**DOCUMENTS**

**A. CCROP program**

1. User Manual – detailed use of program

2. CCROP model concepts – overview

3. CCROP tools – describes the four tools used in CCROP

**B. CIRRIG program**

1. CIRRIG Automation – describes automatic control of irrigation by integrating CIRRIG output with PLC hardware

2. CIRRIG Concepts - describes basic concepts of how CIRRIG determines irrigation amounts

3. CIRRIG User Notes – more specific information on using CIRRIG to output irrigation amounts

4. Leaching Fraction Testing – details how to determine the leaching fraction (LF), a key component of using CIRRIG with LF Zone type.

5. Measuring Irrigation Uniformity – details how to determine irrigation uniformity, a zone input for determining irrigation amount

6. Measuring plant size and plant spacing – details how to determine these zone inputs needed for ET zone type

7. Monitoring irrigation effectiveness – describes tests to help monitor effectiveness of ET zone type output

8. Percent plant cover gallery – provides example photos of a range of percent plant canopy coverage, a zone input for ET zone type.

9. Irrigation CIRRIG control – diagram of CIRRIG system

**C. CIRRIG app**

1. Info App Pages – describes each page in app

2. Info Basic Concepts – describes how the app determines irrigation amounts based on user input conditions and weather acquired from FAWN, the Florida Agricultural Weather Network

**D. LF app**

1. ??

**E. WaterTips app**

1. WaterTips User Guide - A guide for using the watertips app to monitor and adjust irrigation in container nurseries

**F. PLC GUI**

1. GUI user notes – basics of using GUI

**MANUSCRIPTS**

Million, J., T. Yeager, C. Larsen, J. Ritchie, C. Warner, and J. Albano. 2008. Resource management tool for container production. Proc. South. Nursery Assoc. Res. Conf. 53:20-23. (CCROP)

Million, J.B., J.T. Ritchie, T.H. Yeager, C.A. Larsen, C.D. Warner and J.P. Albano. 2011. CCROP - Simulation model for container-grown nursery plant production. Scientia Horticulturae 130(4):874-886. <https://doi.org/10.1016/j.scienta.2011.08.030> (CCROP)

Million, J.B. and T.H. Yeager. 2012. BMP assessments using CCROP (Container Crop Resource Optimization Program) simulation tools. J. Environ. Hort. 30(2):93–102. <https://doi.org/10.24266/0738-2898.30.2.102> (CCROP)

Million, J. and T. Yeager. 2012. BMPToolbox.org - interactive simulation tools for managing water and nutrients in container nurseries. Proc. South. Nursery Assoc. Res. Conf. 57:48-54. (CCROP)

Million, J.B., and T.H. Yeager. 2015. CIRRIG: weather-based irrigation management program for container nurseries. HortTechnology 25(4):528-535. <https://doi.org/10.21273/HORTTECH.25.4.528> (CIRRIG)

Million, J.B and T.H. Yeager. 2018. Production of Thuja (T. Standishii x T. Plicata) using and automated micro-irrigation system and routine leaching fraction testing in a container nursery. J. Environ. Hort. 36(4):140-145. <https://doi.org/10.24266/0738-2898-36.4.140> (CIRRIG)

Million, J.B. and T.H. Yeager. 2019. Testing an automated irrigation system based on leaching fraction testing and weather in a container nursery. HortTechnology 29(2):114-121. <https://doi.org/10.21273/HORTTECH04213-18> (CIRRIG)

Million, J. and T. Yeager. 2019. An automated weather-based irrigation system helps Florida’s Hibernia Nursery save water and labor. Nursery Management. Dec. issue. p. 20-27.

Million, J.B. and T.H. Yeager. 2020. Periodic versus real-time adjustment of a leaching fraction-based microirrigation schedule for container-grown plants. HortScience 55(1):83-88. <https://doi.org/10.21273/HORTSCI14402-19> (CIRRIG)

Million, J.B. and T.H. Yeager. 2021. Million, J.B. and T.H. Yeager. 2021. Use of routine leaching fraction testing to guide irrigation at a container nursery. J. Environ. Hort. 39(3):108-114. <https://doi.org/10.24266/0738-2898-39.3.108> (CIRRIG)

Million, J.B. and T.H. Yeager. 2022. Fabric containers increased irrigation demand but decreased leachate loss of nitrogen and phosphorus compared with conventional plastic container during production of dwarf Burford holly. HortScience 57(7):743-749. <https://doi.org/10.21273/HORTSCI16570-22> (CIRRIG)

Million, J.B. and T.H. Yeager. 2022. Fabric containers increased irrigation demand but decreased leachate loss of nitrogen and phosphorus compared with conventional plastic container during production of dwarf Burford holly. HortScience 57(7):743-749. <https://doi.org/10.21273/HORTSCI16570-22> (CIRRIG with Tipper sensors)

Million, J. and T. Yeager. 2022. Small rain gauge method of monitoring leachate volume in container nurseries. Florida State Horticultural Society (FSHS 2022 not available as of 1/9/23; see Word doc: FSHS 6-29-22) (Tipper sensors)