

THE DEPARTMENT OF PLANT AND SOIL SCIENCES CORDIALLY INVITES YOU TO A SEMINAR ON



"LIGHT QUALITY AND ITS MANIPULATION IN HORTICULTURE"

Dr. Erik Runkle

Michigan State University

FRIDAY, OCTOBER 7, 2022. AT 12:20PM-1:15PM 132 TOWNSEND HALL

Host: Dr. Qingwu Meng https://udel.zoom.us/j/95848830334

If you would like to meet with Dr. Erik Runkle individually, please email William Meng (qwmeng@udel.edu) with your available time slots.

Synopsis: Light quality, or the photon spectrum, regulates plant growth and development throughout its life cycle. With the development of light-emitting diodes (LEDs), we can deliver various spectra in controlled environments (e.g., growth chambers and greenhouses) based on desired growth outcomes. In this seminar, Dr. Runkle will share his team's research about the regulatory effects of light quality on plant morphology, growth, and flowering of a range of horticultural specialty crops, including greenhouse ornamentals and hydroponically grown leafy greens.

Bio: <u>Dr. Erik Runkle</u> is a Professor and Extension Specialist in the Department of Horticulture at Michigan State University. Erik obtained a B.S. in Ornamental Horticulture from the University of Illinois and an M.S. and Ph.D. in Horticulture at Michigan State University. Since he joined the faculty in 2001, he and his graduate research team have performed numerous practical experiments in controlled environments to determine the effects of light, temperature, and other environmental factors on plant growth and development. Experiments have been performed on a wide range of herbaceous specialty crops including leafy greens and ornamentals. Erik recently developed the <u>Controlled-Environment Lighting Laboratory</u> to better understand how the photon spectrum can be manipulated to produce crops with desired attributes. He is the director of <u>OptimIA</u>, a USDA-supported Specialty Crop Research Initiative project on improving the profitability and sustainability of indoor leafy-greens production.