Professor Emeritus Adel A. Kader (1941–2012): a golden era in postharvest education, research and practice

Adel A. Kader, Professor Emeritus of Postharvest Physiology at University of California, Davis, USA, passed away on 10 December 2012 at the age of 71 while returning home from POSTHARVEST AFRICA, held at Stellenbosch University, South Africa, where he delivered the Inaugural SARChI Postharvest Lecture plus a keynote address on 'Advances in postharvest management of pomegranates'. During the past 50 years, Adel has spearheaded the education of a new generation of global scientists and championed the advancement of postharvest education and research. We will forever remember and cherish Adel as the humble, generous and innovative towering figure and father of modern postharvest science, whose entrepreneurial leadership and mentorship have shaped the way we understand and handle fresh produce. We pay tribute to a great man, whose non-compromising and incisive quality research enquiries and prolific outputs have left indelible marks of new knowledge which contribute to better life for all.



Note: Dr. Adel A. Kader delivering his keynote address at POSTHARVEST AFRICA 2012 at Stellenbosch University, South Africa.

In my inaugural editorial in this journal (*IJPTI*, Vol. 1, No. 1, 2006, pp.1–3), I talked about 'a new era in postharvest technology', referring in part to the critical need for new postharvest knowledge and the dissemination of existing knowledge to assist in reducing food insecurity and advance sustainable economic development. While preparing for the launch of *IJPTI* in 2006, I shared these sentiments with Adel, and in his characteristic generosity, he gave me good words of advice on how to proceed and kindly agreed to be

the first consulting editor of the journal, for which as the founding editor-in-chief, I remain forever grateful.

It is with great shock, sadness and heavy heart that I pay tribute to Emeritus Professor Adel A. Kader, whose sudden death marks the end of a golden era in global postharvest education, research and practice. Like his family and most people who have met and known Adel, his death is also a personal loss to me. Adel passed away at the San Francisco Airport (USA) on his way home after 'giving it all' to all of us who attended POSTHARVEST AFRICA 2012 (25-29 November): the 7th CIGR International Technical Symposium on 'Innovating the Food Value Chain', incorporating the 2nd International Conference on Postharvest Technology and Quality Management, held at Stellenbosch University, South Africa. As the Convenor, I invited Adel to deliver the 'Inaugural SARChI (South African Research Chairs Initiative) Postharvest Innovation Lecture' at Stellenbosch University during the conference, to which he agreed, and went further to ask if I wanted him to present additional talks to the participants, which resulted in his keynote address on 'Advances in postharvest management of pomegranates'. We are grateful to the South African Postharvest Innovation Programme, which is supported by the South African Department of Science & Technology, for sponsoring Adel's participation at the conference.

During the conference, Adel made time to speak individually to as many participants and industry people as possible on various postharvest issues, challenges and opportunities. The demand for personal photographs with him was relentless and I had to politely intervene so that he could have some time to eat or drink something during the comfort break. While we discussed his presentation on pomegranates and future research prospects, Adel assured me that he has read every article on postharvest technology of pomegranates from my research group. Such was the great scientist, a living library of postharvest knowledge. Prior to delivering the inaugural SARChI Postharvest Lecture, Adel called up the youngest female and male participants in audience and, symbolic of his characteristic generosity and interest on the youth, presented each of them with a brand new hand-held device used in postharvest research. He also presented me with a UC Davis POSTHARVEST TECHNOLOGY bag containing a copy of his seminal book on *Postharvest Technology of Horticultural Crops*, four other books, postharvest instructional posters, a digital thermometer, and a flash disk containing postharvest e-resources.

In his SARChI Postharvest Inaugural Lecture entitled 'Fifty years of learning and teaching postharvest biology and technology of horticultural crops', Adel took us on scientific postharvest journey which started in 1961 (incidentally the year I was born) till the present. Using a combination of photographs of himself over this period and examples of milestone publications, he talked about the role of extension and outreach as one of the key strategies for reducing postharvest losses and waste by informing all those involved in marketing about the best handling practices and consumers about food handling at home. He also described the genealogy and content of the Postharvest Technology Short Courses which he has offered every year since 1979, and the content-rich web-based information and learning tools, which averages over 3 million views annually, and encompasses more than 600 pages and 750 documents. Through his personal and in-depth global insights, Adel provided us with a captivating overview on recent and future trends in postharvest research, and concluded that "reducing postharvest losses by 50% by 2025 is an attainable goal". What a truly golden era in postharvest postharvest education, research and practice!

