

## Book review

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*Biogenesis of Plant Cell Wall Polysaccharides*: edited by F. LOEWUS, Academic Press, New York and London, 1973, xi+379 pages, \$ 14.00.

This book is a compilation of the papers presented in New York in August 1972 at a meeting sponsored by the Division of Cellulose, Wood and Fiber Chemistry of The American Chemical Society.

Loewus, the editor of this commendably speedily published book, discusses the role of *myo*-inositol in pectin biosynthesis in lily pollen walls, and the fragmentation and re-utilisation of the arabinogalactan in lily stigmatic exudate leading to glucan formation. Albersheim displays his customary zest and imagination in considering the nature and inter-relationships between oligosaccharides, polysaccharides, and proteins in the primary cell-walls of sycamore. Lamport argues persuasively against the common relegation of the highly organised, non-cellulosic components of the cell wall to the humble and vague position of matrix substances, and discusses the nature of hydroxyproline-rich glycopeptides containing arabinose and galactose residues. Feingold clarifies a route leading to the biosynthesis of L-arabinose, and Roberts provides evidence of the origin of D-glucuronic acid residues. Colvin reports on the fibrillar nature of an elusive polygalacturonic acid in suspension cultures of *Ipomoea*. Bandurski concludes that much of the indoleacetic acid in corn kernels is present as an ester of a cellulosic glucan. A role of the Golgi apparatus in the biosynthesis and transportation of polysaccharides is revealed by Malcolm Brown. Kindel reports on an apiogalacturonan from *Lemna minor*. Aspinall reviews the carbohydrate chemistry of the plant cell-wall. There are numerous other and important contributions in this book, and in spite of the complexity of the cell wall much speculation is being replaced by discovery.

There is a plethora of symposia, and some are more timely and pointful than others; this symposium is in that category. Bandurski humorously writes "as we look back on this symposium 10 years hence, we will either be amazed at the sagacity of Dr. Loewus in keeping us on the right track or dismayed that he led us far astray". For the moment, and for the immediate future, this is a most stimulating book and if any of the contributors have gone astray they have at least gained, it is hoped, and have certainly given, pleasure by moving off the beaten track and now allow others to contemplate what they have discovered or think they have discovered.

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