SAQUATROLS

IMPROVING TURF QUALITY USING LESS WATER

oil wetting agents are one of the most effective tools a turf or landscape manager can use to alleviate water infiltration and drainage problems.

By easing the surface tension of water molecules, wetting agents like AquaGro allow water to penetrate into heavy thatch, hydrophobic (water repellent), layered or compacted soils. University research has proven that treatments with wetting agents can eliminate localized dry spots, resulting in a dramatic improvement in turf growth and visual quality.

AquaGro wetting agent, when applied to the soil surrounding plant material, can reduce evaporation and run-off by promoting quicker water penetration. In highly compacted areas, for instance, surface-applied water cannot easily reach a plant's root system. The USDA reports that, in some states, less than 20 percent of rainfall actually gets into plant rootzones. Field tests, however, have shown that AquaGro can help solve such problems because 30 to 50 percent less water will be used since the water is not lost to evaporation or runoff.

Joseph Broyles of Lawn Doctor of Oyster Bay-Syosset, N.Y. finds that AquaGro makes the grass "obviously healthier" and it's also a moneymaker.

"It separates me from other people in a lot of instances," he notes. "It's really improved the drainage and root systems for a lot of my clients.

"There are some lawns I have where customers are side-by-side and one person will pay for it and one won't. You can tell the difference. I say that's because I use the AquaGro, because everything else I do on the properties is similar."

Broyles says AquaGro treatments are an excellent add-on service. He charges \$8 to \$10 per 1000 square feet, making two applications per lawn per year.

Meanwhile, Chris Sann owns a customized lawn service that recommends AquaGro to 90 percent of its clients. It helps solve three main prob-



Joe Broyles: AquaGro makes turf "obviously healthier."

lems: hilly areas that drain quickly, soil layering and thatch.

"The bulk of my use is with granular, AquaGro • S," notes the owner of Complete Lawn Service, Wilmington, Del. "I'm small enough that I can isolate and solve problems with a custom application.

"After I test soil, if there is a physical layering problem, I use AquaGro. The wetting agent helps reduce the soil interface problem. I've also noticed that, if you use it in a coordinated program...where thatch is involved...AquaGro will increase root depth by 100 percent easily."

Paul Luccia of Heyser Landscaping, Norristown, Pa. agrees.

"The turf grows thicker with AquaGro," he says. "In a sense, it gets me contracts that I might not get. I can be precise in solving a particular client's problem." One client, Luccia explains, had 150 flowers to be watered two to three times per week to keep them healthy. But a potting mix incorporating Aqua-Gro solved time and labor problems. "The wetting agent helped take care of almost all the water needs of the flowers. We just watered maybe once a month, and when we did water, it was very fast."

On slopes, berms and exposed areas and on compacted or thatchy soils, water tends to easily run off the soil surface. In these instances, wetting agents—along with a well-managed irrigation program—are the keys to improving water infiltration. AquaGro does not change the soil structure or eliminate thatch; it does measureably improve water penetration and aeration, which in turn provides a healthy environment for root growth.

In the case of golf greens where inconsistent topdressing practices have led to layered soils, drainage problems often result. This can mean decreased turf vigor and increased disease. In this scenario, a wetting agent can help solve the problem without completely renovating the greens.

"I use AquaGro to 'open up' the soil so water will penetrate and cure the localized dry spots," notes Bill Foust, superintendent at Pine Lake Golf Club in Anderson, S.C. "The big triplex mowers running over the greens cause a lot of compaction. So unless you've got real good drainage, it's not a bad idea to apply AquaGro on a regular basis. It's done a real good job for me."

INJECTING AQUAGRO WITH IRRIGATION SAVES LABOR



P.P.M Unit

etting agents can be more conveniently applied when injected directly into irrigation systems. Aquatrols manufactures The Little Squirt System and the P.P.M. Unit to inject AquaGro • L or AquaGro Injectable directly into the irrigation stream.

The Little Squirt is a very precise injector which is regulated by the flow rate of irrigation water. It automatically and consistently injects the desired concentration of AquaGro regardless of changes in flow rate. The

P.P.M. Unit is an economical, heavy duty fixed-pulse pump that provides accurate time-proportioned applications.

Bill Black at Congressional Country Club in Potomac, Md., has been using AquaGro since 1964 and The Little Squirt System since 1985.

"We're using it to do away with localized dry spots," he says. "We give the turf a good squirt at the beginning of the year to get AquaGro into the soil. Then we come back in June and July with a light application."

Black used to hand-water greens to treat localized dry spots. But, with the efficiency and convenience of The Little Squirt System, he's found that he can expand his use of AquaGro.

"The Little Squirt got rid of the inconvenience of putting the AquaGro on with a sprayer," he notes. "We figured that—what the heck—if it works



The Little Squirt System.

on greens, it can work on fairways too."

Bob Ribbans, superintendent at Foresgate Country Club in Jamesburg, N.J. favors the simpler P.P.M. unit.

"We set it on top of a 52-gallon drum of AquaGro, plugged into a 24hour timer," notes Ribbans. "It takes absolutely no labor to inject the wetting agent—just 20 or 30 minutes to (initially) install the unit. The labor saving is incredible, and it's all applied in the evening so you don't have to disturb the golfers."

Ribbans claims that he can visually see the difference in his turf.

"Our east course is real hilly, and our west course has heavy soil. So the east course puddles easily and the other drains fast," he notes. "Since wetting agents work both ways—to help eliminate puddling and promote drainage—it makes both courses healthier and more attractive."

The Little Squirt and P.P.M. Units—take your choice—make applying a product with proven effectiveness even more economical, efficient and convenient.



Chris McCarron: nice result with SuperSorb.

WATER ON DEMAND WITH POLYMERS

ater-absorbent polymers, relatively new products of agronomic science, can help maximize a landscape's beauty and minimize maintenance requirements by controlling water availability to plants.

Once water has penetrated the soil surface surrounding a plant, it needs to be made available as the plant uses



SuperSorb provides controlled water availability in the landscape.

it—in the right amount, at the right time. Water absorbents help make this possible.

During periods of high precipitation, water-absorbent polymers gather and store extra water, thus helping alleviate waterlogging and providing a store of water for later use. Then, as the soil dries, the polymers can release stored water to the plant as needed.

Water absorbent polymers consist of molecules with the same electrical charge. When water touches a waterabsorbent, the electrical charge causes the absorbent's molecules to push away from each other. As this happens, water molecules are drawn