

Dr. Joseph Smartt (1931–2013)

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Dr. Joseph ‘Joe’ Smartt, geneticist and renowned grain legume expert, died peacefully in his sleep on 7 June 2013, just 3 months shy of his 82nd birthday.

Born in the East End of London, he gained his BSc in 1952 from Durham University in the UK, a Diploma in Agricultural Science from the University of Cambridge in 1953, as well as the Diploma in Tropical Agriculture from the Imperial College of Tropical Agriculture, Trinidad (now the University of the West

Indies) in 1954. In 1965 he was awarded his PhD from North Carolina State University (NCSU) for a dissertation on cross compatibility between the cultivated groundnut, *Arachis hypogaea*, and wild species in which he emphasised the relevance of using the methods of experimental taxonomy to unravel their evolutionary relationships (Smartt 1965). His major professor was the distinguished groundnut breeder and geneticist Walton C. Gregory.

Between 1954 and 1961 he was a groundnut breeder in Northern Rhodesia (now Zambia), and it was this experience that led him towards his PhD research at NCSU. In 1967 he was appointed Lecturer in Genetics in the Department of Botany at the University of Southampton. He remained there until 1996 when he retired after 29 years of loyal service and distinguished research in evolutionary biology. In 1990 he was appointed Reader in Biology by the university, and in 1989 he was awarded the DSc degree for his published work on the genetics and evolution of crop plants.

But it is for his work on the diversity, evolution, and domestication syndromes in grain legumes that he will be best remembered. While he undertook primary research on groundnuts and *Phaseolus* beans, his influential books and papers on the evolution and use of genetic resources of these species and other grain legumes led, in no small part, to increased interest in their improvement. Some of his most important synthesis papers were published as a series of six in

Experimental Agriculture (Smartt 1984, 1985a, b, c, d, 1986). Among the books he authored were *Tropical Pulses* (Smartt 1976) and *Grain Legumes: Evolution and Genetic Resources* (Smartt 1990), while he co-edited (with Norman Simmonds) second editions of *Evolution of Crop Plants* (1995) and *Principles of Crop Improvement* (1999). He edited *The Groundnut Crop: A Scientific Basis for Improvement* (Smartt 1994), and co-edited *Food and Feed from Legumes and Oil Seeds* (Nwokolo and Smartt 1996).

Based on his own practical experiences as a plant breeder in Africa, he showed how evaluation and exploitation of legume germplasm collections, coupled with appropriate evolutionary biology research, could lead to enhanced yields. This body of work no doubt encouraged others to take up the mantle and develop successful legume breeding programs. In this respect, the focus and impact of his scientific contributions on pulses are comparable with those of Jack Harlan (on cereals) and Jack Hawkes (potatoes), to name just two of his contemporaries.

Joe had a lifelong passion for all kinds of music and traditional instruments, folk dancing, steam trains, and goldfish breeding and judging. In connection with the latter, which started as a hobby, he authored two books (Smartt and Bundell 1997; Smartt 2001) on goldfish genetics and breeding.

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