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BOOK REVIEW

Margareta Séquin: The Chemistry of Plants and Insects: Plants, Bugs and Molecules

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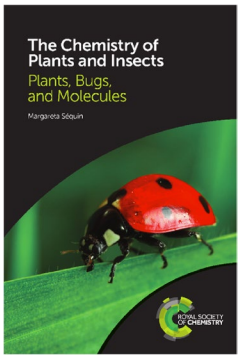

Bibliography
The Chemistry of Plants and Insects: Plants, Bugs and Molecules
Margareta Séquin
Royal Society of Chemistry, Cambridge, UK, 2017, pp 186
ISBN 978-1-78262-448-6
GBP 27.99

This book provides an insight into the role of organic chemicals in either attracting, or repelling, insects ("bugs" in the American sense of insects in general, not just Hemiptera). The chapters are organised in order of increasing complexity of compounds, but within each chapter a number of discrete topics are addressed. Co-evolution is an important and recurring theme; it is considered from both the plants' and the insects' point of view. The final section of the book focusses on how humans are affected by plant–insect interactions, giving examples from silkworms to honeybees and also mentioning dyes from insects and insecticides from plants. Plant galls are also covered, while conceding that our knowledge of the plant hormones that insects use to develop galls is still only poorly understood.

This fluently written book is illustrated by well-chosen colour photos and numerous chemical formulae as well as some tabulation of data such as one showing the composition of the synthetic medium used to feed pea aphids. This involves having a detailed knowledge of insects' dietary needs, which are surprisingly complex. I found it interesting to read that the reason that pheromones have odd numbers of carbon atoms in each molecule is because of the mechanism by which insects synthesise them. After reading this book one comes away with the feeling that there is a lot more to be learned from this topic, particularly by those who would like to move away from using environmentally unfriendly sprays in favour of more targeted approaches.

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