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 Book reviews
 

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**Deborah Strauss (managing ed.): Diversity. A new journal for the Plant Genetic Resources Community.** Fort Collins CO: LISA/DIVERSITY. International subscription \$55.- (per year).

This new journal is designed to serve "the needs of the plant genetic resource community" and is published by the Laboratory for Information Science in Agriculture (LISA). Its goal is to "address the changing needs and global interests of NPGS (National Plant Germplasm System) community in the most cost- and information-effective manner possible". The intention is to become a self-supporting journal although at the moment there is an active campaign to attract patrons or sustaining members. Many commercial firms in the fields of seed production, breeding and those linked with agricultural research are helping the enterprise at this early stage. Since spring 1982, 6 issues have already been produced, which means 2 to 3 per year. A heavily professional, diverse, advisory board guarantees the diversity of *Diversity*. The contents can be divided into 6 main sections: Capitol news (which demonstrates the strong link to the US scene), NPGS news, New crops, Genetics engineering update, International perspective, Viewpoints. Furthermore, there are announcements of meetings, short reviews of publications in the field, as well as some gossip in the NPGS community under the title "News in brief".

One gets the impression that this new temporary aperiodical can fill a niche in the breeders community. It keeps readers informed of developments, news and innovations regarding the preservation, management and the use of critically important world resources.

H. F. Linskens, Nijmegen

**Oxender, D.L. (ed.): Protein Transport and Secretion. UCLA Symposia on Molecular and Cellular Biology. New Series, Vol. 15.** New York: Alan R. Liss 1984. xxi+422 pp., several figs. and tabs. Hard bound £ 60.00.

This book represents the proceedings of the CETUS-UCLA Symposium held in Keystone, Colorado, in 1983.

Many of the articles have also appeared in various volumes of the Journal of Cellular Biochemistry. The book, however, collects these and other articles together between the one set of covers and focuses on molecular biological approaches to the study of membrane protein transport and secretion. Protein sorting models involving the catalytic role of signal sequences on the polypeptide chain, or the folding of the chain leading to interactions with the hydrophobic and polar areas of the membrane, are both presented in the final section of this book. The second section deals with genetic studies of the problem with examples drawn from the work with *E. coli*, *B. subtilis* and yeast. Export-defective protein mutations are discussed and the general classes of mutants defined.

Protein secretion in eukaryotes is given good coverage in a third section, drawing examples from bee venom glands, the adrenal medulla, hen oviduct and cultured hepatocytes. Attention is drawn to the identification of cellular components of the protein export machinery and current ideas on intracellular sorting of proteins.

Glycoprotein synthesis and sorting naturally also finds a place in the volume, including viral coat glycoproteins and the cellular glycoproteins such as asialoglycoprotein and the glycoproteins involved in pinocytosis of acid hydrolases from  $\text{NH}_4\text{Cl}$ -induced fibroblast secretions. Two smaller sections combine to make up the complete volume - that of ATP-dependent protein degradation and its role in cellular protein turnover, and voltage-dependent orientation of membrane polypeptides.

A very useful book, combining as it does what is known of bacterial and animal protein secretion. The content is up-to-date and contains the most recent work available in this important area. It has a full and useful index. The papers are arranged in chronological order of appearance in the Journal of Cellular Biochemistry; this may be somewhat confusing. However, the table of contents arranges the papers according to areas covered and so restores confusion to an order expected in such a volume. This book is a must for all those interested in research advances in the field of protein secretion.

J. F. Jackson, Glen Osmond