

scarcely mentioned. Admittedly, these latter comments may reflect personal interests, and it would be difficult to fault the reviews of the reactivity and role of sulphhydryl and S-S groups in proteins, which forms the major part of the text.

My overall conclusion is that this book is an essential reference text for enzymologists and protein chemists at all interested in studying the role of sulphhydryl or S-S groups in proteins. For most other

biochemists access to a library copy will be sufficient. The considerable cost of the book, despite direct reproduction of the author's typescript, led me to believe the publishers may have anticipated this limited demand.

*Department of Biochemistry,  
U.C.W., Aberystwyth*

LYNDON J. ROGERS

---

**Introduction to Alkaloids, A Biogenetic Approach:** by GEOFFREY A. CORDELL. Wiley Interscience, New York, 1981. 1055 pp. £92.50.

Considering both the enormous medicinal importance and the potential toxicities of plant alkaloids, it is remarkable how few attempts there have been to provide a general introductory text that caters for a wide audience of readers. The classic text of T. A. Henry, the fourth edition of which appeared in 1949, has long been out of date and out of print. A general chemistry text, edited by S. W. Pelletier, appeared in 1970 but this suffered from uneven presentation due to the variety of contributors involved. The present book benefits from the uniform treatment a single author can provide and it goes a long way towards meeting the needs of the general scientist for a work of reference providing the basic facts about a given alkaloid or group of alkaloids.

It is true that the main theme of the book is the biosynthesis of these substances, but there is sufficient coverage of the botany, chemistry and pharmacology of the 5000 or more known alkaloids to make this an extremely useful reference work. Two introductory chapters provide the necessary background on detection, isolation, classification, nomenclature and biosynthetic techniques. The remaining ten chapters then describe in sufficient detail for easy comprehension the chemistry, biosynthesis and activity of all the major groups of alkaloid, arranged logically in sequence according to their known precursors. Each section is lavishly illustrated with formulae, spectral details and biosynthetic schemes and concludes with a key list of literature references.

The author has a natural, flowing style of writing which makes for enjoyable and easy reading. To have dealt authoritatively with the chemistry, biosynthesis and pharmacology of so many widely differing groups

of natural product is a great achievement. This accomplishment recalls to mind what the poet Goldsmith, in the *Deserted Village*, said of the village schoolmaster:

And still they gazed and still the wonder grew,  
That one small head could carry all he knew.

Clearly, alkaloid chemists specializing in one or other structural class may be disappointed with the brevity of coverage of their favourite substances, but this is inevitable in a work which describes every important known alkaloid and every known class. One might regret the limited treatment of botanical aspects (e.g. yields are not often given, plant sources are only sketched in, etc.) but again this is inevitable in an introductory work. In any case, the chemotaxonomy of alkaloids has been rather well covered elsewhere (e.g. by R. Hegnauer and others). In general, the work appears to be accurate and free from serious errors, although I did note that the polyamines spermine and spermidine which are widespread in plants are described as being also formed primarily in the prostrate (sic!) gland of man. The book concludes with useful details of how to prepare alkaloid-detecting reagents and there is an excellent index.

The tragedy about this book is that it is so highly priced that it will not only be outside the range of the individual's pocket but also outside the purchasing power of many libraries. This is an enormous pity since it is an immensely readable and well ordered reference book that should be widely available. Indeed, it is the nearest thing to a modern Henry that we can expect in this day and age.

*Plant Science Laboratories, JEFFERY B. HARBORNE  
University of Reading*