

## ■ From the editors' desk

### A moment of reflection

Welcome to the first issue of the 2017 *UV4Plants Bulletin*. When I first started thinking about this editorial it was the middle of summer. While it is now autumn for those of us living in the northern hemisphere, the weather here in New Orleans is still very much like summer. So, please bear with me as my mind is still very much on summer time activities.

Traditionally, summer is a time when schools are out and families go on vacation or holiday, people travel or spend time on the beach (sunscreen reminder seems appropriate here), and we have some degree of change in our normal daily routines. For many faculty and graduate students, summer is a season of long periods of uninterrupted time that can be devoted to research activities and, at least in northern temperate locations, ecologists are furiously trying to complete field work before inclement weather arrives and study organisms decide it is time to stop cooperating with their investigators. In New Orleans, summer is a time when life generally slows down as the heat, humidity and afternoon thunderstorms settle in and it becomes less than comfortable to pursue vigorous outdoor activities. Thus, in this part of the world, summer is a good time to relax, eat and drink good food and beverages, and ponder (Figure 1.1).

So, in this spirit I've been reflecting on the *UV4Plants Bulletin* and wondering what we seem to be doing well and in what areas we might improve upon (I decline to mention what food and drink are being consumed during this process). Beginning with its inception in December 2015, the "Bulletin" has continued to support six key aims of The International Association for Plant UV Research. These aims are itemized at the end

of each issue and won't be reiterated here but in general, one can place these goals into the following broad categories or topics: 1) research; 2) news; 3) outreach; 4) product development; 5) funding; and 6) community building. After reviewing the contents of the previous Bulletins, it seems to me that we are doing a good job addressing the research, news and community building parts of our mission. The vast majority of articles published so far have focused on research (including historical accounts, profiles of UV researchers and opinion pieces), methodology (including tutorials and FAQs), book reviews, news items and information on previous and upcoming meetings. So far, a total of 18 individuals have contributed to the Bulletin, including faculty and students, and the list of new contributors grows with each issue. In my view, these are all positive signs that the Bulletin is vibrant, relevant and serving an important role in supporting many of the original aims of our association. However, it does seem that we could improve upon our efforts in communicating ideas and information in several areas—most notably, outreach and education, interfacing with industry and product developers, and advocating for increased research funding.

In the current issue, several articles address some of these "under-represented" topics while others further add to, and enhance, our current strengths. The article by Gareth Jenkins is a wonderful example of the development of a teaching lab that introduces students to molecular aspects of plant responses to UV-B, while also engaging students in the process of scientific discovery. Many of us are involved in the teaching of undergraduate and graduate students, and we encourage others who have developed



**Figure 1.1:** A sampling of typical New Orleans cuisine that is quite suitable to ponder over. (A) Shrimp and grits; (B) Bread pudding; (C) Char-grilled oysters; and (D) Gumbo. Photos by Andrew Barnes.

educational materials in UV photobiology to submit them to the *Bulletin* for publication. Marcel Jansen explores the linkages between carnivorous plants and UV radiation in a thought-provoking opinion. Carnivorous plants have fascinated naturalists and scientists as far back as Charles Darwin (1875) and they provide a wonderful way to attract and excite students and the general population about botany and, in so doing, increase people's appreciation for the plant world and those who study plants. The outreach and education about UV and plants is further addressed in Pedro Aphalo's review of David Prutchi's book *Exploring Ultraviolet Photography*. This integration of art with science is an additional avenue for UV photobiologists to connect with non-scientists, which then further contributes to the broader efforts to make science relevant and valued in today's society where "fake news" and misinformation are widespread. A methodological review/tutorial on the analysis of phenolic compounds by Susanne Neugart provides a comprehensive overview of technical approaches to sampling and quantifying phenolic compounds in plants and addresses, from a methodological perspective, the various environ-

mental and biological factors that can influence the phenolic composition of plant tissue. The methods and recommendations outlined in this review will greatly aid all of us who wish to accurately and precisely characterize UV effects on flavonoids and related phenolic compounds. A report by Marcel Jansen on the Workshop "Modulation of Plant UV-Responses by Environmental Factors" held at Brno, Czech Republic, two reports on lab visits by students (Neha Rai, Sari Siipola and Yan Yan, and Rozenn Pineau), several news items and a letter from our President, Gareth Jenkins, round out this issue.

So, enjoy this mid-summer issue of the UV4Plants *Bulletin* and take a moment or two to ponder things of your own (It was grilled shrimp and red wine if you are interested).

*Paul W. Barnes* (editor)

New Orleans, August–October 2017.

## References

Darwin, C. (1875). *Insectivorous plants*. London: John Murray. 462 pp.