Table I—Formation Constants (K_f) for Cycloheptaamylose–Barbiturate Interactions and Substrate-Induced Shifts for Cycloheptaamylose Protons at 30°

Substrate	K_f[a]	$\Delta\delta$[b], p.p.m. H-1	H-2	H-3	H-4	H-5	H-6
Barbital	1.51×10^2	−0.10	−0.03	0.00	−0.03	+0.05	0.00
Amobarbital	1.24×10^3	−0.02	−0.02	+0.03	−0.03	+0.12	+0.01
Pentobarbital	1.82×10^3	−0.01	−0.02	−0.01	−0.02	+0.13	+0.00
Phenobarbital	3.60×10^3	+0.04	+0.03	0.00	+0.06	+0.31	+0.11

[a] Calculated according to Thoma and Stewart (9) from solubility data obtained by the method of Higuchi and Lach (6). [b] Substrate-induced shift $= \Delta\delta = (\delta_{free} - \delta_{saturated}$ with barbiturate). Determined from chemical shifts measured at 100 MHz. (relative to tetramethylsilane as external reference) of about 2% (w/v) solution of cycloheptaamylose in D_2O without, and saturated with, the respective barbiturates. Accurate to ±0.02 p.p.m.

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Received October 28, 1970.
Accepted for publication December 17, 1970.

We thank W. L. Wilham, P. B. Kuehn, T. K. Elzey, and L. A. Spangle for technical assistance.

BOOKS

Pharmacognosy 6th Edition. By E. P. CLAUS, V. E. TYLER, and L. R. BRADY. Lea & Febiger, Philadelphia, PA 19106, 1970. xii + 518 pp. 18 × 26 cm. Price $17.50.

A fresh revision of a widely adopted, standard textbook is always a welcome event. The appearance of this, the 6th revised edition of Gathercoal and Wirth's classic contribution to pharmacognosy, is no exception.

This revision will continue to provide a useful service, particularly as an undergraduate textbook in pharmacognosy. The authors have attempted to organize and include information that is pertinent to the current concepts of the science and to satisfy the needs of the individual training to practice the profession of pharmacy.

The arrangement of the material is essentially the same as in the previous edition, but several changes have been made. A number of illustrations of histological sections of crude drugs and microscopic elements of powdered drug samples have been eliminated. Likewise, some of the botanical descriptive material has been reduced in bulk or deleted. On the other hand, the number of chemical structures and biosynthetic pathways of important plant and animal constituents has been increased which is in keeping with the current trend on more emphasis on the chemical rather than the botanical phases of the science. References to specific editions of the *United States Pharmacopeia* or *National Formulary* in which a drug was included have been omitted. The useful references, included at the end of each chapter, have been updated and in several instances are more comprehensive than in the previous edition.

The introductory material in several instances, including antibiotics, has been expanded and is quite complete. The photographs and illustrations are well chosen, are good in quality, and serve as a valuable addition to the written text.

It is somewhat unfortunate that the Appendix on Powdered Drugs has been deleted. Although this may be of minor importance for teaching purposes, it has served as a handy reference when this sort of information was needed.

The book will serve as a valuable teaching tool and is versatile enough to allow for the several avenues that may be employed in teaching the subject. The material is inclusive enough to make it a good reference as well. Those students and teachers who use it should want to make it a permanent part of their professional collection.

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Molecular Radiation Biology. By HERMANN DERTINGER and HORST JUNG. Springer-Verlag, Berlin, West Germany, 1970. 15 × 23 cm. x + 237 pp.

The field of radiobiology extends into a number of related disciplines. Since it is broad and important enough to accommodate scientists of many backgrounds and interests, it is quite difficult to define its borderlines. However, it would seem quite possible to establish some basic principles in determining the extension of radiobiology into other associated areas.

This book is a collection of lecture topics on radiobiology. It does not present the fundamental principles of molecular radiation biology *per se*, but it offers certain specific problems of this field