

less effort devoted to hormones and the more physiological aspects. This edited volume aims to provide an up-to-date account of the roles played by phytohormones in the coordination of plant growth and development in response to stress, and to provide an insight into the complexity of the mechanisms involved in signal perception and transduction in response to abiotic stresses. The format includes a mix of chapters ranging from those outlining general aspects of phytohormone involvement in stress responses to individual chapters on some of the traditionally recognised major hormone classes (auxins, cytokinins, gibberellins and ethylene) and on less well-known compounds (nitric oxide, brassinosteroids, salicylic acid and jasmonic acid). Disappointingly, there is no chapter specifically focussing on what is probably the central hormone involved in plant stress responses (abscisic acid), though it is discussed in the text.

Overall, the articles bring together much useful information on phytohormone involvement in the signalling pathways in response to abiotic stresses, with a particularly useful chapter by Harrison on the cross talk between them, and some useful up-to-date information and references. There is little attempt to synthesise available information on overall stress responses that could make this an essential read for researchers or students. Therefore, I cannot see any individuals and few libraries wanting to purchase a copy at this price. For most topics covered, more useful reviews can be found in recent issues of *Annual Reviews* or relevant plant journals.

Hamlyn Jones

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Bioenergy for Sustainable Development in Africa. Edited by R. Janssen and D. Rutz. Heidelberg, Germany: Springer Science (2012), pp. 413, £117.00. ISBN: 978-94-007-2180-7.

This book addresses bioenergy opportunities and related risks for Africa in five parts: Biomass Production and Use; Biomass Technologies and Markets; Biomass Policies; Sustainability of Biomass Production and Use; Financing and Socio-Economic Issues. The interest in bioenergy has been driven primarily by initiatives on climate change to reduce Greenhouse Gas (GHG), to reduce dependency on fossil fuels and by potential for socio-economic development. At the same time, there is increasing concern with the wider implications of bioenergy production, particularly if grown at large scale, including pro-poor development, environmental sustainability, GHG emissions, land use changes and impact on food prices.

African countries have launched initiatives to establish regulatory policy frameworks for bioenergy to ensure environmentally, economically and socially sustainable production and use of traditional and modern bioenergy. There are regional and African Union level initiatives too. Specific activities in bioenergy sustainability certification as an essential component of the regulation of the bioenergy sector are also being performed in three countries and one region but these do not address the perceptions of communities and the risks of negative environmental and socio-economic effects.

The book highlights the crucial importance of carefully integrating policies for land use, agriculture and energy, and aligning them with policies for rural development, transport and finance; and that bioenergy development in African countries will only find its proper environmental context and agricultural scale if convergence with biodiversity, GHG emissions and water use policies is achieved. Two important aspects are not addressed: the important role of Conservation Agriculture in reducing energy requirement for bioenergy crop production and in lowering GHG emissions, and the need to use crop residues in sustainable soil health and production management.

Amir Kassam

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Crop Post-Harvest: Science and Technology – Perishables. Edited by D. Rees, G. Farrell and J. Orchard. Chichester, UK: Wiley-Blackwell (2012), pp. 451, £160.00. ISBN 978-0-632-05725-2.

This multi-authored book provides a comprehensive overview of many of the factors affecting the post-harvest quality of perishable fruits, vegetables and ornamentals. The book is the third volume in a series dedicated