

A close-up photograph of a hand holding a soil core. The soil is dark brown and contains a dense network of white roots. In the foreground, a green seedling with several leaves is visible. The background is blurred, showing more plants and a white structure.

Technical Services TRAINING GUIDE



Berger

Stay True to Your Course

AN ARTICLE BY

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Your Expert

Brian Cantin graduated from the University of Guelph with a Honors Science Degree in Environmental Horticulture. He majored in Plant Physiology, with a minor in Plant Protection (plant pathology and plant entomology).

Subsequently, Mr. Cantin took on a greenhouse research position with the Brooks Horticultural Research centre in Brooks, Alberta. During his tenure, he continued post-graduate studies, majoring in soil sciences and substrates, at the University of Alberta and Texas A&M University.

After his studies, Mr. Cantin took a position with the R&D division of the Alberta Gas Trunk line. He collaborated with other associates to design and develop waste heat greenhouses that could harness the energy from pumping stations. Once greenhouses in Princess and Joffre Alberta were built, he continued to manage two waste heat projects.

Mr. Cantin was then hired by Yoder as Head Grower and Manager of Technical Support. While at Yoder, he conducted applied research, which eventually turned into a consulting business, Applied Techniques.

Today, Mr. Cantin is a grower advisor at Berger, transforming his vast background in horticulture into inestimable value for the company's customers. He helps customers to resolve their cultivation challenges and improve their growing practices. Mr. Cantin also ensures that all client trials are conducted with the highest of Berger's standards.



Stay True to Your Course

Many rookie grower has been stressed out after a day of well-intended visits by veteran growers. The origin of the stress can in part be brought on by the little bits of wisdom left behind after each visit. As the day goes on, fear may set in and a less experienced grower may start to question his or her ability to grow. At this point, I would prescribe a deep cleansing breath, a good night's rest and then proceed as you normally would. The worst thing to do would be to forfeit all you have gained through your own experiences and replace it with information based on ideas that may not be compliant with your existing greenhouse settings. To this end, I would like to pass on to you some practises that will help you to stay true to your course.



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Advice N° 1

Measure and Monitor Everything

Knowledge is king. If you do not monitor, you assume and when you make too many assumptions you begin to lose focus.

Advice N° 2

Always Walk Your Crop

Take time to patiently walk the crop. So many daily decisions cannot be made without close inspection of the plants and how they are responding to existing practises.

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Advice N° 3

Roots Talk

No other plant part tells more about the overall condition of the plant than its root system. The status of the roots is a true reflection of its surrounding environment and practises that the roots have been subjected to.

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Advice N° 4

Monitor Your Fertilization Program

Performing routine checks on the media salts and pH levels allows you to react quickly to any sub-optimal conditions that warrant attention. In-house testing as well as commercial labs makes monitoring available to everyone.

Advice N° 5

Water Management is a Fine Art

Excuse the pun, but profits can literally be washed away by improper watering. Water holding capacity of the media, varietal sensitivity and seasonal factors all play a role as to when and how to irrigate. Decisions need to be made daily especially during prolonged periods of inclement weather.

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Advice N° 6

Learn to be Pro-Active Rather than Reactive

Take time to recognize early tell-tale symptoms of plant stress whether it be insect, disease or nutrient related. Make this part of your daily routine and get other personnel involved in reporting symptoms that warrant attention. Early detection reduces and minimizes damage and reactive costs.

Advice N° 7

Plant Protection & Record Keeping go Hand in Hand

The cost of chemicals whether they be pesticides, fungicides or PGRs, warrant a full understanding of their chemistry, mode of action and the proper application of each product. The efficacy of chemicals can be jeopardized by factors that are within your control. Outdated chemicals, less than ideal greenhouse conditions, a lack of an understanding of an insect's life cycle and poor water quality, can jeopardize the overall success of your plant protection program. I have seen effective chemicals put back on the shelf because of a grower's bad experience.

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Advice N° 8

To Drench or not to Drench

Many articles have reviewed the pros and cons of fungicide drenches regarding its effect on root growth. Should the main question actually be, "How good are your sanitation practises"? By the time one makes the decision to drench, you have to realize that there has already been damage that has altered the healthy status of the roots. If applied at the appropriate time, drenches do serve a purpose.

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Advice N° 9

PGRs Use

If we wait until the plants are too tall prior to applying PGRs, then we are fighting an uphill battle. Take the time to understand what conditions encourage stretching. I prefer to use PGRs as a toning tool to complement good growing practises.



In conclusion, growing is a balance between science and common sense growing. Fortunately we have an abundance of scientific facts at our disposal; on the other hand a common sense approach comes with experience i.e. your day to day experiences as a grower. There is nothing wrong with networking information; however it should never set precedent over your own learning through experience.

Brian Cantin, Senior Grower Advisor



To get more information on solutions tailored to your day-to-day challenges, contact your Berger specialist today!

