
Book Reviews

Robertson F.R.S., A.: Selection Experiments in Laboratory and Domestic Animals. The Proceedings of a Symposium. Slough: Commonwealth Agricultural Bureaux 1980. 10/245 pp. Soft bound £ 12.00.

Publication of the Proceedings of the Symposium "Selection Experiments in Laboratory and Domestic Animals" organized by the Commonwealth Agricultural Bureaux will, undoubtedly, be welcomed because it reflects the trends in the development of a complex of genetic and selection studies of animals. The Proceedings present to the reader a great number of new investigations of both scientific and practical value. About 30 reports and abstracts covering a wide range of selection and genetic problems are included in this issue. These can be classified into three main sections. The first is concerned mostly with the theory and optimum design of selection experiments. The second deals with experiments, whether on laboratory or domestic animals, in which the main aim was to examine the validity of statistical prediction. The final section presents a discussion, mostly in physiological and biochemical terms, in which the direct and correlated responses to selection for the same or similar characters, such as growth or reproduction, in different species are compared. Unfortunately, a third part of the reports is presented only in abstracts. This prevents understanding and reduces the value of the issue. Nevertheless, the high scientific level of many reports must be emphasized: it will, surely, draw the attention of specialists to the issue and will contribute to the progress of this real and complicated field of research.

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Robinson, D. G.; Quader, H. (eds.): Cell Walls '81. Proceedings of the Second Cell Wall Meeting, Göttingen, April

8th–11th 1981. Stuttgart: Wissenschaftliche Verlagsges. 1981. 297 pp., 258 figs. Soft bound DM 58,-.

In April 1981 the second meeting on cell walls was held in Göttingen, the proceedings of which are published here. Its 31 articles can be divided into 5 sections.

Section 1 is devoted to organelles and cell wall syntheses *in vivo*. The fine structure of the Golgi apparatus during development was illustrated (Tsekos, I.). A new concept was put forward: a direct insertion of membrane subunits might be possible. These subunits might be considered as building a "pool" which can be drawn upon to fulfill the needs of Golgi apparatus and endoplasmic reticulum (Robinson, D. G.).

Section 2 covers glucan structure and syntheses. Five of the articles are about glucan synthetases. Four of the articles are about cellulose. The current views of the conformation and packing of cellulose molecules were commented on. According to X-ray structural analysis, the packing model of the parallel chains, the "up" and "down" arrangement, is still in question. The anti-parallel packing model also has to be discussed (Zugenmaier, P.).

Section 3 deals with microfibril orientation and microtubules. Thirteen photographs directly illustrate the particular interest of ultracyotomy as being one way to study the microfibrillar units (Vian, B.).

Section 4 turns to hormones, properties of cell wall and elongation. Cell elongation represents an integration of wall loosening and wall synthesis.

This book also represents a reference source for anyone interested in the cell wall. Many readers will find articles or methods in this book to be very useful. Genetic control of specific structure of the cell wall and the synthesis of wall compounds is still out of scope of the workers in the field.

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