

well-organized compilation by specialists of accounts of the effects of elevated CO₂ levels on crop growth. Among the strengths of this compilation is the breadth of the crops covered, from pasture through fibre and arable crops to vines. Similarly, the contributors of the chapters have a wide range of experience and expertise, originating in Europe, Japan, the USA and Africa.

The work reported in 19 chapters is drawn from laboratory studies and work done in growth chambers and from studies done on field-grown plants. The field studies include work done with long-term exposure to elevated CO₂ in both open-topped chambers (OTC) and in 'free air carbon dioxide enrichment' (FACE).

Among the particular difficulties in appreciating the effects of elevated CO₂ are the associated effects of temperature and the contrasting responses that are sometimes reported both between and within species, e.g. yield of potato –26 % to +100 %, yield of *Lolium perenne* –6 % to +29 %, dry mass of corn cobs –20 %, and the development of acclimatization of some species to raised levels of CO₂. Crop species therefore need to be examined individually and care must be taken to distinguish whether differences reported are artefacts of the differing methods used in the studies or reflect genetic differences. The accounts given inform such questions.

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Hybrid Vegetable Development. Edited by P. K. Singh, S. K. Dasgupta and S. K. Tripathi. Binghamton, NY, USA: The Haworth Press (2005), pp. 441, US \$59.95 (paperback). ISBN 1-56022-119-4. doi:10.1017/S0014479706314536

At first glance this looks like a lot of book for the money. It has chapters on a wide, if somewhat eclectic range of vegetables, although the information appears somewhat dated – probably a reflection of the relative decrease in information in the public domain, as public funding on breeding has shrunk.

Structurally it suffers from considerable repetition with separate chapters on hot and bell peppers, and cabbage, cauliflower, kohlrabi and broccoli; inevitably, the breeding technology is similar, even if specific traits are different. A chapter on hybrid peas seems superfluous when, as the author admits, hybrid varieties are extremely unlikely!

The editing is poor. Differences in units abound – quintal/acre, quintal/hectare, kg/h, t/ha, kg ha⁻¹, kg h⁻¹, kg/acre – sometimes within the same section. Contradictions and inaccuracies abound, some insignificant, some important, some just irritating (pollenizer rather than pollinator). Within two pages in the chapters on hot pepper, the level of natural cross-pollination varies from 16 % (p. 35) up to 30–40 % (p. 37). For onions, the biochemistry of the lachrymatory factor could be better described than a 'mild form of sulfuric acid' and the C (pollinator) line doesn't have to have the constitution NMsMs (p. 238). The first hybrid cabbage was not, I think, developed in Japan in 1995 (p. 89).

Consequently the book is seriously flawed, but nevertheless it does contain a lot of information and if all the irritations can be overlooked it could be a useful, albeit heavily compromised introduction to hybrid vegetables – after all there are not that many books on the subject.

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Saffron (Crocus sativus) Production and Processing. Edited by M. Kafi, A. Koocheki, M. H. Rashid and N. Nassiri. Enfield, NH, USA: Science Publishers (2006), pp. 244, £33.50. ISBN 1-57808-427-X. doi:10.1017/S0014479706324532

This book deals with a crop well known for its product but little known for its cultivation, the farming systems of which it is a part, or its complex processing requirements. The main centre of production is Iran, and a Centre for Excellence for Special Crops was established at the Ferdowsi University of Mashad. The content of the book is based on the collection and documentation by the Centre of all the local and international literature on saffron. There are 11 chapters, each by a different Iranian author. English is not their first language, and the content of the book is compromised by the poor quality of the language. It is surprising that the publishers did not insist on final editing by someone fluent in English.

Saffron is a highly labour intensive crop requiring 270 person-days per hectare. The market price has fluctuated between US \$344 kg⁻¹ and US \$927 kg⁻¹ – the price falling as production increases. Yields average only 1.9 kg ha⁻¹ in Iran, but the potential recorded under experiment conditions is up to 20.3 kg ha⁻¹. Farmers in Spain achieve yields of up to 10–12 kg ha⁻¹.