

Nathan Owen-Going, Ph.D.

Nathan obtained his degrees in Agriculture (BSc) and Environmental Biology (MSc and Ph.D.) from the University of Guelph, Ontario, Canada. He has worked with numerous plant pathogens and crops of greenhouse and controlled environment systems utilizing both soil and hydroponic media. As an epidemiologist, his early work has helped to develop and evaluate novel technologies to increase water and nutrient use efficiency in self-sustaining hydroponic systems. A useful byproduct of this early work was the statistical extension of results from bench top experiments to applications on a commercial scale, enhancing information transfer from the lab to practical applications. Later, Nathan's biochemical host-pathogen interaction work developed a greater understanding of the role of phenolic and isoprenoid metabolites not only in the evolution of disease symptoms, but also in the generation of abiotic stresses in hydroponically-grown crops. In short, Nathan's graduate work led to the development of abiotic and biotic technologies to sterilize or filter water and to manipulate populations of beneficial microorganisms in the root zone to enhance plant health and productivity. On Terra, these technologies have proven essential in increasing the environmental compliance of hydroponic operations in Leamington, Ontario (Canada) which is North America's fastest-growing hydroponic community. Nathan has served on several committees for the Canadian Phytopathological Society. He currently works in Ottawa for the Canadian government as a fertilizer efficacy evaluator specializing in microbial supplements and moonlights as an independent agricultural and life sciences consultant.