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Biodiversity, Biofuels, AgroForestry and Conservation Agriculture. Edited by E. Lichtfouse. Heidelberg: Springer (2011), pp. 391, £135.00. ISBN 978-90-481-9512-1.

Biodiversity, Biofuels, AgroForestry and Conservation Agriculture is the fifth in the Sustainable Agriculture Review series from Springer. This is a useful wide-ranging book covering many areas of interest to the thinking agriculturalist of the 21st century operating on a global scale. It covers a number of issues in sustainable agriculture well, through a series of 12 individual chapters covering areas such as sustainable bioenergy use and the role of biotechnology, agro-ecology, carbon sequestration, conservation agriculture in the Mediterranean and semi-arid dryland agriculture, synergism between crops, efficient irrigation, sustainable practices in India, microbial soil quality, and silvopastoralism and biodiversity conservation.

With such a wide ranging disparate series of chapters a unifying overview introduction would have been a useful addition to the review to give a more unifying sense of perspective, position and place for the various areas covered. The opening chapter on agro-ecology is the longest and provides a wide ranging overview of this increasingly talked about relatively 'new' discipline and application and philosophy thereof. Those with any practical experience of farm machinery and farming might question the assertion that optimum field size of 1–2ha is the ceiling for operational machinery efficiency, but in general the chapter provides a useful overview despite its dense language at times. It includes a section on agro-ecology in the curriculum that educationalists will find of interest. The book is well referenced throughout as one has come to expect from the series and it is a useful addition to its partner volumes.

Keith Dawson

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Industrial Crops and Uses. Edited by B. P. Singh. Wallingford, UK: CAB International (2010), pp. 528, £115.00, ISBN-13: 978-1-84593-616-7.

Crops are playing an increasing role as industrial raw materials as they can yield a wide range of products, are renewable and are associated with positive environmental impacts, in contrast to petroleum-based materials. This book describes in detail the range of industrial crops and uses.

Industrial Crops and Uses is divided into eight parts with the first part giving a useful overview. The other parts are split according to the different uses that are made of industrial crops, namely: bioenergy, industrial oil, industrial starch, fibre and dye, rubber and related compounds, insecticide and land rehabilitation. There are several chapters within each part as appropriate to the subject.

Chapters have been provided by some 53 contributors, predominantly from the USA, but also from many other nations. A multidisciplinary approach has been taken to include an insight in to the agronomy, plant breeding, biotechnology, biochemistry and process engineering for the different industrial uses.

The book succeeds in its aim of providing information on industrial crops suitable for a textbook for graduate-level students and to present current research and developments of interest to researchers and professionals involved in the industrial utilization of plants. The reader might have benefited slightly by the split into different parts being shown more distinctly – in the text it is only the chapters rather than the parts of the book that are defined. With different chapters written by different authors, it is inevitable that there is some repetition in terms of background, but this does not detract from this extremely useful book as a whole.

Elaine Booth

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Banana Breeding: Progress and Challenges. Edited by M. Pillay and A. Tenkouano. Boca Raton, FL, USA: CRC Press (2011), pp. 363, US$139.95. ISBN 978-1-4398-0017-1.