a water wand, an important piece of gardening equipment that should get regular use in your rose garden throughout those sunny days.

A water wand is a long handled hose attachment with a water breaker at the end. Its use depends on the water breaker attached. A typical water breaker breaks the water stream into fine rain-like particles used to apply water to roses. It is particularly useful for container watering where the long handle is helpful for reaching down to the container and the gentle spray doesn't disturb the soil in the pot.

The water breaker is also useful for washing off the top of the foliage. Roses get dusty and dirty and like an occasional shower. Conventional watering nozzles can damage tender new foliage or push the developed foliage against the thorns, tearing leaves and blooms. In contrast, the water wand provides a gentle rain-like stream.

Another advantage in using a water wand during the summer is that it helps keep the roses cool. At temperatures above 90 degrees a rose transpires, i.e. gives off water, faster than it can take it up. The fine spray of the water wand cools the foliage and also cools the ambient air around the rose. In addition, a brisk shower is of value in keeping the

stomata on the undersides of the leaves clear from dust and other particulates, thus allowing the rose to better transpire water.

I also use the water breaker head for watering in fertilizers. It is desirable to water in dry fertilizers after their application around the base of plants and I have found that this can be best accomplished by the gentle flooding available from the watering wand.

Most important, a water wand is highly useful for the control of spider mites, the major pest of our hot, dry summers. In fact, a water wand is indispensable for washing the undersides of the foliage of roses where the spider mites congregate. To do this effectively you need a very strong and directed stream of water.

Although the use of a water wand to control mites is common among rosarians, less known is its value of water in controlling powdery mildew. Unlike the water-borne fungus diseases such as black spot, powdery mildew spores are inhibited by water. And since we rarely ever see black spot in our dry Southwest summers it is perfectly fine to use water to control powdery mildew as long as the ambient temperature is warm enough or there is enough daylight left to permit the foliage to dry. Consequently, my practice is to follow up the spraying of the undersides of the leaves by turning the water wand over and blasting off the tops as well. The strong spray will actually remove a lot of any mildew that it contacts. That also has the added benefit of removing other insect pests such as aphids.

A search of your local home improvement store or nursery will turn up any number of water wands, also called rain wands or shower wands. There are typically made of aluminum with a water breaker and some form of plastic shut off valve. They are generally inexpensive but also not very sturdy and will not stand up to continually use. Illustrative is the Orbit 34-inch shower wand that sells for about \$15 at Home Depot. The wand, which is a little longer than average, comes with a plastic head with a perforated aluminum plate that provides a "gentle rain-like shower." The water pressure is controlled by a

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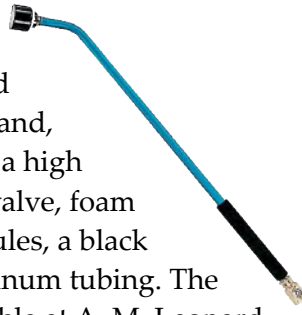


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plastic shut-off lever. The wand itself is a little longer than average and comes with a foam grip. For very small gardens and infrequent use it is adequate.

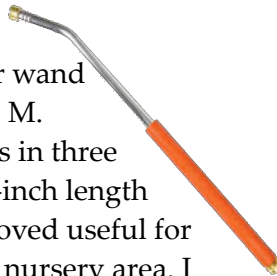
Dramm Colormark Waterwand

Those looking for a better quality complete wand should consider the Dramm Colormark Waterwand, which I have recommended in past articles. It is a high quality wand with a heavy-duty brass shut-off valve, foam cushion hand grip, commercial grade brass ferrules, a black heavy plastic water breaker and premium aluminum tubing. The wand measures 30 inches in length and is available at A. M. Leonard in blue, green or berry colors for around \$37.



36-Inch Leonard Straight Watering Wand

The best approach to obtaining a top-quality water wand is to assemble one yourself using as the base an A. M. Leonard straight watering wand. This wand comes in three sizes, with the best at 36-inches. I also have the 24-inch length (which at this writing is out of stock), and it has proved useful for watering small containers on raised shelves in my nursery area. I have not tried the 48-inch length which I expect would be awkward based on my experience with the 36-inch wand.



