

■ Commentary

Interaction within and between communities

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While doing my PhD thesis some years ago, I attended the *American Society for Photobiology* meeting in Puerto Rico and the *European Society for Photobiology* meeting in Bath. Since completing my PhD thesis, the congresses I have participated in have been orientated in the field of applied sciences, mainly horticulture. In 2014, I attended to the *American Society for Horticultural Science* meeting in Orlando. There were in all 49 different sessions, each having about 5-7 oral presentations and 5-7 posters. Two oral presentations and three posters were related to UV effects and exploiting their possibilities in horticulture (Box 7.1). The 2015 American Society for Horticultural Science in New Orleans hosted dozens of sessions and a myriad of presentations and poster, two of which were related to UV effects (Box 7.1). A recent issue of *HortScience* published half a dozen articles, highlighting proceedings from the 2014 ASHS meeting colloquium and workshop, related to LEDs and horticultural science (Massa and Norrie 2015). UVB and UVR8 get mentioned and some application possibilities are briefly outlined by Folta and Carvalho (2015).

Conferences or sessions within conferences, specialized in (UV) photobiology, demonstrate the enormous amount of information and lessons learned over the years from scientific work. There have been presentations and publications on how to transfer this knowledge to agricultural and horticultural applications, but they have been largely presented *within* the photobiological research community. The more-applied community then have their own branch of UV-related studies, but these researchers do not necessarily concentrate solely on studying and utilizing UV-related effects. When the latest results are presented within the respective communities, one can argue that there is a lack of knowledge transfer.

Based on my experience, I would say we need more conferences like the one organised by the President of *Association of Applied Biologists*, Professor Bill Davies in Lancaster during June 2015. Invited speakers and other presentations covered a plethora of subjects under the theme, "from research to the food supply chain", ranging from les-

Box 7.1: UV-related oral and poster presentations at the two most recent meetings of the *American Society for Horticultural Science*

ASHS 2014

- Exploring Plant-UV Interactions with Greenhouse Tomatoes: Stress, Flavor, and Phytochemicals by M. Dzakovich and C. A. Mitchell (Oral)
- UVB Radiation Affects Intumescence Development in Ornamental Sweet Potato (*Ipomoea batatas*) by J. Craver et al. (Oral)
- Watermelon-based Sunscreen Blocks UVA and UVB Light by P. Perkins-Veazie and A. Davis (Poster)
- The Effect of Multi-wavelength Light-emitting Diode Lighting on the Growth Response of Leaf Lettuce at Different Stages by C.-L. Chang (Poster)
- Glucosinolates Are Enhanced by Controlled Application of Abiotic Stresses in Broccoli (*Brassica oleracea* var. *Italica*) during Postharvest Storage by A. Duarte Sierra (Poster)

ASHS 2015

- Phenylalanine and Abiotic Regulation of Early Defense by K. Warpeha (Oral)
- Analysis of Effect on Harmful Microorganism Death Rate According to Ultraviolet Irradiation and Sterilization Condition of Substrate for Cultivation of Oyster Mushroom by I. S. Baek et al. (Poster)

sons learned from breeding efforts for higher photosynthetic efficiency, biological control of pests in Africa, using farmer networks, all the way to exploiting photobiology in protected cropping (Association of Applied Biologists 2015).

References

Association of Applied Biologists (2015). *Knowledge exchange: from research to the food supply chain: Provisional Programme and Booking Form*. URL: http://www.aab.org.uk/images/knowledge_exchange_pro.pdf (visited on 10/13/2015).

- Folta, K. M. and S. D. Carvalho (2015). "Photoreceptors and Control of Horticultural Plant Traits". In: *HortScience* 50.9, pp. 1274-1280.
- Massa, G. D. and J. Norrie (2015). "LEDs Electrifying Horticultural Science: Proceedings from the 2014 Colloquium and Workshop". In: *HortScience* 50.9, pp. 1272-1273. eprint: <http://hortsci.ashspublications.org/content/50/9/1272.full.pdf+html>.