HPLC of Acyl Lipids

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HNB Publishing
New York, NY, USA
ISBN 0-9728061-1-3
2005, Hardcover, \$90 US, 576 pp.

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HPLC of Acyl Lipids is an interesting compilation of presentations on a wide variety of topics related to HPLC analysis of lipids. There are eighteen chapters containing contributions from twenty-eight authors from six different countries. As noted by the editors in a Preface, the book is "aimed at the practical aspects of lipid separation." But, since "practical and theoretical aspects of lipid separation are interrelated," there is one chapter that focuses on theory and others that include pertinent discussion. From the title of this book, one might anticipate that only esterified lipids would be covered. In fact, numerous other lipid classes are discussed, including free fatty acids, eicosanoids, and sphingolipids; and, in addition to standard HPLC with UV detection (in some cases combined with mass spectrometry), less commonly used approaches such as detection by evaporative light-scattering, chiral-phase HPLC, silver-ion HPLC, size-exclusion chromatogra-

phy, and supercritical chromatography are also discussed, as well as several derivatization strategies to enhance lipid separation and/or detection. In each of these chapters there are details about mobile phases, columns, and instrumentation along with examples of the use of these techniques for analysis of "real-life" samples. Documentation with extensive lists of literature citations is also provided.

An obvious strength of *HPLC of Acyl Lipids* is that a reader will be able to find practical recommendations on separation and detection of essentially all major biologically relevant lipids in one source. A weakness of the book, however, is that there is little uniformity in the style or format of the chapters, with some of the contributions resembling formal review articles while others reading as discussions of the authors' personal experiences. It was also not especially helpful that some topics were repeated in several chapters—with slightly different focus, although not necessarily divergent opinions. Another factor that detracted from the potential impact of the book is the low quality of reproduction of many of the figures, sometimes making it very difficult to clearly see the features being discussed.

Overall, having access to *HPLC of Acyl Lipids* would undoubtedly be beneficial for researchers needing lipid separation and analysis, especially those requiring practical, basic information. As the importance of studying lipids and their critical role in biological processes is becoming more widely recognized, there will be increasing demand for optimized methods for lipid analysis. A book like *HPLC of Acyl Lipids* might be valuable to help an investigator get started in this area.