Journal of Agricultural Science (2007), **145**.
doi:10.1017/S002185960700740X,
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First published online 17 August 2007

The Chocolate Tree – A Natural History of Cacao, by ALLEN M. YOUNG. xvi + 218 pp. University Press of Florida (2007).
$24.95 (Paperback). ISBN 978 0 8130 3044 9.

This is an interesting little book which contains a wealth of information but anyone thinking from the title that this is a light easy read would be mistaken. There are very readable chapters but it fluctuates between chatty narrative and highly academic text.

In terms of chatty narrative, there are some lovely descriptions of the author's personal experiences in the Central American tropics, encounters with snakes, with people and on one occasion with an archaeological relic. The descriptions of research, although not set out as in formal research papers, are nevertheless detailed and referenced. Its great strength is that it is a multidisciplinary study, written by a zoologist studying plant/animal interactions with an archaeological time frame. It reports on a lifetime of experience in study and research.

The preface is very readable and sets the scene defining the importance of cocoa as a commercial crop and the author's interests and research. The last chapter, 'Back to the rainforest: a bridge between agriculture and conservation', is also well worth reading by any who want to grow cocoa or who are interested in promoting systems of agroforestry which maintain some degree of biodiversity. It clearly summarizes the main conclusions of the research: the author's experiences with cocoa as a rainforest tree and its relationships and interactions with the other biota including man. This is an important contribution to the debates about how to provide people with income and maintain something of the original biodiversity in a sustainable manner. Some of the conclusions run counter to common plantation practice such as leaving damaged and rotting pods amongst the cocoa trees.

Chapter 1 is a historical account including a great deal of speculation. One is offered no evidence of the two different routes that cocoa may have taken into Central America. Although the seeds may be typical rainforest recalcitrants with very limited viability, it is not clear from the text how long the seeds may remain viable in the pods. There are some inconsistencies such as 'There is no proof of cultivation or use of cocoa seeds in South America in pre-contact times' (p. 15) *v.* 'Venezuala was another area where the cocoa beans were used for chocolate' (p. 17). Was this pre-contact? Chapter 2 describes the development of the chocolate trade and describes the different races of cocoa. Chapter 3 surprisingly goes into descriptions of other agricultural crops: coffee, rubber and bananas, which do not seem to warrant such full-blown treatment in a book about cocoa. Chapter 4 includes botanical descriptions which perhaps should have been checked by a botanist. The pollen sacs are confused with anthers and the term 'petiole' is used for flower stalk which should be 'pedicel'. Given the title of the book, a more formal description of the tree would not have been out of place. Chapter 5 is perhaps the focus of the book – the author's own research on pollination, largely by midges. It is an engaging account, written in very human terms, of the development of the research, its results and the practical conclusions for plantation management. The author's enthusiasm carries the dialogue and it would be a worthwhile background read for anyone wanting to do research in the tropics and should certainly be interesting to growers of cocoa anywhere.

There is an appendix of plant and animal names, a good bibliography and a useful index. The photographs are poorly reproduced, reflecting the cheapness of the production, although they usually manage to show what is intended. The diagrams are mostly clear.

This is a useful contribution to the biology of cocoa with wider implications for tropical conservation and agroforestry.

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https://doi.org/10.1017/S002185960700740X Published online by Cambridge University Press