

Preface

When we observe plants in the outdoors, we are likely to notice the visiting insects. Plants and insects communicate in numerous ways, and chemistry plays a key role in these communications. Natural organic compounds determine whether a plant is consumed by insects or avoided by them, and which insects may pollinate its flowers. I was intrigued by these connections during a field seminar where the task was to search for insects. While I found few insect samples initially, the entomologists in the group collected plenty of exciting beetles, caterpillars, and butterflies. My colleagues clearly knew to look for distinct host plants whose plant chemistry attracted specific insects.

This book is aimed at lay readers who have a basic understanding of chemistry. It addresses non-chemists who work at, or enjoy visiting, botanical gardens and science centers, and non-major undergraduate college students. The book can be a supplementary text for students in plant sciences, ecology, entomology, and horticultural programs. By connecting chemistry with plants and insects, the author intends to capture the interest of readers who would like a deeper understanding of the natural world.

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Caterpillar topiary at San Francisco State University.