A.M. Leonard also has as an “angled grip” watering wand that is supposed to allow for “multiple wand and/or hand positions”. I have tried one and found it awkward and of no improvement over a straight wand.

A. M. Leonard’s straight water wands are made of anodized aluminum and come with a brass female swivel and a heavy-duty male connection that has a few more threads than cheaper wands. It also has a long comfortable foam grip. The wand itself costs



about \$13 but does not include a watering head or shut off valve, which are sold separately.

Leonard ABS Watering Nozzle with Stainless Steel Faceplate

Having selected a wand, the next step in assembly is to select a water breaker or head. A. M. Leonard sells a stainless steel water head of excellent construction for about \$18. Better yet is its ABS watering nozzle with a stainless steel faceplate. This faceplate has a 2-inch nozzle with micro-sized holes that provides high volume and a gentle spray. The head itself is constructed with a strong ABS poly plastic and the faceplate has a rubber bumper. At around \$14 it is a better buy than the one entirely constructed of stainless steel.

Fogg-It Nozzle - Heavy Volume - 4 GPM

The water breakers or heads on the previous wands are as noted designed to provide a “gentle” shower of water, which is desirable for watering roses, especially those in containers. However, in using a water wand for the control of spider mites, “gentle” is not going to work. Instead, what is needed is a powerful spray to the undersides of the leaves to dislodge the mites, as well as the eggs that are entangled in their fine webbing.



For many years, my main solution to the non-chemical control of mites was another specialized tool, also called a water wand, that was designed specifically for the control of spider mites. Older rosarians will recognize this tool as a Cecil Stoakes water wand. Those who have been around even longer, like me, may call it a Walter Vinton water wand. That is because Walter Vinton of Missouri once sold these through an



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advertisement in the American Rose magazine. Later the wand business passed to Cecil Stoakes in Texas, who has since passed on. I still have one, plus most of the parts of a second one, and had been using the wand for years,



The Cecil Stoakes water wand is a long (53") thin hose attachment with a sprinkler head at the end. The sprinkler head breaks the water into a strong fine stream that is somewhat similar to the sprinkler heads you probably ran through in your youth.

The sprinkler head on the Cecil Stoakes water wand is useful for washing the undersides of the foliage of roses, however the spray is not very strong and does not cover a lot of area. This requires a lot of waving around to get good coverage and I have found that mites are unusually clever at hiding from it. I also find it somewhat hard on the arms and shoulders, particularly as I have aged. As a consequence, I have for as many years been looking for a better replacement.

The answer to that search recently came from my good friend Suzanne Horn who shared with me her experience with a heavy volume (4 GPM) Fogg-It nozzle. She had also been looking for a solution to her ongoing problem with mites and had been in communication with our mutual friend Lou Pavlovich of Tucson, Arizona. Lou, it turns out, has been using the heavy volume Fogg-It nozzle for years. Having now acquired one and used it on several occasions, I am sold on it being a game changing solution to spider mites.

Fogg-It nozzles come with three brass jets that create a fog-like spray. There are four different volumes available, including a 1/2 GPM super fine; a 1 GPM fine; a 2 GPM low volume; and the 4 GPM heavy volume. It is the latter heavy volume Fogg-It nozzle that you need for spider mites. Expect to pay around \$13 from Amazon.

The heavy volume Fogg-It Nozzle can be attached directly to the hose or to the end of your water wand. I use it with my A. M. Leonard straight water wand, which as mentioned is of solid anodized aluminum construction and has a few extra threads on the male end. This is important because the heavy volume Fogg-It nozzle uses a lot of pressure and needs to be firmly seated on the wand or you will get a lot of blow back. The seal can also be improved by using 1/2-inch Teflon plumber's tape (often sold as Teflon thread tape) on the threads of the male end.

