Dr. Qingwu 'William' Meng

Dr. Meng is currently an Assistant Professor in Plant and Soil Sciences at the University of Delaware. He worked as a plant scientist for a private company in Grow Research and Development. Dr. Meng's research expertise is in LED light control in controlled environment systems. Following are some of his recent papers.

Education

Ph.D.	Horticulture, **Michigan State University** *Dissertation: Spectral manipulation improves growth and quality attributes of leafy greens grown indoors*	2018
Ph.D.	Multidisciplinary Science, **Rensselaer Polytechnic Institute** (transferred)	2015
M.S.	Horticulture, **Michigan State University** *Thesis: Investigating use of blue, red, and far-red light from light-emitting diodes to regulate flowering of photoperiodic ornamental crops*	2014
B.E.	Agricultural Engineering • B.A., English, **China Agricultural University** *Thesis: Light quality affects growth and development of cucumber seedlings in an enclosed transplant factory*	2012

1. **Meng, Q.*** and E.S. Runkle*. 2023. Blue photons from broad-spectrum LEDs control growth, morphology, and coloration of indoor hydroponic red-leaf lettuce. Plants (minor revisions submitted, pending acceptance).
2. Kohler, A.E., E.M. Birtell, E.S. Runkle, and **Q. Meng***. 2023. Day-extension blue light inhibits flowering of chrysanthemum when the short main photoperiod includes far-red light. J. Amer. Soc. Hort. Sci. (accepted).
3. Runkle, E.S.*, Y. Park, and **Q. Meng**. 2022. High photosynthetic photon flux density can attenuate effects of light quality. Acta Hort. 1337:333–340. [CrossRef]
4. **Meng, Q.** and E.S. Runkle*. 2020. Growth responses of red-leaf lettuce to temporal spectral changes. Front. Plant Sci. 11:571788. [CrossRef]
5. Kelly, N., D. Choe, **Q. Meng**, and E.S. Runkle*. 2020. Promotion of lettuce growth under an increasing daily light integral depends on the combination of the photosynthetic photon flux density and photoperiod. Sci. Hort. 272:109565. [CrossRef]
6. Lopez, R.G.*, **Q. Meng**, and E.S. Runkle. 2020. Blue radiation signals and saturates photoperiodic flowering of several long-day plants at crop-specific photon flux densities. Sci. Hort. 271:109470. [CrossRef]
7. **Meng, Q.**, J. Boldt, and E.S. Runkle*. 2020. Blue radiation interacts with green radiation to influence growth and predominantly controls quality attributes of lettuce. J. Amer. Soc. Hort. Sci. 145:75–87. [CrossRef]
8. Runkle, E.S.*, **Q. Meng**, and Y. Park. 2019. LED applications in greenhouse and indoor production of horticultural crops. Acta. Hort. 1263:17–30. [CrossRef]
9. **Meng, Q.** and E.S. Runkle*. 2019. Far-red radiation interacts with relative and absolute blue and red photon flux densities to regulate growth, morphology, and pigmentation of lettuce and basil seedlings. Sci. Hort. 255:269–280. [CrossRef]
10. **Meng, Q.**, N. Kelly, and E.S. Runkle*. 2019. Substituting green or far-red radiation for blue radiation induces shade avoidance and promotes growth in lettuce and kale. Environ. Exp. Bot. 162:383–391. [CrossRef]