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# Dr. Gregory L. Reighard - 2018 Wilder Medal Recipient

Dr. Gregory L. Reighard, Professor Emeritus at Clemson University, was awarded the 2018 Wilder Medal by the American Pomological Society for his work in peach tree genetics and culture.

Dr. Reighard was born in Johnstown, PA, and he attained his B.S. in Forestry at Penn State in 1977, his M.S. in Biology at the University of Michigan in 1978, and his Ph.D. in Forestry at Michigan State University in 1984. Upon graduation and after one year as Research Associate at the University of Florida, Dr. Reighard started working at Clemson University, where he has spent his entire professional career as a faculty member in the College of Agriculture, Forestry and Life Sciences, with research, extension and teaching appointments. At this institution, he has demonstrated excellence in scholarship, dedication to the discipline of pomology and the commercial tree fruit industry.

His accomplishments in pomology span the gamut from applied, field-based work to the fundamentals of molecular biology. His research interests include the study of physiological phenomena of genetically compound fruit trees in terms of effects of rootstocks, interstems and cultural practices on vegetative growth, fruiting, frost protection, nutrition, disease resistance, and cold injury. Additional research involved developing new rootstocks that are resistant to nematodes, determining how interstems and growth hormones affect root growth and scion phenology, flower bud thinning techniques, and finding molecular markers for traits such as nematode resistance and dormancy control for use in applied breeding programs. His extension emphasis is fueled by his passion for grower's success and it is based on disseminating current information on orchard management systems for peaches and apples, communicating the relevance of his research findings to commercial growers, and establishing cultivar trials to promote alternative fruit crops for fruit grower diversification. Although teaching and advising has been a small part of his appointment, he has advised 15 M.S. and Ph.D. students to completion, and has included more than 120 undergraduate students in his research program.

One of his greatest accomplishments came about through his commitment to the performance evaluation and genetic analysis of rootstocks that could provide tolerance to the disease complex Peach Tree Short Life (PTSL). His insight and perseverance, and his collaboration with colleagues at the USDA, resulted in the identification, selection, development and commercialization of the Guardian™ peach rootstock, which provided the industry with a rootstock choice that protected trees from PTSL. This was an outstanding contribution at a critical time when the industry was losing traditional chemical control options, and allowed the peach industry in the southeastern U.S. to thrive by improving long-term sustainability and profitability of many farms. Today at least ninety percent of all commercial peaches newly put in the ground in the southeastern U.S. are planted on Guardian Rootstock. Furthermore, Guardian™ rootstock is having a similarly positive impact on peach production in California, South Africa and Australia. Other than the development of Guardian™, his program has also been very successful at achieving an improved understanding of crop load management, harvest modeling, tree habit, bud dormancy, and structural and comparative genomics, and not just in peach, but in other important fruit crops such as apple, apricot, pear and plum.

During his career, Dr. Reighard has been awarded grants for a total of more than

$35 million. Therefore, Dr. Reighard has an extensive list of peer-reviewed research publications (more than 160), over 250 abstracts and near 200 additional proceedings, book chapters, including two chapters in "The Peach: Botany, Production and Uses", and numerous extension and outreach publications, including handbooks, trade journals, magazines, newsletters and popular press articles. Dr. Reighard has served in dozens of committees in regional, national and international symposia. He serves as the Peach Rootstock Coordinator for the SAES-422 Multistate Project NC-140 "Improving Economic and Environmental Sustainability in Tree-Fruit Production through Changes in Rootstock Use", is an honorary member of the Romanian Faculty Academic Council, and he has been a reviewer for more than 20 different scientific journals. He has given more than 450 presentations, including 170 invited presentations. He has also organized many field days and demonstrations tours for fruit tree growers. Dr. Reighard has also hosted 11 post doctoral, visiting scholars and sabbaticals scientists from the U.S., China, Turkey, Spain, France, Ukraine, South Africa and Brazil. Furthermore, in 2017 he served as Interim Chair of the Department of Plant and Environmental Sciences at Clemson University.

Dr. Reighard has been recognized numerous times throughout his career with awards including his election as a Fellow of the American Society for Horticultural Science (2014), the National Peach Council Career Achievement Award (2013), the International Fruit Tree Association Fruit Researcher Award (2012), the American Pomological Society Shepard Award (in 2017, 2010 and 2004), and the National Peach Council Carroll R. Miller Award (2002). Some of his most significant recognitions in the last decade also include the "Mr. Peach" Award by the South Carolina Peach Council (2017), the Experiment Station Section Excellence in Multistate Research Award (2015), the Clemson University CAFLS Superior Service Award (2014), the Clemson University Board of Trustees Award for Faculty Excellence (in 2001, 2005, 2007, 2008, and 2011), the American Society for Horticultural Science – Southern Region Julian C. Miller Sr. Distinguished Research Award (2008) and the Godley-Snell Award for Excellence in Agricultural Research (2008).

In summary, Dr. Greg Reighard's professional career is one of exemplary and sustained dedication to tree fruit improvement, which has resulted in high-quality scholarship for the discipline of Horticulture, and relevant and impactful deliverables for the industry both domestically and abroad.

The Wilder Medal Award was presented to Dr. Reighard at the American Pomological Society Annual Business Meeting in Washington DC on August 2, 2018. This article was prepared by Juan Carlos Melgar and Ksenija Gasic.