The effect of the heavy volume Fogg-It nozzle is quite dramatic. Placed under the bush it makes a wide spray that is strong enough to blow off the mites and their offspring, while at the same time being fine enough so that it doesn't break branches. Suzanne and Lou describe it accurately as like running your bush through a car wash.

Another advantage of the heavy volume Fogg-It nozzle is that it takes me less than half the time to wand the entire garden. That is because it creates a spray that is much wider than the Cecil Stoakes wand so I don't have to move it around as much to get coverage on the entire bush. I have also found that the 36-inch length works perfectly well simply holding it with two hands like a shovel or flame thrower (a water thrower!) and letting the water do the work rather than poking it around like I have to do with the Cecil Stoakes wand.

Lou Pavlovich of Tucson reports that he has been using the heavy volume Fogg-It nozzle for over 35 years in his garden with great success. Typically, his primary time for spider mite problems in Tucson begins at the tail end of the spring bloom in mid-April. This also is the time when the Arizona temperatures starts hitting 90 degrees and continue upward past the century mark.

So he watches the foliage very carefully every day and, at the first sign of spider mites, he pulls out the Fogg-It nozzle and carefully blasts the undersides and tops of all roses from bud union all the way to the top.

Lou also reports that the Fogg-It nozzle has one more major benefit for roses in his climate during the summer – basal

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breaks. Every morning, he goes out into his garden of 50 roses (all are in 24 inch in diameter pots) and sprays off every rose with the nozzle, top to bottom, quickly. It takes about five minutes to do it. On three of those days, he blasts the undersides of every rose to keep spider mites at bay. That takes about 10 minutes each time.

Lou also puts up 63% shade cloth above all his roses once it hits 90 degrees (about mid-April) and keeps it up until it falls below 90 for the high (typically in early November). With this combination of 63% shade, a low dosage of fertilizer every time plants are watered and the spray of water from the Fogg-It nozzle every morning, he finds that virtually every single rose plant produces basal breaks during the summer even when it hits 110° and higher.

He says it defies logic that rose plants can grow several feet during the summer and also produce basal breaks. But his do, and he has proved highly successful at Arizona Rose Shows.

Dramm Heavy Duty Water Shutoff Valve

The final piece of the water wand is the shut-off valve, which is important if you move around the garden and need to shut off the spray between plants. A. M. Leonard’s straight water wands do not come with a shut-off valve. My experience is that the shut-off valve is the weakest part of commercial water wands. Those made of plastic leak and break. Aluminum connectors dent and corrode.

I prefer heavy-duty brass connectors and, as a consequence, routinely add a Dramm Heavy Duty Water Shutoff Valve. The valve has a full flow design and is of brass construction with stainless steel ball valve, and a large lever for easier operation.

It is not cheap at around \$19 but definitely worth it if you want a shut-off valve that will work and will last. This is particularly important in the use of the Heavy Volume Fogg-It Nozzle, which puts a lot of pressure on the hose end of the wand.



Conclusion

In conclusion, the water wand properly used is an important tool for the care of roses during the hot summer months of the Southwest. And, for controlling spider mites, the Death Eaters of summer, a water wand armed with a heavy volume Fogg-It nozzle is without peer. Use it with the spell *Aguamenti*.

You might also give thought to experimenting with the use of additional spells from Harry Potter that might improve the wand’s effectiveness on spider mites. Spells that may be considered include *Petrificus Totalus*, said to render its target completely immobile; *Evanesco*, a vanishing spell; or even *Avada Kedavra*, the killing curse. The mites deserve it and your roses will thank you for saving them.

—Robert B. Martin, Jr.
San Diego Rose Society
President/American Rose Society

Porcupines in the Roses!

(Ed. Note: As companion to the story on deer and roses on pages 21 and 22 of this issue, below is the reply of an HRNW member living in Potlatch ID when asked about deer problems.)

You asked about deer in our garden. We could not garden without fencing to keep deer, rabbits and porcupines out.