At the conference closing ceremony Adel was presented with a life-time award for his enormous contributions and global impact on postharvest education and research. It was difficult to convince Adel to accept the award because he believed that many others also deserve to be recognised as he responded to me: "While I greatly appreciate your thoughtful suggestion of recognizing my contributions to postharvest horticulture during the past 50 years, I feel that I have had enough recognitions and it is important to also recognize other colleagues who made significant contributions to international postharvest research, education, and/or extension, including some of the other invited speakers to the symposium and yourself". Many who knew and associated closely with Adel will find that this response typifies the humility of the gentle and generous scientific giant, the man that I proudly introduced during his SARChI Postharvest Lecture as "one of Africa's greatest gifts to the scientific world".

Adel is one of the most cited authors in postharvest research but is quick to acknowledge the contributions made by his colleagues and students to his remarkable achievements and global impact. When I asked him for a brief biographical statement to introduce him during POSTHARVEST AFRICA 2012, Adel's response included the following: "He and his associates conducted research on postharvest biology and technology in relation to preserving flavor and nutritional quality of intact and fresh-cut fruits and published more than 250 technical publications and a book on Postharvest Technology of Horticultural Crops".

Over the past 20 years, I have come to know and admire Adel as an inspirational role model of what a true scientist and exemplary human being can be. I first had the opportunity to meet him while I was pursuing my PhD studies in agricultural engineering at Massey University in the early 1990s and will never forget the motivating and insightful seminar he delivered to our postharvest research group. I will always cherish the time he spent with me (and indeed other postgraduate students), one-to-one, to discuss my research topic on stem-end splitting in apples, during which I marvelled at his tremendous knowledge of the literature (and the key researchers around the world), with fundamental understanding of the mechanisms and possible control strategies to address the problem. Although Adel's visit to Massey University was short, his impact on people and the future of postharvest science has been life-long and enduring. More recently, I have served with Adel on the International Advisory Board (IAB) of the Horticultural Collaborative Research Support Program (Horticulture CRSP) of the USAID which was awarded to the University of California, Davis, USA.

While the international postharvest and horticulture communities mourn his death, we are equally grateful to Adel and his family for the sacrifices they have made over the past 50 years, which have enriched us individually and collectively through Adel's work as educator, researcher, mentor and inspirational leader. His foresight and self-less service have assured living and lasting legacies through the human resources he has developed across all inhabited continents and through the scientific knowledge he has created and fostered through partnership with his peers, students and industry. We thank the Kader family for generously sharing their husband, father and grand-father with us and would like to remind them that he was a good man who has positively touched the lives of more people that he could have imagined. At this difficult period, we remember his wife Aileen, daughter Soad, son Sami, daughter in-law Shantel, and grand-children Dominic and Alexandra. A big thank you to Soad (Adel calls her Susu) for accompanying your dad to POSTHARVEST AFRICA. Right from the first time we met in Bangkok during the tour of the fruit market as part of the IAB meeting, you agreed that you will

accompany your dad to visit us in South Africa and you did. It was great fun having you and Adel with us and we thank you personally for your warmth and for generously sharing your dad and your time with us.

In lieu of flowers, the Kader family has requested gifts be made to the Postharvest Program Endowment Fund in honour of Dr. Adel A. Kader. Following the link https://awc.ucdavis.edu/MakeAGift.aspx, please select 'Other Fund', the 3rd choice on the pull down menu and type in 'Postharvest Program Endowment Fund – 07642'. On 26 January 2013, a memorial service will be held for Adel at the University of California, Davis, Alumni Center with receptions starting at 11h00.

Before departing home at POSTHARVEST AFRICA 2012, Adel informed me that he would send the manuscripts of his two presentations for inclusion in a special journal issue. We also talked about launching new strategies and initiatives to strengthen and deepen the role of postharvest technology to support agricultural development in Africa, especially in transforming smallholder rural agriculture by linking them to local, regional and international markets. Adel reminded me that a lot of existing knowledge that can contribute towards this goal already exist and have not been fully exploited. He also reminded me to take a deeper look at the information contained in the various technical materials he had given to me. In his memory, a special issue of the Int. J. Postharvest Technology and Innovation containing selected articles from POSTHARVEST AFRICA 2012 will be published in 2013 to celebrate the life and global impact of this great and inspirational scientist who has pioneered and championed the past golden era of education and research in postharvest biology and technology. His enduring legacies provide us with the blueprint to ensure that existing knowledge gains are sustained and that we equally aspire and continue to push the boundaries of this knowledge for the improvement of human wellbeing and sustainability of life on our planet.

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