

Fighting a Losing Battle?

Sometimes, it seems we are fighting a losing battle. One of the first things we tell growers is: “Do not water crops from overhead, and protect them from rainfall if at all possible.” Wet leaves are ideal targets for many plant pathogens. Splashing rain water or overhead irrigation spreads spores for bacteria and many fungi such as *Alternaria*, *Cercospora*, *Colletotrichum*, *Cylindrocladium*, *Glomerella*, *Helminthosporium*, *Myrothecium*, *Pseudomonas* and *Xanthomonas*.

When I started at the University of Florida, I did some trials using overhead and hand irrigation to demonstrate that no disease occurred for *Alternaria* and *Helminthosporium* leaf spots when the leaves were kept dry — even when I loaded them up with inoculum. That was 34 years ago and I don’t see anyone stopping overhead irrigation unless the law gets on them about regulating water quality or run-off. I think water is the most critical element. If you had to pick one factor what would you pick?

Water management continues to challenge some producers due to economics of using methods other than overhead irrigation. They are making the most of irrigation timing and frequency but physical limitations keep water management a continuing issue.

FINDING AN ALTERNATIVE

Ever wonder if you stopped overhead irrigating and some if not most of your disease issues went away or were not as severe? You may not have to be making those huge fungicide purchases and can stop the vicious circle. If you can try and do a test with a small area, just hand water.

You might find that with the saving of fungicides you actually can afford to pay employees to hand water! Coming from me — a non-plant person or grower — I don’t understand why if we know a particular method doesn’t work ... why do we keep doing it? What’s the attraction?

I think I’d be really looking for a different strategy and looking to save money at the same time. There have been some places that we have visited and as we’re walking around I’ve seen water runoff in nurseries and greenhouses that make you shake your head.

With the extreme drought conditions in California and other states looking at ways to conserve water, maybe we need to re-think things. There have to be alternatives. There is always more than one way to do something.

THINGS TO CONSIDER

Start asking yourself the “Why” questions and what would you need to do to change the method, what kind of impact would that have?

Water is the one natural resource required to sustain all life on the planet, making it already the most important commodity on Earth. Although it has been fought over, sold, diverted, dammed, claimed by governments and overseen by different water authorities, Wall Street has never really gotten its hands in it the way it has with, say, oil. Looking ahead into the next quarter century, clean drinkable water is expected to become more scarce as the human population grows and climate change shifts the shorelines and weather patterns.

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So can we change our watering methods? Do we wait for our counties to mandate how we water? Now you find yourself at a crossroad. Will you be reactive or proactive? Which way will you go? Do you like fighting a losing battle?

Late last year, I was at a meeting in California and was talking with some growers and golf course maintenance people. One of the golf course people told me that a particular golf course was paying a hefty monthly fine for over watering in the current drought conditions. At some point they will come to a crossroad and have to deal with which way they will go — keep on with the fines (who knows how long they can do that) or make a change and comply.

Let’s face it and be practical, the way we used to do a lot of things or produce whatever the item(s) may be, we’ve had to change our methods. Why? Mainly cost, and now that we’re a global economy, we need to compete more.

If we were to cut out overhead irrigation and possibly cut out some of the plant diseases that many have been attributed by this method, we should be able to cut our cost without sacrificing quality. We would be able to cut our fungicide use (which would be a great step toward a more sustainable agriculture) and water use, and we might be able to cut other steps in order to save money or invest it back in your company.

Do you really enjoy fighting a losing battle? [gpn](#)



Chase Agricultural Consulting, LLC was formed in 2011 by Ann (A.R.) Chase and Mike Zemke. Ann has more than 35 years experience in research, diagnostics and practical consulting in plant pathology. She has been retired from the University of Florida since 1994 but remains on staff as a Professor Emeritus. Mike holds an Associate of Applied Science in manufacturing drafting and started his education in horticulture when he and Ann were married in 1995. He specializes in communications of all sorts within the industry.