Besides tall fencing to keep deer out we fenced the bottom with hardware wire to keep out rabbits. We also have an electric wire about 12” from the ground to keep out porcupines which we turn on at night.

Since installing the electric wire several years ago we have had no porcupines. They were worse than deer at mauling the roses. At least the deer would browse and move on, but not so with porcupines.

—Justine Landes, reprinted with permission from
Heritage Roses NW, Spring 2020 issue
Margaret Nelson, Editor



Gadgets and Gizmos for Growing

When you grow roses for over 40 years, it is interesting the unique gizmos and gadgets that you collect to make the hobby easier and more enjoyable. I've found items associated with plumbing particularly fascinating, since the vast majority of time spent in rose growing involves water.

That typically involves watering systems to distribute H₂O to the soil of roses and spraying plants off with water to prevent spider mites from destroying foliage in the summer. Here are a few terrific items I have found particularly useful for rose growing.

Full Port Ball Valve

The Cadillac of outside water valves is the full port ball valve (right). This high-quality valve allows you to turn on and off the water for your hose or watering systems for many years without replacing it.



Over 30 years ago, I got into a discussion on outside water valves with Ralph McPheeters, owner of Catalina Heights Nursery in Tucson. I complained to him that the old gate valve that was currently on my outside water pipe leaked.

It was the third one I had replaced over a 10-year period. It didn't matter if I tightened the upper nut or put new packing material inside the threads. It leaked. I needed to replace it but didn't know what type of valve would hold up.

Ralph suggested using a full port ball valve (see above). He said they rarely go bad. In his nursery, he had numerous hose connections to these valves. None had gone bad for many years since he switched to them. That endorsement was all I needed to hear.

I purchased a 3/4" full port ball valve that screwed on the pipe next to my home. It has worked perfectly without any leak for 30 years and counting.

Another suggestion: When freezing weather hits, make sure you wrap your valve and any pipe near it with a cotton bathroom towel in-between the times you turn on the water outside.

I failed to do this many years ago when there was a 20° night. The pressure of the water and freezing conditions outside cracked the valve and caused water to shoot into the air. I have never made that mistake since.

ClampTite Hose Repair Tool

Who hasn't had a hose that sprung a leak?

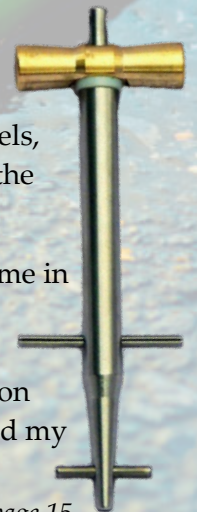
Usually, the leak is at the end of the hose connected to a watering device of some sort because the hose typically has tremendous pressure at the end of the hose, and the rubber or synthetic material degrades over time.

It doesn't help that this part of the hose is bent time and time again if you use a water wand as gravity drops the hose from the end of the wand to the ground and often times bends the hose sharply.

What everyone does is cut the bad part of the hose off near the end. Then you purchase a hose mender or clamp from the hardware store which allows the hose to go over the brass male end of a hose adapter.

After purchasing eight of these devices, all different models, they simply did not work without a leak taking place in the coming weeks.

After I once again became upset after a blast of water hit me in the stomach from a leak, I did a little research to find out what type of clamps were used in the auto industry as well as airline engines. I discovered an ingenious device on the internet called the ClampTite tool (right) which solved my problem.



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This unique tool allows stainless steel wire to be wrapped around a hose pushed over a male brass hose adapter the equivalent of four times for a maximum hold.

It is up to 10 times stronger and 90% lighter than a regular clamp. It is the only clamp that is a true 360° seal with no flat spots, which you find with many clamps that are tightened with a screwdriver.



The ClampTite tool provides a way to tighten wires wrapped around a hose and then lock it in place. In a matter of minutes, you make your own hose clamp out of stainless steel wire that will not leak (see below).

I had to purchase one to see if it worked. And it did with perfection!

