GROWERTALKS

Growers Talk Production

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What? How? Why?

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Yes, I know. My tendency to give long explanations is getting on people's nerves. Growers don't want to hear about details: Get to the point, Albert! Everybody's busy and nobody has time to absorb scientific fine-print. We want straightforward recipes that are easy to follow. The K.I.S.S. principle. Keep things simple.

If I could come up with a book of easy-to-follow growing recipes that work every time, I could probably finance my retirement. It's just not that simple. Yes, there are recipe books for greenhouse growers, but the trouble is that even the best instructions give us perfect results only nine times out of 10. At best. Easy-to-follow instructions leave us high and dry when things don't work as planned. Keeping things simple can cost us a lot of money in those 10% of cases where simplicity has no valid answers.

I was never satisfied with simple how-to-grow instructions. I always wanted to know WHY something worked instead of merely observing the process. It's true that in greenhouse production we repeat what works and we don't repeat what doesn't work. But if we stop there, we risk short-circuit thinking when things don't turn out as expected. It's too easy to limit the scope of our damage investigations to popular mainstream suppositions like substrate pH or EC or even iron nutrition, which are widely covered in recipe books.

Instead, we should be digging into details of plant physiology, greenhouse climate or into undesired side effects of crop treatments. We tend to prefer explanations that are simple and intuitive versions of common grower knowledge. When we limit ourselves to what's easily accessible, we lose opportunities to learn and to correct errors. When we rely on convenient shortcut answers instead of studying complex realities, we're likely to repeat the same mistakes again and again. Mark Twain said, "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so."

I admit that I'm afflicted with an obsession for learning and knowledge. My family didn't allow me to get a higher education, and out of sheer spite, I did the next best thing and read dozens and dozens of second-hand university textbooks. I tried very hard to grasp the concepts that I found. I wanted to get the most comprehensive understanding of all the mysteries that I observed in my daily work. All of this would have been useless, however, if I wouldn't have been lucky enough to discover the necessary questions before reading about the answers in those books.

Deep understanding of any complex process requires a three-step learning pattern. First, we must observe WHAT is being done. We must work through the processes without much opportunity to question them. Unless we've completed this first step, we cannot comprehend the method or the outcome that's expected.

Next, we must pay attention as to HOW each step of each process is implemented. We must become acquainted with the fine details of all necessary manual and technical tasks. Only then can we pursue the reasons that drive the processes we discovered in the first two steps.

Step number three helps us ask the most important question: WHY?

In lieu of university, I went through a traditional apprenticeship. This form of practical education is built around the three steps of learning. Greenhouse apprenticeships are designed as three-year stints. The idea is that we need to experience three full production cycles, one cycle for each step of learning. The first year, we learn what we grow. The second year, we learn how to grow it. By the third year, we should have accumulated enough questions that we can begin to look for answers as to why we do the things that we do. Sadly, too many growers never make it past the second step of learning. Growing recipes are easier to find than the answer to tough questions and this is how we miss out on all the opportunities that come from digging into the science that's the foundation of our business.

It's the third step of learning that gives us an edge in our work. Deep questions are an opportunity. The famous K.I.S.S. principle is little more than an excuse for not wanting to ask them. Don't dismiss them. Drag your old textbooks out of the attic and start reading. **GT**

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