
 Book reviews

Roy, A.K.; Clark, J.H. (eds.): **Gene Regulation by Steroid Hormones II**. Berlin, Heidelberg, New York, Tokyo: Springer 1983. XIII + 353 pp., 149 figs. Hard bound DM 174,-.

The Second Meadow Brooks Conference, held in 1981, more than three years after the preceding Conference on Hormones (I), has brought together leading researchers in the important area of regulatory biology. How hormones regulate gene expression is analysed in 20 chapters. Our current knowledge of the mechanics by which steroid hormones regulate transcription has been derived primarily from the analysis of defined gene products in a few well-characterized steroid-responsive systems. Like many other low-molecular-weight hormones and vitamins steroid hormones also exert their biological effects via an intracellular receptor protein. We know today that there are separate receptor proteins for androgens, estrogens, glucocorticoids and mineralocorticoids. But the question of specific nuclear acceptors has been a difficult one. These questions, and studies of the mechanism of glucocorticoid hormone action and the functional analysis of the glucocorticoid receptor by limited proteolysis, immunochemical studies of estrogen receptors, the biological role of estrogen-binding sites and steroid hormone action, modulation of androgen action by thyroid and peptide hormones, respectively, are highlighted by profound and sometimes controversial representations of the authors. The results of Gustafson, showing specific interaction between the glucocorticoid receptor and certain pieces of naked DNA, are remarkable and impressive. Altogether the book conducts all researchers in molecular biology, endocrinology and immunology to the front of the actual problems of gene regulation.

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Böhme, H.; Müller-Stoll, W.R.; Müntz, K.; Rieger, R.; Rieth, A.; Scholz, F.; Stubbe, H. (eds.): **Die Kulturpflanze. Mitteilungen aus dem Zentralinstitut für Genetik und Kulturpflanzenforschung der Akademie der Wissenschaften der DDR, Gatersleben, Bd. 31**. Berlin: Akademie-Verlag 1983. 364 pp., 119 figs.

In addition to the usual progress reports, this year's volume from the Central Research Institute for Genetics and Cultivated Plants Research of the GDR contains 3 review articles: a monograph on the treatment of a wild plant collection of *Datura*, computers in gene banks, and the possibilities of utilizing apomictic seed formation in certain cultivated plants. Most of the papers are reports on collecting expeditions: Georgia for indigenous cultivated plants, Spain for legumes, Lybia for local taxa of cultivated plants, Southern Italy for land-races and Sicily for wheat varieties. All articles are extremely well-documented with tables, figures and pictures. Furthermore, the list of literature on the archaeological remains of cultivated plants as well as on their taxonomy and evolution is continued for the years 1981 and 1982. An interesting technical paper reports on a significant correlation between the quotient of the length of the first and second leaf and the grain yield per plants at ripeness for two spring barley varieties.

All in all, an interesting picture of an active research institute working with a broad spectrum of topics in applied genetics.

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