I made one more modification just below the new stainless steel wire clamp I made. A spring about four inches long snugly fits over the hose in this area (see bottom of the water wand photo below) which allows the hose to gently bend.

In the past, the weight of water in the hose caused the hose to sharply bend over and over again below the valve on the water wand which ultimately caused a leak. This simple spring prevented that problem from taking place. After four years, I have had no hint of a leak anywhere on my hose.

To show you how the ClampTite tool works, see the video [here](#). Skip the first 45 seconds of the 6-minute video. The rest is superb.

Custom Made Water Wand

If you have grown roses for a number of years or simply had a garden, you utilize a water wand on the end of your hose to water the soil of plants.



As many can attest, water wands from Home Depot and Lowes will go bad within a year if you use them often. The connection from the wand to a hose typically deteriorates within a year and springs a leak in the thin aluminum.

Over a 15-year span, I purchased more than 10 water wands from Home Depot or Lowes which all sprung leaks. I especially hated it when a leak occurred and water began spraying all over my shirt or face.

So I decided to design my own water wand out of 3/4" rigid copper pipe and sweated joints with solder and flux and a propane torch. I learned how to do it with the help of a YouTube video on the internet.

The end of the pipe has a 1/2" full port ball valve to turn the water on and off. The ball valve is smaller to reduce the weight of the water wand. This connects to the hose with the proper fitting. On the other end of the copper pipe is a gentle spray head.

Along the area you hold the copper tubing is rubber tape normally used on the bat handles of aluminum baseball bats. This prevents your hand from being burned during hot weather.

At left is what my copper water wand looks like. It has lasted over 25 years so far without one leak. At right is Diane watering a rose plant with it.



Fogg-It Nozzle

I learned about this great hose attachment decades ago from Ralph McPheeters, owner of Catalina Heights Nursery in Tucson.

I purchased a number of roses from his nursery in early January for many years. I was intrigued at the sprayer his workers used to keep the new bare root roses moist. They were in pits as well as the newly canned bare root roses in 5-gallon containers.

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This device screws onto a water hose and is called a Fogg-It nozzle (heavy volume, 4 gallons/minute). It is still available on the internet at www.amazon.com.

It also is a fantastic deterrent to spider mites, the No. 1 enemy of rose growers in Tucson during the summer.

Spider mites, which look like small salt-and-pepper particles under leaves, will suck the leaves dry until they turn light brown and fall off. Keeping as much foliage on your plants is crucial to rose health during our summers with 100° temperatures virtually every day. If enough foliage drops from your rose plants at this time, they will die.

Every morning during the summer (late April to late September), I spray off my roses with a jet of water supplied by a Fogg-It nozzle. The added benefit is adding humidity to your garden which is vital in Tucson's arid summer conditions.


—Lou Pavlovich, RST member

AZ Internet Rose Resources

Green Things

<https://greenthingsaz.com/> – Tucson

Harlow Gardens

<https://harlowgardens.com/> – Tucson

Magic Garden

<https://www.magicgardennursery.com/> – Tucson

Mesquite Valley Growers Nursery

<https://www.facebook.com/mesquitevalleygrowersnursery/> – Tucson

Rillito Nursery and Garden Center

<https://www.rillitonursery.com/> – Tucson

Summer Winds Nursery

<https://summerwindsnursery.com/> – Glendale, Mesa and Phoenix

My Favorite Rose

Armi L. Mulholland

Golden Celebration, Shrub, David Austin English Rose

This beautiful rose, with its deliciously strong fragrance, vibrant golden yellow color, giant cupped blooms in clusters, repeatflowering all year round got me hooked on roses.

I now have a dozen David Austin varieties.

After moving to Tucson I didn't know much about roses and gardening in the desert. I researched roses for a potted rose garden I wanted for our home.



Golden Celebration



Golden Celebration

I found David Austin's *Juliet* rose, the most expensive rose ever developed. Since it is beyond my reach, I bought *Golden Celebration* from a Prescott nursery and this started my potted rose garden.

What else can make you feel so much without a word? 